

Traffic Impact Study

To: Fall Mountain Farm Company

From: Eli Farney, PE, PTOE

Date: August 24, 2026

Fall Mountain Farm

El Paso County, Colorado

Prepared By:



J·R ENGINEERING

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Traffic Engineer's Statement

The attached traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Eli Farney, P.E. #41677

8/24/2026
Date

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

A blue ink signature of Steve Roscio.

Steve Roscio
Fall Mountain Farm Company
4700 Turner Road
Monument, CO 80132

10/8/2026
Date

Table of Contents

Executive Summary	4
Introduction	5
Traffic Volumes and Distribution	8
Traffic Operations Analysis	13
Additional Analysis	15
Conclusion	20

List of Figures

Figure 1: Vicinity Map	6
Figure 2: Existing Traffic Volumes and Lane Geometry	7
Figure 3: Site-Generated Traffic Volumes	10
Figure 4: Total Traffic Volumes	11
Figure 5: Sight Distance Triangles	12

List of Tables

Table 1: Average Daily Traffic Summary	9
Table 2: Levels of Service	13
Table 3: 95th Percentile Queue Lengths	14
Table 4: Crash Rates at Doolittle Road & Lindbergh Road	16
Table 5: Road Impact Fees by Land Use	18
Table 6: Fall Mountain Farm Road Impact Fees Per Land Use	18

List of Appendices

Appendix A: Traffic Counts
Appendix B: Fall Mountain Farm Traffic Data
Appendix C: Synchro Reports

Executive Summary

JR Engineering (JR) has completed a review of the traffic impacts resulting from Fall Mountain Farm in El Paso County, Colorado (County).

The objectives of this Traffic Impact Study (TIS, Study) are:

- Collect Year 2025 existing traffic count data at nearby intersections.
- Estimate site-generated traffic and route trips onto adjacent streets.
- Perform traffic operations analysis at nearby intersections.
- Make recommendations related to traffic operations.

The methodology, content, and findings of this TIS are consistent with the following documents:

- *El Paso County Engineering Criteria Manual*, Chapter 2 – Transportation Facilities
- *El Paso County Engineering Criteria Manual*, Appendix B: Transportation Impact Study Guidelines
- *El Paso County Major Transportation Corridors Plan*

Key Findings of this TIS

- Levels of Service: All movements are LOS B or better at the Study intersections with the addition of site-generated traffic. No operational issues are identified.
- Queue Lengths: 95th percentile queue lengths are nominal at the Study intersections with the addition of site-generated traffic. No queuing issues are identified.
- Recommendations: JR recommends that the County accept the traffic operations in the vicinity of Fall Mountain Farm. The site does not adversely impact traffic operations at the nearby intersections. No new roadway improvements or changes to posted signage are recommended at this time. JR also recommends the following: the applicant coordinates with the county on appropriate seasonal accommodations, the county to consider monitoring the intersection of Doolittle & Lindbergh for safety purposes, to maintain and monitor existing trees so sight distance is maintained, and for the applicant to continue to implement event-day traffic management measures.

Introduction

JR has completed a review of the traffic operations in the vicinity of Fall Mountain Farm. A vicinity map is included in **Figure 1**.

Existing Land Use

Fall Mountain Farm is a recreational/educational farm site located in El Paso County. It is open to the public on select days, with weekends being the busiest.

Study Intersections

Two existing intersections were analyzed in this Study:

1. Doolittle Road/Site Access & Mt Herman Lane
 - Non-standard intersection, analyzed as a tee-intersection with stop-control on the eastbound leg.
2. Doolittle Road & Lindbergh Road
 - Two-way stop control with stop-control on the north and southbound legs.

Existing Roadway Conditions

According to the El Paso County Major Transportation Corridors Plan (MTCP), Doolittle Road is classified as a rural local road in the existing condition. Doolittle Road is paved east of Lindbergh Road and gravel to the west with a posted speed limit of 30 mph.

According to the MTCP, Lindbergh Road is classified as a rural local road in the existing condition. Lindbergh Road is gravel both north and south of Doolittle with a posted speed limit of 30 mph.

Existing Traffic Volumes

Existing traffic volumes were obtained on Saturday, September 13, 2025 by All Traffic Data Services. Mid-day peak hour turning movement counts were collected at the intersection of Doolittle Road & Lindbergh Road. Additionally, 24-hour counts were collected on Doolittle Road west of Lindbergh Road. Existing traffic volumes and lane geometry at the Study intersections are shown in **Figure 2**. Traffic counts are included in **Appendix A**.

It should be noted that the 24-hour tube counts were collected when Fall Mountain Farm was hosting a private event on-site. However, in order to be conservative, the additional traffic from this private event was still included in the existing condition analysis.

Proposed Land Use

Fall Mountain Farm proposes to operate a pumpkin patch during the fall season annually. The pumpkin patch was open in the fall of 2024 and 2025. The County is requesting that a TIS be performed for this land use. The pumpkin patch typically operates from 10AM to 5PM on Thursdays or Fridays through Sunday from mid-September to late October. Fall Mountain Farm is open for approximately 20 days per year.

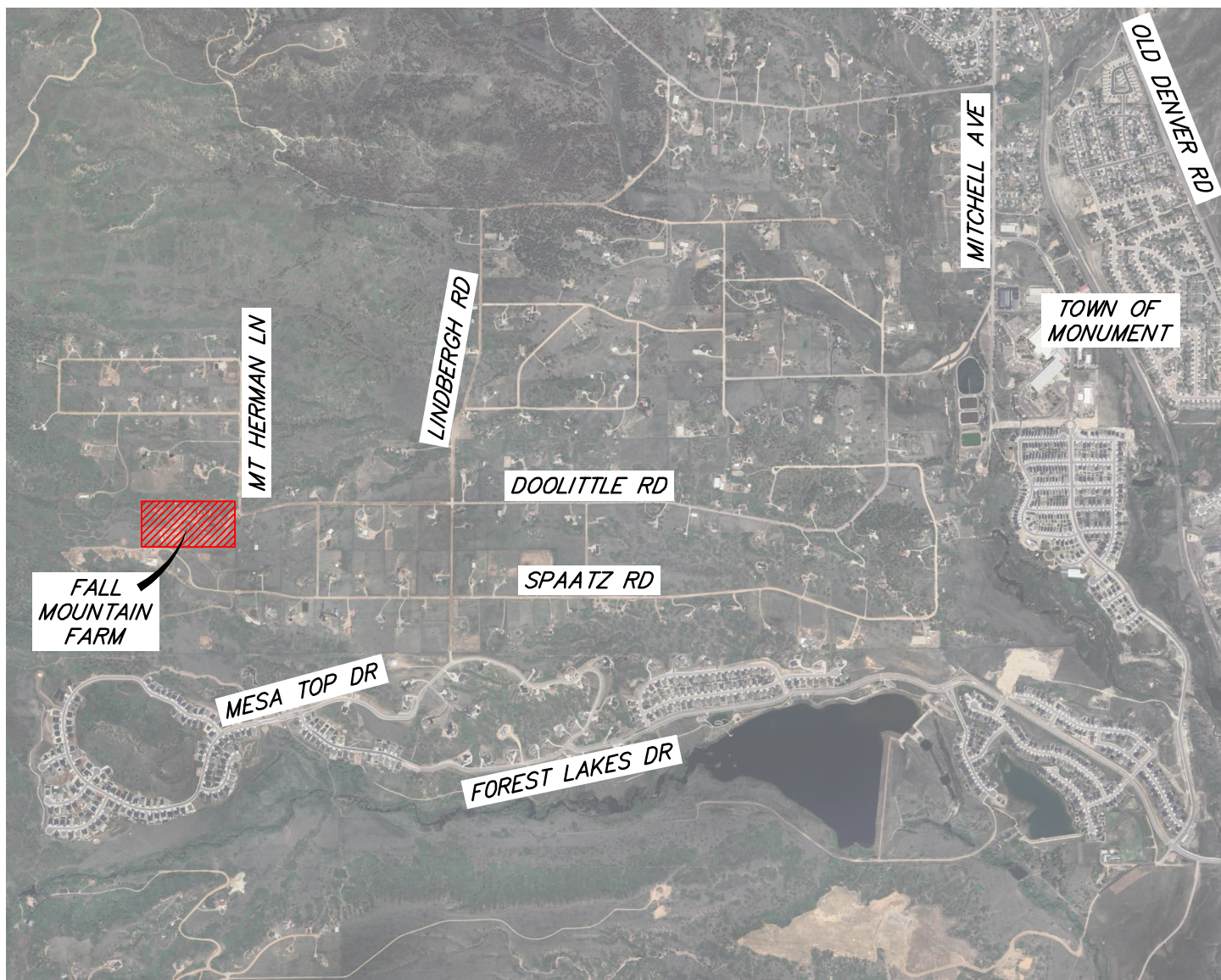
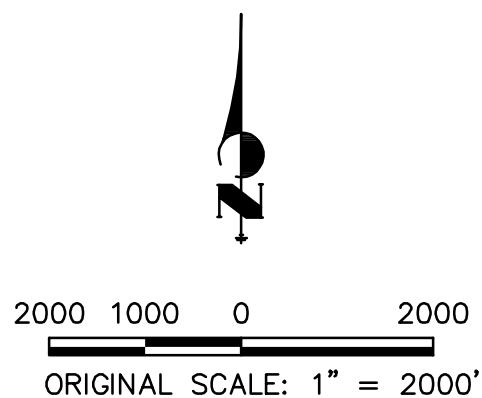


Figure 1 - Vicinity Map



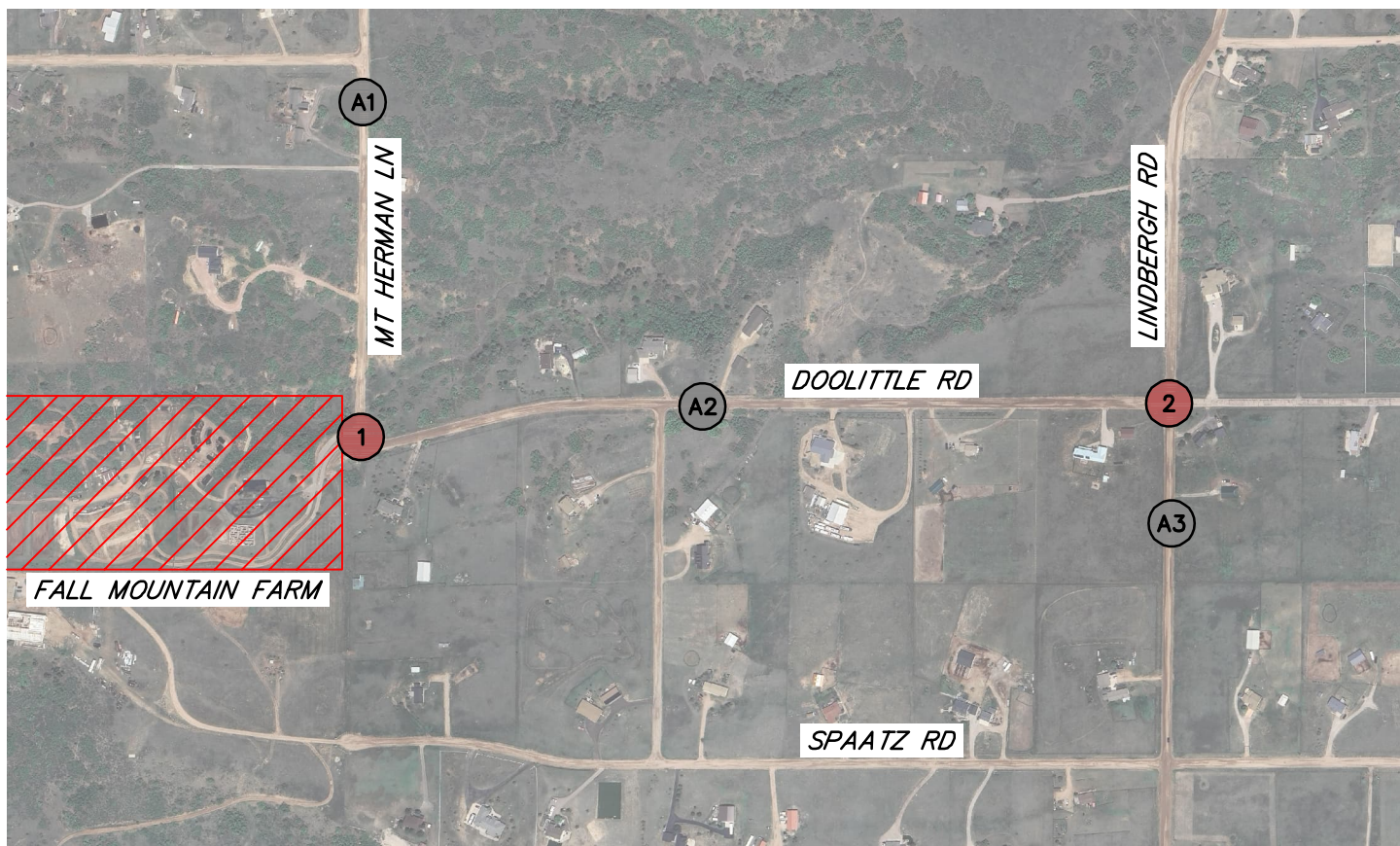


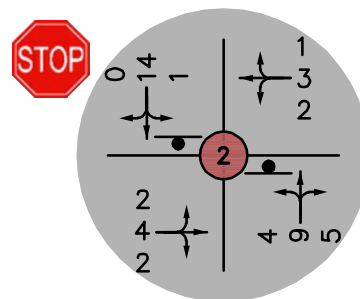
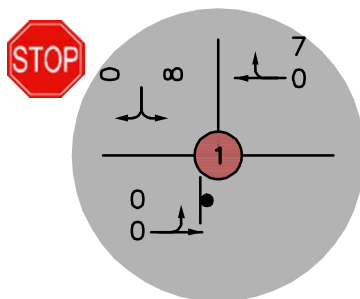
Figure 2 - Existing Traffic Volumes and Lane Geometry

PEAK ADT

A1	75
A2	220
A3	180

MEAN ADT

A1	-
A2	148
A3	-



600 300 0 600

ORIGINAL SCALE: 1" = 600'

LEGEND

X	EXISTING INTERSECTION
A#	2025 AVERAGE DAILY TRAFFIC
XX	SATURDAY PEAK HOUR TRIPS
●	STOP SIGN CONTROL

Traffic Volumes and Distribution

Background Traffic Volumes

For the purposes of this Study, background traffic is the counted traffic volumes during the Saturday mid-day peak hour. 24-hour tube counts were collected while Fall Mountain Farm was hosting a private event on-site. However, this data was still included in the existing condition analysis to be conservative.

Site-Generated Traffic Volumes

In standard practice, site-generated traffic volumes would be estimated using the ITE *Trip Generation Manual*. However, Fall Mountain Farm does not match well with any of the ITE land uses. Therefore, JR estimated site-generated traffic volumes based on ticket sales. Fall Mountain Farm provided vehicle traffic generated by the site by treating ticket transactions as a proxy for vehicles. For example, a single transaction that purchased four tickets was presumed to be a family that came in one vehicle. The data provided includes online sales as well as on-site sales.

Fall Mountain Farm provided JR with data from one of their busiest days in 2024. Data from 2025 was also provided. Based on this data, JR concluded that the site generated 91 entering trips during the busiest hour between both years. For the purposes of this Study, JR assumed that 91 trips would exit the site as well.

The site generated Average Daily Traffic (ADT) was calculated in two distinct ways: the Peak ADT and Mean ADT. The Peak ADT refers to ADT that was calculated using data from the busiest Saturday of the provided data when applicable. The Mean ADT was calculated by taking averaging the number of trips and hours represented on each Saturday of the provided data to estimate a Mean ADT for Saturday overall. A summary of Average Daily Traffic is presented in **Table 1**.

Site-generated traffic volumes are shown in **Figure 3**. Traffic data provided by Fall Mountain Farm is included in **Appendix B**.

Distribution of Site-Generated Traffic

The directional distribution of site-generated traffic was based on the approximate distribution of existing traffic counts at the intersection of Doolittle Road & Lindbergh Road. Existing traffic counts were collected by All Traffic Data on September 13, 2025.

The distribution of site generated traffic was oriented as follows:

- 30% to the north along Lindbergh Road
- 40% to the south along Lindbergh Road
- 15% to the east along Doolittle Road
- 15% to the west along Doolittle Road

Total Traffic

Total traffic is the sum of background and site-generated traffic. Total traffic volumes are shown in **Figure 4**.

Average Daily Traffic

Existing, site-generated, and Year 2045 future ADT volumes are summarized in **Table 1** and shown in **Figures 2** through **4**. Future conditions represent Year 2045 background traffic plus site-generated traffic. ADT estimates were developed using September 13, 2025 traffic counts collected by All Traffic Data, traffic data provided by Fall Mountain Farm, and available El Paso County traffic counts along Doolittle Road.

Table 1: Average Daily Traffic Summary

Node	Condition	Peak ADT*	Mean ADT**
A1	Year 2025 - Existing	75	-
	Site Generated	0	0
	Year 2045 - Future	75	-
A2	Year 2025 - Existing	220	148
	Site Generated	540	380
	Year 2045 - Future	660	464
A3	Year 2025 - Existing	180	-
	Site Generated	216	152
	Year 2045 - Future	264	186

*Peak ADT refers to the ADT that was calculated using the busiest Saturday of the presented data when applicable

**Mean ADT refers to the ADT that was averaged across each Saturday of the presented data when applicable

As summarized in **Table 1**, ADT was evaluated at three locations: Mount Herman Lane (A1), Doolittle Road (A2), and Lindbergh Road (A3).

At A1, existing and future ADT is approximately 75 vehicles per day. No site-generated traffic was assigned to Mount Herman Lane because it does not provide a connection to the surrounding regional roadway network.

At A2, existing ADT on Doolittle Road ranges from a mean Saturday volume of 148 vehicles per day to a peak Saturday volume of 220 vehicles per day. Site-generated traffic was estimated using traffic data provided by Fall Mountain Farm. The resulting future ADT ranges from 464 vehicles per day under mean conditions to 660 vehicles per day during the peak seasonal condition.

At A3, existing ADT on Lindbergh Road is approximately 180 vehicles per day. Based on the anticipated distribution of site traffic, future ADT is estimated at 186 vehicles per day under mean conditions and 264 vehicles per day during the peak seasonal condition.

The existing peak ADT on Doolittle Road already exceeds 200 vehicles per day, while Lindbergh Road is near this threshold. Site-generated traffic results in peak seasonal volumes above 200 vehicles per day at both locations. However, Fall Mountain Farm is a seasonal business that typically operates from 10:00 AM to 5:00 PM, Thursdays or Fridays through Sunday, from mid-September through late October. Therefore, the peak seasonal volumes do not represent typical year-round traffic conditions. Given the limited operating season, full roadway paving may not be proportional to the project's year-round traffic impact. Instead, the applicant should coordinate with El Paso County regarding appropriate seasonal mitigation measures, which may include dust control, roadway grading, maintenance contributions, temporary traffic control, event signage, and on-site parking and queue management during peak operating periods.

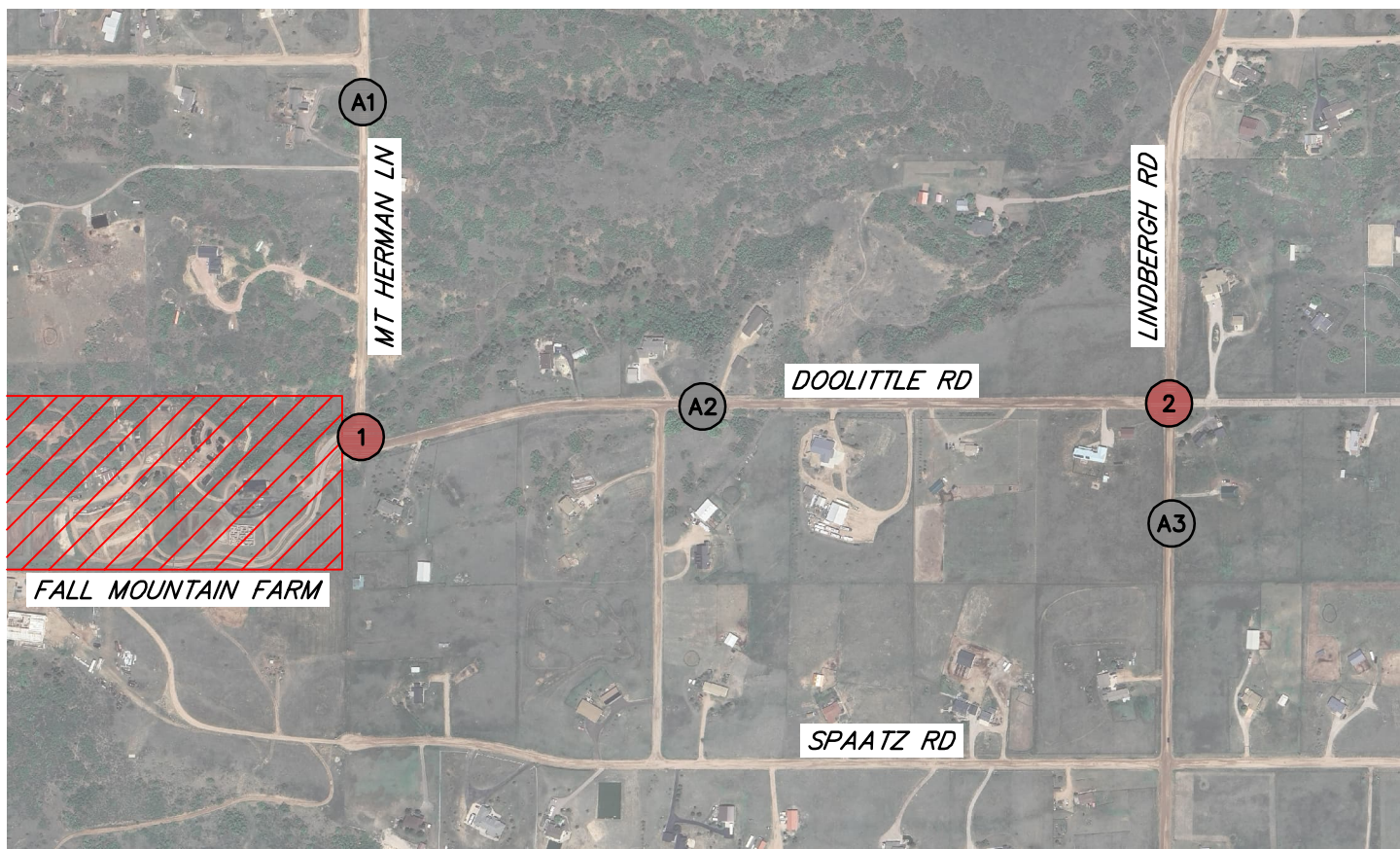


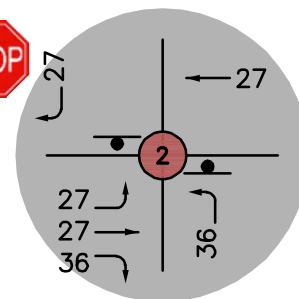
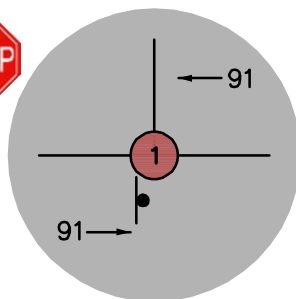
Figure 3 - Site-Generated Traffic Volumes

PEAK ADT

A1	0
A2	540
A3	216

MEAN ADT

A1	0
A2	380
A3	152



600 300 0 600

ORIGINAL SCALE: 1" = 600'

LEGEND



EXISTING INTERSECTION



SITE GENERATED
AVERAGE DAILY TRAFFIC



SATURDAY PEAK HOUR TRIPS



STOP SIGN CONTROL

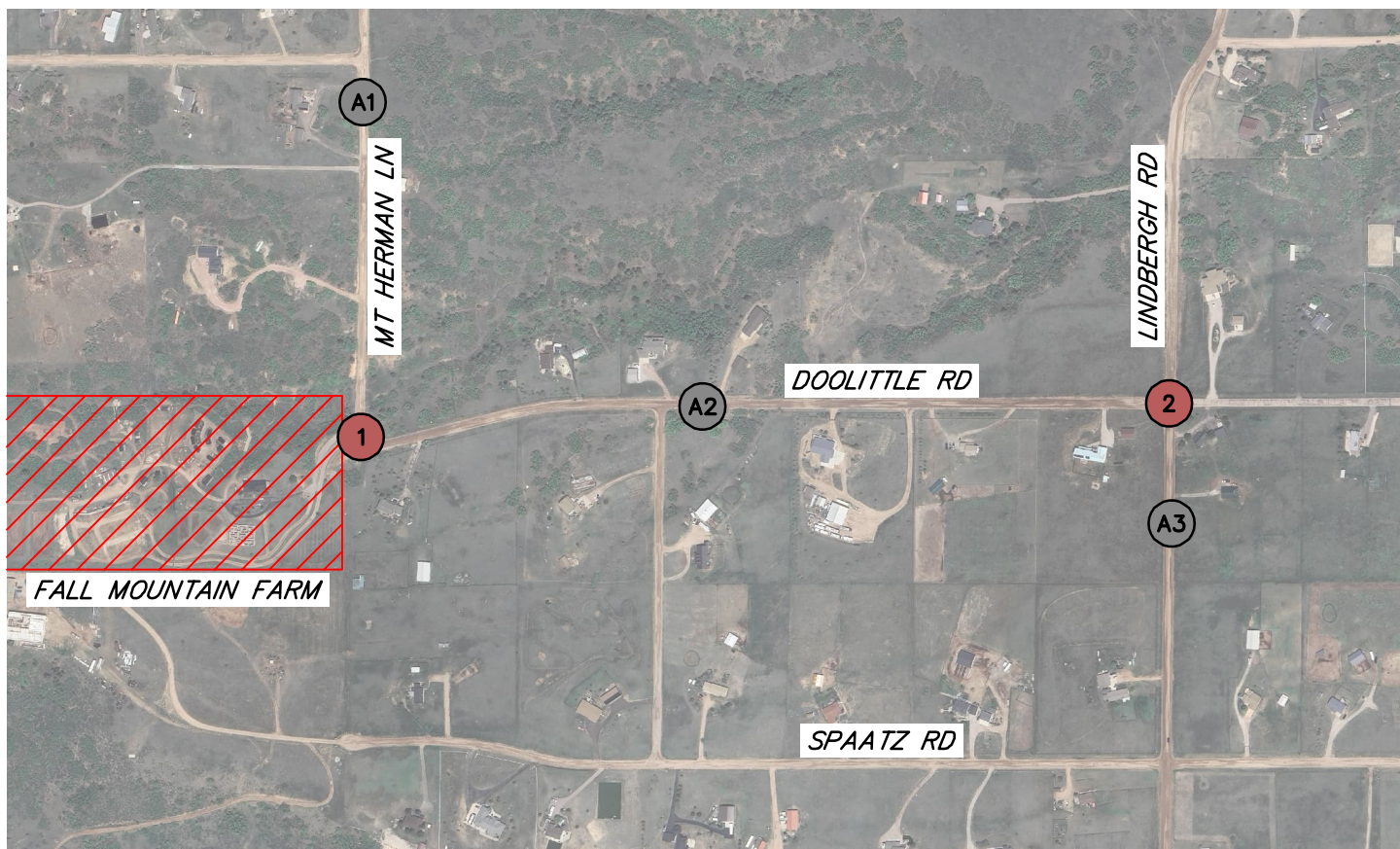


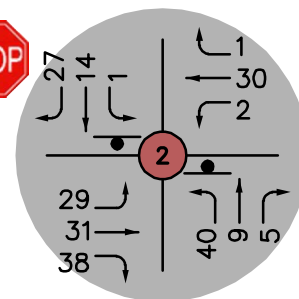
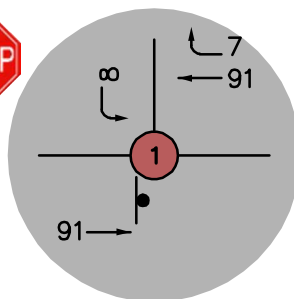
Figure 4 - Total Traffic Volumes

PEAK ADT

A1	75
A2	660
A3	264

MEAN ADT

A1	-
A2	464
A3	186



600 300 0 600

ORIGINAL SCALE: 1" = 600'

LEGEND



EXISTING INTERSECTION



2045 AVERAGE DAILY TRAFFIC



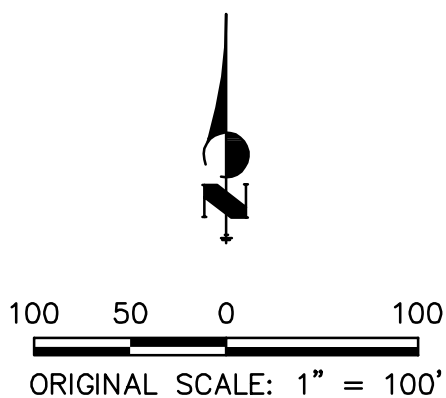
SATURDAY PEAK HOUR TRIPS



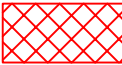
STOP SIGN CONTROL



Figure 5 - Sight Distance Triangles



LEGEND

 SIGHT DISTANCE TRIANGLE

Traffic Operations Analysis

Traffic operations were analyzed using *Highway Capacity Manual*, 7th Edition methodology. Synchro reports are included in **Appendix C**.

Levels of Service

JR analyzed both of the Study intersections for peak hour level of service (LOS). **Table 2** includes the LOS for each approach under two conditions: 1) background traffic only, and 2) total traffic including site-generated traffic from Fall Mountain Farm.

Table 2: Levels of Service

	Intersection	Approach	Background LOS	Total LOS
	1: Doolittle Road/Site Access & Mt Herman Lane	Eastbound	-	B
		Westbound	A	A
		Southbound	A	A
	2: Doolittle Road & Lindbergh Road	Eastbound	A	A
		Westbound	A	A
		Northbound	A	B
		Southbound	A	A

Discussion on Levels of Service

In the background traffic condition, all traffic operations are LOS A, suggesting nominal delays at the Study intersections. In the total traffic condition, levels of service remain similar. The northbound approach at Doolittle & Lindbergh degrades slightly to LOS B, but this is not an operational concern.

Due to the low traffic volumes and satisfactory levels of service at the study intersection, JR does not anticipate any operational issues at nearby intersections such as Lindbergh Road/Mesa Top Drive and Fairchild Avenue/Arnold Avenue.

While a 20-year horizon analysis is typically performed, in this case it would serve limited purpose. The area surrounding Fall Mountain Farm appears to be generally built-out, meaning future growth is expected to be minimal. As a result, a 20-year forecast would be anticipated to show operational results similar to those identified for the 2025 analysis.

Queue Lengths

JR analyzed both of the Study intersections for 95th percentile queue lengths. **Table 3** includes the queue lengths for each approach under two conditions: 1) background traffic only, and 2) total traffic including site-generated traffic from Fall Mountain Farm.

Table 3: 95th Percentile Queue Lengths

	Intersection	Approach	Background Queue (ft)	Total Queue (ft)
	1: Doolittle Road/Site Access & Mt Herman Lane	Eastbound	-	<25
		Westbound	<25	<25
		Southbound	<25	<25
	2: Doolittle Road & Lindbergh Road	Eastbound	<25	<25
		Westbound	<25	<25
		Northbound	<25	<25
		Southbound	<25	<25

Discussion on Queue Lengths

Queue lengths are minimal at both intersections in the background condition. This is a result of low traffic volumes. In the total traffic condition, queue lengths remain nominal. No issues with queuing are identified.

Additional Analysis

Sight Distance

According to the ECM section 2.4.1 for Access Design Criteria, the entering sight distance between a non-public road/driveway and a public road is dependent on the posted speed and design vehicle. Vehicles accessing Fall Mountain Farm are typically passenger cars or pickup trucks and the posted speed limit along Doolittle Road is 30 mph. Table 2-35 in the ECM gives entering sight distance for posted speeds of 25 mph and 35 mph. Therefore, the 30-mph sight distance was interpolated using these two data points to be 300 feet.

The sight distance triangles are shown in **Figure 5**, where vehicles exiting Fall Mountain Farm have a clear view of the southbound approach along Mount Herman Lane as well as the westbound approach along Doolittle Road. In the future, trees on the sides of each approach may need to be trimmed and maintained in order to maintain satisfactory sight distance.

Access Location and Spacing

In the existing condition, the access point to Fall Mountain Farm is approximately 200 feet west of an existing driveway that services another residential home. The site access is also approximately 430 feet south of another existing residential driveway.

According to the El Paso County Engineering Criteria Manual (ECM) section 2.4.1 for Access Design Criteria, accesses shall be separated by a distance equal to the entering sight distance. The entering sight distance for Fall Mountain Farm is 300 feet, as discussed in the Sight Distance Section.

The spacing criteria is satisfied for the existing driveway to the north of the site. However, the spacing criteria is not satisfied for the existing driveway to the east of the site. As discussed in the queue length analysis, expected 95th percentile queues from site generated traffic are less than 25 feet and therefore do not block access to this residential driveway. In addition, El Paso County has provided community feedback, concerns, and questions in the form of a Traffic & Road Safety Public Comments Excerpts. Comments from local homeowners did not mention driveways being blocked when Fall Mountain Farm was operational. The property owner directly east of Fall Mountain Farm has previously written the County a letter of support stating they do not have concerns about traffic or road use. Therefore, it is recommended that this spacing be accepted.

Safety and Accident Analysis

Statewide crash data points are collected by investigating officers at the scene of an accident. They fill out a crash form and send it to the Department of Revenue (DOR). After this, data listings are collected, processed, and maintained by the Colorado Department of Transportation (CDOT) such that they have constructed an accessible crash database covering the Year 2007 to 2025.

Crash data from CDOT is publicly available and was used in order to assess the crash rate within the vicinity of the site for the past five years (Years 2021 to 2025). Accidents at the studied intersections of Doolittle Road & Mount Herman Lane (E1) and Doolittle Road & Lindbergh Road (E2) were considered for analysis.

Within the data provided by CDOT, there was a single accident that occurred at E2 in 2025. No other accidents were reported at either E1 or E2 within the 2021-2025 time period. This accident was a broadside collision that resulted in injury but no fatalities. CDOT's data lists the reason for the crash as careless driving. The data presented in **Table 4** shows crash rates over 1 per 1 million vehicles, however this is primarily due to the low existing ADT along rural roads within the vicinity of the site. Therefore, it is recommended to accept this abnormally high crash rate when taking into account the low existing average daily traffic. No additional improvements to the lane geometry or postage signage at Doolittle & Lindbergh (E2) are recommended at this time, however, the County may consider monitoring the safety operations of this intersection further.

Table 4: Crash Rates at Doolittle Road & Lindbergh Road

Year	Intersection	Number of Accidents	ADT	Crash Rate
2025	E2- Doolittle Road & Lindbergh Road	1	193	14.20

Site Observation

Field observations were conducted during an operating day to evaluate site access, traffic operations, and vehicle circulation. During the observation period, traffic entering and exiting the site operated in an orderly manner, and no significant vehicle queues or traffic safety concerns were observed on Doolittle Road. Based on the traffic analysis, field observations, and the operational assumptions documented in this study, the proposed maximum on-site parking limit of 225 vehicles is a reasonable operational cap for the seasonal use. Continued implementation of event-day traffic management measures, including staff-assisted parking and traffic control as needed, is recommended to support safe and efficient operations during peak periods.

Public and Community Feedback

El Paso County provided public comments received through the Electronic Development Application Review Program (EDARP). The comments were reviewed and considered during preparation of this Traffic Impact Study. The discussion below is limited to topics related to traffic operations, access, and roadway safety.

Several comments expressed concerns regarding emergency access and site evacuation. Emergency access and fire protection are under the jurisdiction of the applicable fire authority and are evaluated through the County's development review process; therefore, these topics are beyond the scope of this Traffic Impact Study.

Comments were also received regarding the traffic control at the Doolittle Road & Mount Herman Lane intersection. The operational analysis has been updated to reflect the existing intersection traffic control, with the site approach operating under stop control.

Public comments referenced a convex traffic mirror that was previously located near the Doolittle Road/Mount Herman Lane intersection. Convex mirrors are not considered standard traffic control devices for public roadways and were not evaluated as part of this Study. The operational analysis presented herein is based on the existing roadway geometry, traffic control, and available sight distance.

Questions were raised regarding the proposed on-site parking limit of 225 vehicles. The parking limit represents a reasonable operational cap on the maximum number of vehicles permitted on-site and is not equivalent to peak-hour traffic entering or exiting the site. Peak-hour trip generation used in this study is based on traffic volumes collected during site operations and represents a conservative analysis of traffic operations under peak operating conditions. The parking limit serves as an operational management measure and was not independently evaluated as part of a parking demand analysis.

Finally, comments questioned the traffic count methodology. Existing 24-hour traffic counts were collected when Fall Mountain Farm was not operating as a pumpkin patch, although a private event was occurring at the site. Traffic associated with the private event was retained in the existing traffic volumes to provide a conservative baseline condition. Site-generated traffic associated with the pumpkin patch was then added separately to the background traffic volumes to evaluate future operating conditions. Collecting baseline counts during normal pumpkin patch operations would have included site-generated traffic in the existing volumes and resulted in double-counting when forecasting future conditions.

Road Impact Fee Program

Within El Paso County, the impact of new developments on the surrounding roadway network is allocated fairly using the Road Impact Fee Program. The basis for these fees is established as part of the County's Major Transportation Corridors Plan (MTCP). The revenue generated by this program ensures that El Paso County and new developments can establish a fair-share contribution to improvements that accommodate growth within the county.

The cost of a road impact fee is typically dependent on the approved land use. El Paso County's website provides a table for each land use, their up-front fee, and two different fees if the developer wishes to join a Public Improvement District (PID). El Paso County typically calculates fees based on land use and acreage, which is more applicable for the purposes of this study. Information from the County's website is shown below in **Table 5**.

Table 5: Road Impact Fees by Land Use

Land Use	Unit	Total Fee per Unit	5-Mill PID		10-Mill PID	
			PID Tax	Net Fee	PID Tax	Net Fee
Single-Family Detached	Dwelling	\$4,101	\$2,127	\$1,974	\$3,808	\$293
Multi-Family	Dwelling	\$2,585	\$1,013	\$1,542	\$2,026	\$556
Mobile Home Park	Pad/Site	\$2,736	\$614	\$2,122	\$1,228	\$1,508
Hotel/Motel	Room	\$3,208	\$1,175	\$2,033	\$2,350	\$858
General Commercial	1,000 sf	\$5,498	\$666	\$4,832	\$1,333	\$4,165
Fast Food Restaurant	1,000 sf	\$13,694	\$4,898	\$8,796	\$9,796	\$3,898
Fueling Position	Added*	\$2,283	\$877	\$1,406	\$1,754	\$529
Office	1,000 sf	\$3,340	\$666	\$2,674	\$1,333	\$2,007
Public/Institutional	1,000 sf	\$2,371	\$666	\$1,705	\$1,333	\$1,038
Industrial	1,000 sf	\$2,648	\$438	\$2,210	\$877	\$1,771
Warehouse	1,000 sf	\$931	\$351	\$580	\$701	\$230
Mini-Warehouse/Outdoor Storage	1,000 sf	\$447	\$351	\$96	\$701	\$0
Mining/Utility/Outdoor Industrial	Acre	\$21,519	\$2,630	\$18,889	\$5,261	\$16,258
Outdoor Recreation	Acre	\$1,264	\$263	\$1,001	\$526	\$738
RV Park/Campsite	Site	\$1,038	\$263	\$775	\$526	\$512

*applies to new fueling stations added to an existing use

Fall Mountain Farm is subject to the fees implemented by this program. Fees were calculated using the "Outdoor Recreation" land use presented in **Table 5**. Fall Mountain Farm does not intend to join a PID. The calculated impact fees are shown in **Table 6**.

Table 6: Fall Mountain Farm Road Impact Fees Per Land Use

Land Use	Acres	Fee per Unit	5-Mill PID		10-Mill PID	
			PID Tax	Net Fee	PID Tax	Net Fee
Outdoor Recreation	19.18	\$24,244	\$5,044	\$19,199	\$10,089	\$14,155

Recommendations

According to El Paso County's ECM Section 2.2.7 – Pavement Design, an existing gravel roadway is suitable for pavement when a development causes the projected ADT to exceed 200 or more.

As discussed in earlier sections of this study, Fall Mountain Farm is a seasonal business operating from 10AM to 5PM on Thursdays or Fridays through Sunday from mid-September to late October, with traffic concentrated primarily on weekends during the fall season. Although the forecasted ADT shown in **Table 1** exceeds 200 vehicles per day, this condition is temporary and does not represent the typical year-round average daily traffic on Doolittle Road. Therefore, full roadway paving may not be proportional to Fall Mountain Farm's year-round traffic impact. Instead, it is recommended for the applicant to coordinate with El-Paso County on appropriate seasonal mitigation measures, which may include the following: dust control, roadway grading, maintenance contributions, temporary traffic control, event signage, and on-site parking/queue management during peak weekends. Existing maintenance measures should be coordinated and maintained going forward as well.

In addition, there are no recommended changes to signage or lane geometry at either Doolittle & Mt. Herman or Doolittle & Lindbergh. The traffic operation analysis showed that each intersection operates at satisfactory levels of service in both the existing and future conditions. Therefore, no intersection or signage improvements are recommended at this time. However, the County may consider monitoring the intersection of Doolittle & Lindbergh (E2) for safety purposes.

In order to maintain appropriate sight distance for vehicles exiting the site, it is recommended to maintain and monitor the existing trees on the shoulders of the road if they need to be trimmed.

Based on field observations conducted during operational hours, it is recommended that the applicant continues to implement event-day traffic management measures such as staff-assisted parking and traffic control as needed in order to support safe and efficient operations during peak periods.

Conclusion

Below is a summary of the conclusions and findings of this TIS.

Levels of Service

Levels of service are LOS B or better at both Study intersections with the addition of site-generated traffic. No operational issues are identified.

Queue Lengths

95th percentile queue lengths are nominal at both Study intersections with the addition of site-generated traffic. No issues related to queuing are identified.

Recommendations

JR recommends that the County accept the traffic operations in the vicinity of Fall Mountain Farm. JR has determined that the site does not adversely impact traffic operations at the nearby intersections. At this time, no changes to roadway geometry or posted signage are recommended due to the satisfactory operation of both intersections.

Appendix A: Traffic Counts



ALL TRAFFIC DATA SERVICES

(303) 216-2439

www.alltrafficdata.net

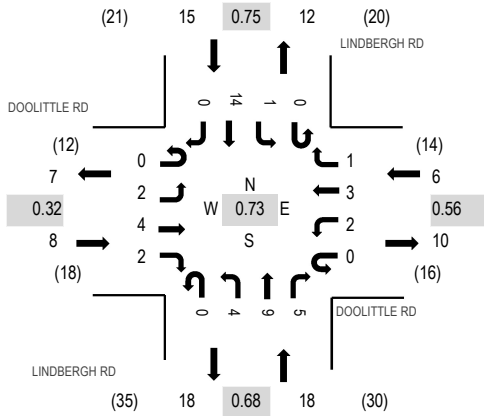
Location: 1 LINDBERGH RD & DOOLITTLE RD Noon

Date: Saturday, September 13, 2025

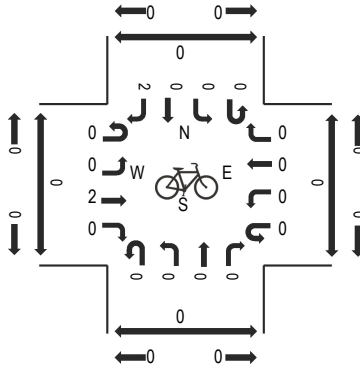
Peak Hour: 11:15 AM - 12:15 PM

Peak 15-Minutes: 11:30 AM - 11:45 AM

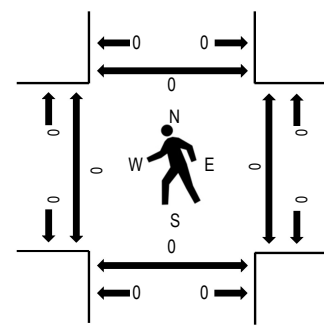
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DOOLITTLE RD Eastbound				DOOLITTLE RD Westbound				LINDBERGH RD Northbound				LINDBERGH RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
11:00 AM	0	0	0	1	0	3	0	0	0	0	1	1	0	0	2	0	8	46	0	0	4	0
11:15 AM	0	0	0	1	0	0	1	0	0	2	1	1	0	0	3	0	9	47	0	0	0	0
11:30 AM	0	2	2	1	0	1	1	0	0	0	4	0	0	1	4	0	16	47	0	0	0	0
11:45 AM	0	0	2	0	0	0	1	0	0	1	3	2	0	0	4	0	13	45	0	0	0	0
12:00 PM	0	0	0	0	0	1	0	1	0	1	1	2	0	0	3	0	9	37	0	0	0	0
12:15 PM	0	0	0	0	0	0	3	1	0	1	1	0	0	0	3	0	9		0	0	0	0
12:30 PM	0	0	2	5	0	0	0	0	0	0	5	2	0	0	0	0	14		0	0	0	0
12:45 PM	0	0	0	2	0	0	1	0	0	0	0	1	0	0	1	0	5		0	0	0	0
Count Total	0	2	6	10	0	5	7	2	0	5	16	9	0	1	20	0	83		0	0	4	0
Peak Hour	0	2	4	2	0	2	3	1	0	4	9	5	0	1	14	0	47		0	0	0	0



All Traffic Data Services

2 - DOOLITTLE RD WEST OF LINDBERGH RD

Time	EB	WB	Total
9/13/2025	0	0	0
9/13/2025 12:15:00 AM	0	0	0
9/13/2025 12:30:00 AM	0	0	0
9/13/2025 12:45:00 AM	0	0	0
9/13/2025 1:00:00 AM	0	0	0
9/13/2025 1:15:00 AM	0	0	0
9/13/2025 1:30:00 AM	0	0	0
9/13/2025 1:45:00 AM	0	0	0
9/13/2025 2:00:00 AM	0	0	0
9/13/2025 2:15:00 AM	1	0	1
9/13/2025 2:30:00 AM	0	0	0
9/13/2025 2:45:00 AM	0	0	0
9/13/2025 3:00:00 AM	0	0	0
9/13/2025 3:15:00 AM	0	0	0
9/13/2025 3:30:00 AM	0	1	1
9/13/2025 3:45:00 AM	1	0	1
9/13/2025 4:00:00 AM	0	0	0
9/13/2025 4:15:00 AM	0	0	0
9/13/2025 4:30:00 AM	0	0	0
9/13/2025 4:45:00 AM	0	0	0
9/13/2025 5:00:00 AM	0	0	0
9/13/2025 5:15:00 AM	0	0	0
9/13/2025 5:30:00 AM	0	0	0
9/13/2025 5:45:00 AM	0	0	0
9/13/2025 6:00:00 AM	0	0	0
9/13/2025 6:15:00 AM	0	0	0
9/13/2025 6:30:00 AM	0	1	1
9/13/2025 6:45:00 AM	1	0	1
9/13/2025 7:00:00 AM	0	0	0
9/13/2025 7:15:00 AM	0	0	0
9/13/2025 7:30:00 AM	1	0	1
9/13/2025 7:45:00 AM	2	0	2
9/13/2025 8:00:00 AM	1	2	3
9/13/2025 8:15:00 AM	3	0	3
9/13/2025 8:30:00 AM	3	2	5
9/13/2025 8:45:00 AM	2	0	2
9/13/2025 9:00:00 AM	5	3	8
9/13/2025 9:15:00 AM	1	1	2
9/13/2025 9:30:00 AM	1	0	1
9/13/2025 9:45:00 AM	2	0	2
9/13/2025 10:00:00 AM	2	2	4
9/13/2025 10:15:00 AM	2	1	3
9/13/2025 10:30:00 AM	3	0	3
9/13/2025 10:45:00 AM	1	2	3
9/13/2025 11:00:00 AM	1	0	1
9/13/2025 11:15:00 AM	1	3	4
9/13/2025 11:30:00 AM	5	1	6
9/13/2025 11:45:00 AM	2	2	4
Total	41	21	62
Percentage	66.1%	33.9%	
Peak Hour	8:15 AM	11:00 AM	8:15 AM
Volume	13	8	19
PHF	0.650	0.667	0.594



All Traffic Data Services

2 - DOOLITTLE RD WEST OF LINDBERGH RD

Time	EB	WB	Total
9/13/2025 12:00:00 PM	0	1	1
9/13/2025 12:15:00 PM	0	4	4
9/13/2025 12:30:00 PM	7	0	7
9/13/2025 12:45:00 PM	2	1	3
9/13/2025 1:00:00 PM	1	5	6
9/13/2025 1:15:00 PM	1	1	2
9/13/2025 1:30:00 PM	2	2	4
9/13/2025 1:45:00 PM	1	0	1
9/13/2025 2:00:00 PM	4	2	6
9/13/2025 2:15:00 PM	0	0	0
9/13/2025 2:30:00 PM	2	1	3
9/13/2025 2:45:00 PM	1	4	5
9/13/2025 3:00:00 PM	3	2	5
9/13/2025 3:15:00 PM	1	3	4
9/13/2025 3:30:00 PM	1	2	3
9/13/2025 3:45:00 PM	1	2	3
9/13/2025 4:00:00 PM	1	2	3
9/13/2025 4:15:00 PM	0	5	5
9/13/2025 4:30:00 PM	2	2	4
9/13/2025 4:45:00 PM	2	1	3
9/13/2025 5:00:00 PM	3	1	4
9/13/2025 5:15:00 PM	1	0	1
9/13/2025 5:30:00 PM	2	1	3
9/13/2025 5:45:00 PM	1	0	1
9/13/2025 6:00:00 PM	0	4	4
9/13/2025 6:15:00 PM	3	2	5
9/13/2025 6:30:00 PM	2	4	6
9/13/2025 6:45:00 PM	3	3	6
9/13/2025 7:00:00 PM	2	0	2
9/13/2025 7:15:00 PM	1	1	2
9/13/2025 7:30:00 PM	1	3	4
9/13/2025 7:45:00 PM	0	2	2
9/13/2025 8:00:00 PM	0	2	2
9/13/2025 8:15:00 PM	1	1	2
9/13/2025 8:30:00 PM	5	0	5
9/13/2025 8:45:00 PM	0	1	1
9/13/2025 9:00:00 PM	0	0	0
9/13/2025 9:15:00 PM	3	1	4
9/13/2025 9:30:00 PM	0	0	0
9/13/2025 9:45:00 PM	0	0	0
9/13/2025 10:00:00 PM	0	1	1
9/13/2025 10:15:00 PM	0	1	1
9/13/2025 10:30:00 PM	0	2	2
9/13/2025 10:45:00 PM	0	1	1
9/13/2025 11:00:00 PM	0	0	0
9/13/2025 11:15:00 PM	0	0	0
9/13/2025 11:30:00 PM	0	0	0
9/13/2025 11:45:00 PM	0	0	0
Total	60	71	131
Percentage	45.8%	54.2%	
Peak Hour	12:30 PM	6:00 PM	6:00 PM
Volume	11	13	21
PHF	0.393	0.813	0.875
Grand Total	101	92	193
Percentage	52.3%	47.7%	

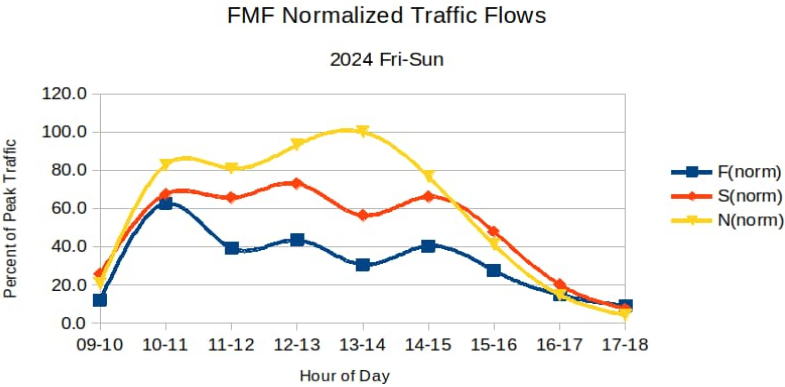
Appendix B: Fall Mountain Farm Traffic Data

HOURLY VEHICLE TRAFFIC
106 day-hours represented

DOW	Date	@ Hour,	#Veh
Sat	2024-09-14	@ 10hr,	3
Sat	2024-09-14	@ 11hr,	6
Sat	2024-09-14	@ 12hr,	3
Sat	2024-09-14	@ 13hr,	9
Sat	2024-09-14	@ 14hr,	3
Sat	2024-09-14	@ 15hr,	16
Sun	2024-09-15	@ 10hr,	4
Sun	2024-09-15	@ 11hr,	7
Sun	2024-09-15	@ 12hr,	7
Sun	2024-09-15	@ 13hr,	1
Sun	2024-09-15	@ 14hr,	4
Fri	2024-09-20	@ 10hr,	4
Fri	2024-09-20	@ 11hr,	5
Fri	2024-09-20	@ 12hr,	4
Fri	2024-09-20	@ 13hr,	1
Fri	2024-09-20	@ 14hr,	4
Fri	2024-09-20	@ 15hr,	1
Sun	2024-09-22	@ 10hr,	2
Sun	2024-09-22	@ 11hr,	1
Sun	2024-09-22	@ 12hr,	2
Sun	2024-09-22	@ 13hr,	6
Sun	2024-09-22	@ 14hr,	2
Sun	2024-09-22	@ 15hr,	6
Fri	2024-09-27	@ 10hr,	6
Fri	2024-09-27	@ 11hr,	4
Fri	2024-09-27	@ 12hr,	2
Fri	2024-09-27	@ 13hr,	2
Fri	2024-09-27	@ 14hr,	6
Fri	2024-09-27	@ 15hr,	2
Sun	2024-09-29	@ 09hr,	1
Sun	2024-09-29	@ 10hr,	19
Sun	2024-09-29	@ 11hr,	15
Sun	2024-09-29	@ 12hr,	12
Sun	2024-09-29	@ 13hr,	16
Sun	2024-09-29	@ 14hr,	14
Sun	2024-09-29	@ 15hr,	1
Fri	2024-10-04	@ 10hr,	13
Fri	2024-10-04	@ 11hr,	6
Fri	2024-10-04	@ 12hr,	3
Fri	2024-10-04	@ 13hr,	11
Fri	2024-10-04	@ 14hr,	10
Fri	2024-10-04	@ 15hr,	7
Sat	2024-10-05	@ 10hr,	36
Sat	2024-10-05	@ 11hr,	24
Sat	2024-10-05	@ 12hr,	23
Sat	2024-10-05	@ 13hr,	22
Sat	2024-10-05	@ 14hr,	25
Sat	2024-10-05	@ 15hr,	13
Sat	2024-10-05	@ 16hr,	3
Sun	2024-10-06	@ 14hr,	72
Sun	2024-10-06	@ 15hr,	72
Fri	2024-10-11	@ 10hr,	50
Fri	2024-10-11	@ 11hr,	34
Fri	2024-10-11	@ 12hr,	19
Fri	2024-10-11	@ 13hr,	12
Fri	2024-10-11	@ 14hr,	16
Fri	2024-10-11	@ 15hr,	7
Fri	2024-10-11	@ 16hr,	4
Sat	2024-10-12	@ 10hr,	70
Sat	2024-10-12	@ 11hr,	44
Sat	2024-10-12	@ 12hr,	33
Sat	2024-10-12	@ 13hr,	35
Sat	2024-10-12	@ 14hr,	36
Sat	2024-10-12	@ 15hr,	29
Sat	2024-10-12	@ 16hr,	8
Sat	2024-10-12	@ 21hr,	1

The following is a note from Fall Mountain Farm: "It was an atypical year in that our usually busiest day, Saturday Oct 19th, was snowed-out, and the following day was nice. So most of Saturday's guests came on Sunday, adding to Sunday's normal numbers.

Clarification on the following chart's legend. F = Friday, S = Saturday, N = Sunday

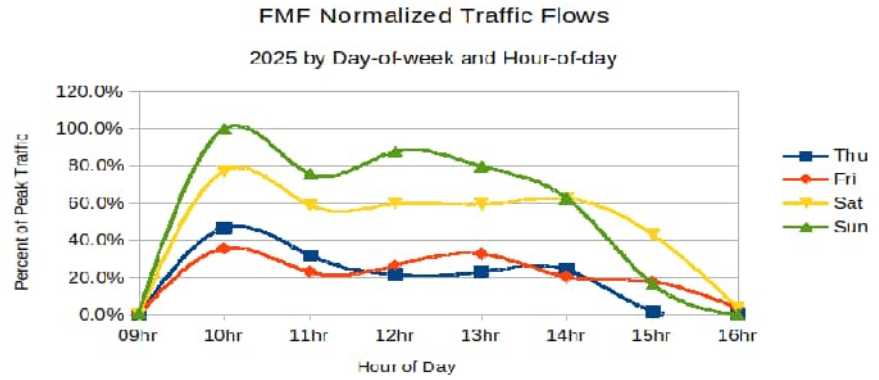


Sun 2024-10-13 @ 10hr,	70
Sun 2024-10-13 @ 11hr,	51
Sun 2024-10-13 @ 12hr,	32
Sun 2024-10-13 @ 13hr,	48
Sun 2024-10-13 @ 14hr,	37
Sun 2024-10-13 @ 15hr,	4
Sun 2024-10-13 @ 21hr,	5
Fri 2024-10-18 @ 10hr,	37
Fri 2024-10-18 @ 11hr,	24
Fri 2024-10-18 @ 12hr,	24
Fri 2024-10-18 @ 13hr,	18
Fri 2024-10-18 @ 14hr,	15
Fri 2024-10-18 @ 15hr,	3
Sun 2024-10-20 @ 10hr,	55
Sun 2024-10-20 @ 11hr,	58
Sun 2024-10-20 @ 12hr,	68
Sun 2024-10-20 @ 13hr,	91
Sun 2024-10-20 @ 14hr,	43
Sun 2024-10-20 @ 15hr,	16
Fri 2024-10-25 @ 10hr,	13
Fri 2024-10-25 @ 11hr,	9
Fri 2024-10-25 @ 12hr,	19
Fri 2024-10-25 @ 13hr,	14
Fri 2024-10-25 @ 14hr,	16
Fri 2024-10-25 @ 15hr,	13
Fri 2024-10-25 @ 16hr,	4
Sat 2024-10-26 @ 10hr,	56
Sat 2024-10-26 @ 11hr,	42
Sat 2024-10-26 @ 12hr,	50
Sat 2024-10-26 @ 13hr,	54
Sat 2024-10-26 @ 14hr,	49
Sat 2024-10-26 @ 15hr,	29
Sat 2024-10-26 @ 16hr,	6
Sun 2024-10-27 @ 10hr,	54
Sun 2024-10-27 @ 11hr,	43
Sun 2024-10-27 @ 12hr,	37
Sun 2024-10-27 @ 13hr,	47
Sun 2024-10-27 @ 14hr,	38
Sun 2024-10-27 @ 15hr,	9
Sun 2024-10-27 @ 16hr,	1

Total vehicles: 2241

2025- Hourly Vehicle Traffic
126 day-hours represented

DOW	Date	Hour,	#Veh
Sun	9/28/2025	@ 10hr,	24
Sun	9/28/2025	@ 11hr,	14
Sun	9/28/2025	@ 12hr,	17
Sun	9/28/2025	@ 13hr,	9
Sun	9/28/2025	@ 14hr,	6
Sun	9/28/2025	@ 15hr,	5
Tue	9/30/2025	@ 06hr,	1
Thu	10/2/2025	@ 10hr,	3
Thu	10/2/2025	@ 11hr,	1
Thu	10/2/2025	@ 12hr,	2
Fri	10/3/2025	@ 10hr,	7
Fri	10/3/2025	@ 11hr,	7
Fri	10/3/2025	@ 12hr,	9
Fri	10/3/2025	@ 13hr,	4
Fri	10/3/2025	@ 14hr,	10
Fri	10/3/2025	@ 15hr,	11
Fri	10/3/2025	@ 16hr,	2
Sun	10/5/2025	@ 09hr,	3
Sun	10/5/2025	@ 10hr,	43
Sun	10/5/2025	@ 11hr,	30
Sun	10/5/2025	@ 12hr,	37
Sun	10/5/2025	@ 13hr,	24
Sun	10/5/2025	@ 14hr,	25
Sun	10/5/2025	@ 15hr,	5
Thu	10/9/2025	@ 10hr,	16
Thu	10/9/2025	@ 11hr,	7
Thu	10/9/2025	@ 12hr,	8
Thu	10/9/2025	@ 13hr,	14
Thu	10/9/2025	@ 14hr,	14
Thu	10/9/2025	@ 15hr,	1
Fri	10/10/2025	@ 10hr,	30
Fri	10/10/2025	@ 11hr,	23
Fri	10/10/2025	@ 12hr,	14
Fri	10/10/2025	@ 13hr,	30
Fri	10/10/2025	@ 14hr,	12
Fri	10/10/2025	@ 15hr,	12
Fri	10/10/2025	@ 16hr,	1
Sat	10/11/2025	@ 10hr,	70
Sat	10/11/2025	@ 11hr,	38
Sat	10/11/2025	@ 12hr,	44
Sat	10/11/2025	@ 13hr,	35
Sat	10/11/2025	@ 14hr,	43
Sat	10/11/2025	@ 15hr,	18
Sat	10/11/2025	@ 16hr,	6
Sun	10/12/2025	@ 10hr,	65
Sun	10/12/2025	@ 11hr,	59
Sun	10/12/2025	@ 12hr,	67
Sun	10/12/2025	@ 13hr,	56
Sun	10/12/2025	@ 14hr,	42
Sun	10/12/2025	@ 15hr,	4
Thu	10/16/2025	@ 10hr,	64
Thu	10/16/2025	@ 11hr,	46
Thu	10/16/2025	@ 12hr,	27
Thu	10/16/2025	@ 13hr,	28
Thu	10/16/2025	@ 14hr,	29
Thu	10/16/2025	@ 15hr,	3
Fri	10/17/2025	@ 10hr,	29
Fri	10/17/2025	@ 11hr,	19
Fri	10/17/2025	@ 12hr,	36
Fri	10/17/2025	@ 13hr,	34
Fri	10/17/2025	@ 14hr,	26
Fri	10/17/2025	@ 15hr,	15
Fri	10/17/2025	@ 16hr,	5
Sat	10/18/2025	@ 10hr,	78
Sat	10/18/2025	@ 11hr,	50
Sat	10/18/2025	@ 12hr,	64
Sat	10/18/2025	@ 13hr,	70
Sat	10/18/2025	@ 14hr,	62
Sat	10/18/2025	@ 15hr,	50
Sat	10/18/2025	@ 16hr,	4
Sun	10/19/2025	@ 10hr,	62
Sun	10/19/2025	@ 11hr,	57
Sun	10/19/2025	@ 12hr,	73
Sun	10/19/2025	@ 13hr,	58
Sun	10/19/2025	@ 14hr,	44
Sun	10/19/2025	@ 15hr,	12
Thu	10/23/2025	@ 10hr,	36
Thu	10/23/2025	@ 11hr,	29
Thu	10/23/2025	@ 12hr,	18
Thu	10/23/2025	@ 13hr,	12
Thu	10/23/2025	@ 14hr,	17
Thu	10/23/2025	@ 15hr,	1
Fri	10/24/2025	@ 10hr,	25
Fri	10/24/2025	@ 11hr,	10
Fri	10/24/2025	@ 12hr,	11
Fri	10/24/2025	@ 13hr,	19
Fri	10/24/2025	@ 14hr,	8
Fri	10/24/2025	@ 15hr,	10
Fri	10/24/2025	@ 16hr,	2
Sat	10/25/2025	@ 10hr,	66
Sat	10/25/2025	@ 11hr,	70
Sat	10/25/2025	@ 12hr,	53
Sat	10/25/2025	@ 13hr,	53
Sat	10/25/2025	@ 14hr,	63



Sat	10/25/2025	@ 15hr,	48
Sat	10/25/2025	@ 16hr,	1
Sun	10/26/2025	@ 10hr,	74
Sun	10/26/2025	@ 11hr,	47
Sun	10/26/2025	@ 12hr,	50
Sun	10/26/2025	@ 13hr,	71
Sun	10/26/2025	@ 14hr,	56
Sun	10/26/2025	@ 15hr,	18
Mon	10/27/2025	@ 10hr,	1
Thu	10/30/2025	@ 10hr,	11
Thu	10/30/2025	@ 11hr,	6
Thu	10/30/2025	@ 12hr,	5
Thu	10/30/2025	@ 13hr,	10
Thu	10/30/2025	@ 14hr,	7
Fri	10/31/2025	@ 10hr,	8
Fri	10/31/2025	@ 11hr,	5
Fri	10/31/2025	@ 12hr,	4
Fri	10/31/2025	@ 13hr,	4
Fri	10/31/2025	@ 14hr,	1
Fri	10/31/2025	@ 15hr,	1
Sat	11/1/2025	@ 10hr,	1
Sat	11/1/2025	@ 11hr,	6
Sat	11/1/2025	@ 12hr,	5
Sat	11/1/2025	@ 13hr,	7
Sat	11/1/2025	@ 14hr,	6
Sat	11/1/2025	@ 15hr,	4
Sun	11/2/2025	@ 10hr,	10
Sun	11/2/2025	@ 11hr,	4
Sun	11/2/2025	@ 12hr,	1
Sun	11/2/2025	@ 13hr,	4
Sun	11/2/2025	@ 14hr,	1
Sun	11/2/2025	@ 15hr,	2

Appendix C: Synchro Reports

Lanes, Volumes, Timings
1: Doolittle Road & Mt Herman Lane

JR Engineering
08/13/2026



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	7	8	0
Future Volume (vph)	0	0	0	7	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr t	0.865					
Flt Protected	0.950					
Satd. Flow (prot)	0	1863	1611	0	1770	0
Flt Permitted	0.950					
Satd. Flow (perm)	0	1863	1611	0	1770	0
Link Speed (mph)	30		30	30		
Link Distance (ft)	1211		2614	976		
Travel Time (s)	27.5		59.4	22.2		
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	0	0	0	9	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	9	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	0		0	12		
Link Offset(ft)	0		0	0		
Crosswalk Width(ft)	16		16	16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control	Stop		Free	Free		
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	7	8	0
Future Vol, veh/h	0	0	0	7	8	0
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	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	9	10	0

Major/Minor	Minor1	Major2	Major1
Conflicting Flow All	0	29	-
Stage 1	0	21	-
Stage 2	0	9	-
Critical Hdwy	7.12	6.52	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-
Follow-up Hdwy	3.518	4.018	-
Pot Cap-1 Maneuver	-	863	-
Stage 1	-	-	-
Stage 2	-	888	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	863	-
Mov Cap-2 Maneuver	-	863	-
Stage 1	-	-	-
Stage 2	-	888	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	
HCM LOS	A		

Minor Lane/Major Mvmt	EBLn1	WBT	WBR
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	0	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	-	-	-

Lanes, Volumes, Timings
2: Lindbergh Road & Doolittle Road

JR Engineering
08/13/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	4	2	2	3	1	4	9	5	1	14	0
Future Volume (vph)	2	4	2	2	3	1	4	9	5	1	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.963			0.983			0.965				
Flt Protected		0.987			0.982			0.989			0.997	
Satd. Flow (prot)	0	1771	0	0	1798	0	0	1778	0	0	1857	0
Flt Permitted		0.987			0.982			0.989			0.997	
Satd. Flow (perm)	0	1771	0	0	1798	0	0	1778	0	0	1857	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2614			865			823			832	
Travel Time (s)		59.4			19.7			18.7			18.9	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	3	5	3	3	4	1	5	12	6	1	18	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	0	8	0	0	23	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	13.3%											
Analysis Period (min)	15											
	ICU Level of Service A											

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	2	4	2	2	3	1	4	9	5	1	14	0
Future Vol, veh/h	2	4	2	2	3	1	4	9	5	1	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	5	3	3	4	1	5	12	6	1	18	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	8	0	0	29	22	6	26	22	4
Stage 1	-	-	-	-	-	-	12	12	-	10	10	-
Stage 2	-	-	-	-	-	-	18	10	-	16	13	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1616	-	-	1613	-	-	979	872	1076	985	871	1079
Stage 1	-	-	-	-	-	-	1009	886	-	1011	888	-
Stage 2	-	-	-	-	-	-	1001	887	-	1004	885	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1616	-	-	1613	-	-	956	869	1076	963	868	1079
Mov Cap-2 Maneuver	-	-	-	-	-	-	956	869	-	963	868	-
Stage 1	-	-	-	-	-	-	1007	885	-	1010	886	-
Stage 2	-	-	-	-	-	-	979	886	-	983	883	-
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	1.81			2.41			8.93			9.21		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	938	422	-	-	571	-	-	874				
HCM Lane V/C Ratio	0.025	0.002	-	-	0.002	-	-	0.022				
HCM Ctrl Dly (s/v)	8.9	7.2	0	-	7.2	0	-	9.2				
HCM Lane LOS	A	A	A	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1				

Lanes, Volumes, Timings
1: Doolittle Road & Mt Herman Lane

JR Engineering
08/13/2026



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	91	91	7	8	0
Future Volume (vph)	0	91	91	7	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.990					
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	1844	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	1844	0	1770	0
Link Speed (mph)	30		30	30		
Link Distance (ft)	1211		2614	976		
Travel Time (s)	27.5		59.4	22.2		
Peak Hour Factor	0.78	0.82	0.82	0.78	0.78	0.78
Adj. Flow (vph)	0	111	111	9	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	120	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	0		0	12		
Link Offset(ft)	0		0	0		
Crosswalk Width(ft)	16		16	16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control	Stop		Free	Free		
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 15.2%				ICU Level of Service A		
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	91	91	7	8	0
Future Vol, veh/h	0	91	91	7	8	0
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	78	82	82	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	111	111	9	10	0

Major/Minor	Minor1	Major2	Major1		
Conflicting Flow All	111	140	-	0	-
Stage 1	0	21	-	-	-
Stage 2	111	120	-	-	-
Critical Hdwy	7.12	6.52	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-
Follow-up Hdwy	3.518	4.018	-	-	-
Pot Cap-1 Maneuver	867	751	-	-	0
Stage 1	-	-	-	-	0
Stage 2	894	796	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	867	751	-	-	0
Mov Cap-2 Maneuver	867	751	-	-	-
Stage 1	-	-	-	-	-
Stage 2	894	796	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	10.63	0	
HCM LOS	B		

Minor Lane/Major Mvmt	EBLn1	WBT	WBR
Capacity (veh/h)	751	-	-
HCM Lane V/C Ratio	0.148	-	-
HCM Ctrl Dly (s/v)	10.6	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-

Lanes, Volumes, Timings
2: Lindbergh Road & Doolittle Road

JR Engineering
08/13/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	31	38	2	30	1	40	9	5	1	14	27
Future Volume (vph)	29	31	38	2	30	1	40	9	5	1	14	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.947			0.997			0.988			0.912	
Flt Protected		0.986			0.996			0.964			0.999	
Satd. Flow (prot)	0	1739	0	0	1850	0	0	1774	0	0	1697	0
Flt Permitted		0.986			0.996			0.964			0.999	
Satd. Flow (perm)	0	1739	0	0	1850	0	0	1774	0	0	1697	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2614			865			823			832	
Travel Time (s)		59.4			19.7			18.7			18.9	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	37	40	49	3	38	1	51	12	6	1	18	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	126	0	0	42	0	0	69	0	0	54	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	28.6%											
Analysis Period (min)	15											
ICU Level of Service A												

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	29	31	38	2	30	1	40	9	5	1	14	27
Future Vol, veh/h	29	31	38	2	30	1	40	9	5	1	14	27
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	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	40	49	3	38	1	51	12	6	1	18	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	40	0	0	88	0	0	191	183	64	164	207	39
Stage 1	-	-	-	-	-	-	138	138	-	44	44	-
Stage 2	-	-	-	-	-	-	53	45	-	120	163	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1570	-	-	1507	-	-	769	711	1000	801	690	1032
Stage 1	-	-	-	-	-	-	865	782	-	970	858	-
Stage 2	-	-	-	-	-	-	960	858	-	884	763	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1570	-	-	1507	-	-	704	692	1000	762	671	1032
Mov Cap-2 Maneuver	-	-	-	-	-	-	704	692	-	762	671	-
Stage 1	-	-	-	-	-	-	843	762	-	968	857	-
Stage 2	-	-	-	-	-	-	907	856	-	844	744	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	2.17			0.45			10.51			9.42		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	722	480	-	-	108	-	-	869
HCM Lane V/C Ratio	0.096	0.024	-	-	0.002	-	-	0.062
HCM Ctrl Dly (s/v)	10.5	7.3	0	-	7.4	0	-	9.4
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.2