

# STONEFIELD

March 25, 2025

**Revised: April 9, 2025**

City of Lathrup Village  
27400 Southfield Road  
Lathrup Village, MI 48076

**RE: Traffic & Parking Assessment Report  
Proposed Multi-Family Residential Development  
27700 Southfield Road  
Parcel ID 2413303021  
City of Lathrup Village, Oakland County, Michigan  
SE&D Job No. DET-250168**

Dear Board Members:

Stonefield Engineering and Design, LLC ("Stonefield") has prepared this analysis to examine the potential traffic and parking impacts of the proposed multi-family residential development on the adjacent roadway network. The subject property is located along the easterly side of Southfield Road, between Sunset Drive East and Goldengate Drive East, in the City of Lathrup Village, Oakland County, Michigan. The location of the site is shown on appended **Figure I**. The subject property is designated as Parcel ID 2413303021. The existing site contains the Academy of Lathrup Village school building which is permanently closed and associated asphalt surface parking lots. Based on research the school has been closed since 2012. The existing access is provided via two (2) curb cuts along Goldengate Drive East and one (1) driveway along Sunset Boulevard East. Under the proposed development program, the main central structure of the existing school would be repurposed, and a multi-family residential development consisting of 145 dwelling units would be constructed. Access is proposed via one (1) driveway along Goldengate Drive East and one (1) driveway along Sunset Boulevard East. It is recommended to install "No Right-Turn" signage egressing the site at the proposed driveway along Goldengate Drive driveway to enforce no cut-through traffic through the residential neighborhood to the northeast of the site.

## **Existing Conditions**

The subject property is located along the easterly side of Southfield Road, between Sunset Drive East and Goldengate Drive East, in the City of Lathrup Village, Oakland County, Michigan. The subject property is designated as Parcel ID 2413303021. Land uses in the area are a mix of residential, commercial, and retail uses.

Southfield Road is classified as a Principal Arterial roadway with a general north-south orientation and is under the jurisdiction of the Road Commission of Oakland County (RCOC). Along the site frontage, the roadway provides two (2) lanes of travel in each direction, separated by a two (2)-way left-turn lane median, and has a posted speed limit of 45 mph. Curb is provided along the westerly side of the roadway, sidewalk is provided along both sides of the roadway, shoulders are provided along both sides of the roadway, and on-street parking is not permitted. Southfield Road provides north-south mobility within the City of Lathrup Village and surrounding municipalities, and provides access to Interstate-696 to the south of the site. Land uses in the area are a mix of retail (Angeles Fashion, Ashley Stewart, Lane Bryant, etc.), restaurant (Panera Bread with drive-through service, Rita's, Jay Birds Bar and Grill, etc.), recreational (Lathrup Village Dog Park, Lathrup Village Community Center, etc.), and residential uses.

Goldengate Drive is a local roadway with a general northeast-southwest orientation and is under the jurisdiction of the City of Lathrup Village. It is noted that the roadway is considered Goldengate Drive East to the east of Southfield Road and Goldengate Drive West to the west of Southfield Road. Along the site frontage,

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the roadway provides one (1) lane of travel in each direction and does not have a posted speed limit. Curb, sidewalk, and shoulders are not provided, and on-street parking is permitted along both sides of the roadway. It is noted that perpendicular on-street parking is provided along the northerly side of the roadway along the site frontage.

Sunset Drive is a local roadway with a general northwest-southeast orientation and is under the jurisdiction of the City of Lathrup Village. It is noted that the roadway is considered Sunset Drive East to the east of Southfield Road and Sunset Boulevard West to the west of Southfield Road. In the vicinity of the site, the roadway provides one (1) lane of travel in each direction and has a posted speed limit of 25 mph. Curb, sidewalk, and shoulders are generally not provided and on-street parking is not permitted.

Southfield Road, Sunset Boulevard West, and Goldengate Drive East intersect to form a four (4)-leg signalized intersection. The eastbound approach of Sunset Boulevard West provides one (1) exclusive left turn lane, one (1) exclusive through lane, and one (1) exclusive right turn lane. The westbound approach of Goldengate Drive East provides one (1) full-movement lane. The northbound and southbound approaches of Southfield Road each provide one (1) exclusive left turn lane, one (1) exclusive through lane, and one (1) shared through/right turn lane. Crosswalks and pedestrian signals are provided across each of the intersection legs. The location of the intersection is shown on appended **Figure I**.

Southfield Road, Sunset Drive East, and Goldengate Drive West intersect to form a four (4)-leg unsignalized intersection with the eastbound approach of Goldengate Drive West and the westbound approach of Sunset Drive East operating under stop control. The eastbound approach of Goldengate Drive West provides one (1) full-movement lane. The westbound approach of Sunset Drive East provides one (1) full-movement lane. The northbound and southbound approaches of Southfield Road each provide one (1) exclusive left-turn lane (via the two (2)-way left-turn lane median), one (1) exclusive through lane, and one (1) shared through/right-turn lane. Pedestrian ramps are provided across the eastern and western legs of the intersection. The location of the intersection is shown on appended **Figure I**.

The subject site is located within 0.1 miles (two (2)-minute walk) bus stops that service Smart Bus Route 420, with the nearest stop located at Southfield Road and Sunset SW (Stop ID: 23673). Smart Bus Route 420 provides service to Southfield, Birmingham, Royal Oak, and various points of interest throughout Oakland County.

## **Proposed Trip Generation**

Trip generation projections for the proposed multi-family residential development were prepared utilizing the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11<sup>th</sup> Edition. Trip generation rates associated with Land Use 221 "Multi-Family Housing (Mid-Rise)" were cited for the 145 multi-family dwelling units. **Table I** provides the weekday morning and weekday evening peak hour trip generation volumes associated with the proposed development.

**TABLE I – PROPOSED TRIP GENERATION**

Land Use	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
145-Unit Multi-Family Housing (Mid-Rise) ITE Land Use 221	12	40	52	35	22	57

The trips generated by the proposed development were distributed according to the existing travel patterns along the adjacent roadways and the allowable turning movements at the site driveways. It is noted that vehicles would not be permitted to make a right turn onto Goldengate Drive when leaving the proposed

development. Based on historic traffic volumes provided within the Michigan Department of Transportation's (MDOT's) Traffic Data Management System, the split between northbound and southbound traffic along Southfield Road is nearly 50/50 during the weekday morning and weekday evening peak hours. As such, the traffic volumes were distributed according to the Southfield Road travel patterns and the location of parking on the site, which is generally concentrated on the northerly portion of the site proximate to Goldengate Drive East. Appended **Figure 2** summarizes the Site-Generated Trip Distribution and appended **Figure 3** summarizes the Site-Generated Traffic Volumes.

The proposed development is expected to generate 52 new trips during the weekday morning peak hour and 57 new trips during the weekday evening peak hour. Based on the Multimodal Transportation Impact Analysis for Site Development published by ITE, a trip increase of less than 50 vehicle trips would likely not change the level of service of the adjacent roadway system or appreciably increase the volume-to-capacity ratio of an intersection approach. The proposed development would provide two (2) access points, alleviating either access point from facilitating all of the traffic into and out of the site. As shown in **Figure 3**, no intersection approach is anticipated to experience more than 50 vehicle trips within one (1) hour. As such, the proposed development is not anticipated to significantly impact the operations of the adjacent roadway network.

It is recommended to install "No Right-Turn" signage egressing the site at the proposed driveway along Goldengate Drive driveway to enforce no cut-through traffic through the residential neighborhood to the northeast of the site. The proposed driveway geometry would also encourage drivers to make a left-turn onto Goldengate Drive. The proposed access would force vehicles to utilize Southfield Road rather than the residential streets in the neighborhood. As a result, minor to no additional traffic is anticipated to utilize residential streets such as Lathrup Boulevard, California Drive, Red Leaf Lane, etc. Therefore, the proposed development would not have an effect on traffic volumes, delays, or queues within the residential community.

## **Existing vs. Proposed Trip Generation Comparison**

Under the existing condition, the subject site is occupied by a school that was most recently recognized as the Academy of Lathrup Village and served 356 students in kindergarten through eighth grade. It is noted that the school has been closed since 2012. The trip generation of the school that previously occupied the site was projected utilizing rates associated with Land Use 520 "Elementary School." **Table 2** provides a comparison between the existing school and the proposed multi-family residential development.

**TABLE 2 – EXISTING VS PROPOSED TRIP GENERATION COMPARISON**

Land Use	Daily	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	Total	Enter	Exit	Total	Enter	Exit	Total
<i>Previous Development</i> 356-Student Elementary School <i>ITE Land Use 520</i>	808	144	123	267	74	86	160
<i>Proposed Development</i> 145-Unit Multi-Family Residential Development <i>ITE Land Use 221</i>	658	12	40	52	35	22	57
<b>Difference</b>	<b>-150</b>	<b>-132</b>	<b>-83</b>	<b>-215</b>	<b>-39</b>	<b>-64</b>	<b>-103</b>

As shown in **Table 2**, the proposed multi-family residential development is expected to generate 215 fewer trips during the weekday morning peak hour and 103 fewer trips during the weekday evening peak hour than the school that previously occupied the site. In addition to the differing trip generation, the two uses would

have different travel patterns and tendencies into and out of the site. Schools typically facilitate most traffic volumes into and out of the site in a condensed 15–30-minute window around school arrival and dismissal times. Residential developments experience an efflux of vehicles within a one (1) to two (2) hour window during the morning time period and an influx of vehicles within a one (1) to two (2) hour window during the evening time period, with various trips into and out of the site throughout the day. The school that previously occupied the site would generate substantially more traffic compared to the proposed residential development during the peak hours and throughout the course of a day.

## **Permitted vs. Proposed Trip Generation Comparison**

Based on the City of Lathrup Village Zoning Map, the subject site is located within the Village Center District. The Lathrup Village Zoning Ordinance states that professional and administrative offices and retail commercial uses are permitted within the Village Center District. **Table 3** provides a comparison of the proposed multi-family residential development and the existing school's trip generation to other uses that are permitted on the subject site. The sizes of the permitted developments are based on the size of the parcel and the necessary parking required for each use.

**TABLE 3 – PROPOSED VS PERMITTED TRIP GENERATION COMPARISON**

Land Use	Daily	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	Total	Enter	Exit	Total	Enter	Exit	Total
<i>Proposed Development</i> 145-Unit Multi-Family Residential Development <i>ITE Land Use 221</i>	658	12	40	52	35	22	57
<i>Previous Development</i> 356-Student Elementary School <i>ITE Land Use 520</i>	808	144	123	267	74	86	160
<i>Permitted Use</i> 80,000 SF General Office Building <i>ITE Land Use 710</i>	956	122	16	138	23	115	138
<i>Permitted Use</i> 60,000 SF Medical-Dental Office Building <i>ITE Land Use 720</i>	2,160	120	32	152	72	169	241
<i>Permitted Use</i> 55,000 SF Shopping Plaza (40-150k) <i>ITE Land Use 821</i>	3,714	59	36	95	140	145	285

As shown in **Table 3**, the proposed multi-family residential development is anticipated to generate significantly fewer trips than other permitted uses that could occupy the site both during the peak hours and throughout the day. Based on the trip generation of the site, the proposed development would not have as significant an impact on the surrounding roadway network as other developments that are permitted in the District.

## **Site Circulation/Parking Supply**

A review was conducted of the proposed multi-family residential development using the Site Plan prepared by Biddison Architecture. In completing this review, particular attention was focused on the site access, circulation, and parking supply.

Under the proposed development program, the main central structure of the existing school would be repurposed, and a multi-family residential development consisting of 145 dwelling units would be constructed. The main central portion of the existing school would be repurposed as a community center, recreational sports court, work space, and leasing office. The proposed residential units would be constructed to the north and to the south of the central repurposed school structure. Access is proposed via one (1) driveway along Goldengate Drive East and one (1) driveway along Sunset Boulevard East. It is recommended to install "No Right-Turn" signage egressing the site at the proposed driveway along Goldengate Drive driveway to enforce no cut-through traffic through the residential neighborhood to the northeast of the site. Security gates would provide access to the parking area located to the east of the proposed structure. A 10-foot-wide by 40-foot-long loading zone would be provided within the parking lot on the southerly portion of the site.

Regarding the parking supply of the proposed development, the site would provide 1.5 parking spaces per unit. For the proposed 145 multi-family residential dwellings, this equates to 218 required spaces. The site would provide 200 parking spaces within the surface parking lot to the east of the proposed building and 18 perpendicular on-street parking spaces along Goldengate Drive East to the north of the structure for a total parking supply of 218 spaces.

The parking supply was evaluated with respect to data published within the ITE's Parking Generation, 5<sup>th</sup> Edition, for Land Use 221 "Multi-Family Housing – 2+ Bedroom (Mid-Rise)." The 85<sup>th</sup> percentile parking demand rate during the peak weekday period for Land Use 221 "Multi-Family Housing – 2+ Bedroom (Mid-Rise)" is 1.45 vehicles per dwelling unit. For the proposed 145 multi-family residential dwellings, this equates to 210 parking spaces. As such, the proposed parking supply of 218 spaces would be sufficient to support the parking demand of the site.

## **Conclusions**

This report was prepared to examine the potential traffic impact of the proposed multi-family residential development. The analysis findings, which have been based on industry standard guidelines, indicate that the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network or the traffic operations within the residential communities east of the site. The proposed development would generate significantly less traffic compared to the previous use on the site and other permitted uses in the Village Center District. The site driveways and on-site layout have been designed to provide for effective access to and from the subject property. The proposed parking supply would meet the parking demand of the site.

Please do not hesitate to contact our office if there are any questions.

Best regards,



John R. Corak, PE  
**Stonefield Engineering and Design, LLC**



Nicholas Kennedy  
**Stonefield Engineering and Design, LLC**

## **TECHNICAL APPENDIX**

## **MDOT COUNT DATA**



# Volume Count Report

LOCATION INFO	
Location ID	63-5479
Type	SPOT
Funct'l Class	3
Located On	SOUTHFIELD RD
Direction	2-WAY
County	Oakland
Community	Lathrup Village
MPO ID	40484
HPMS ID	
Agency	MDOT

COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Wed 10/30/2024
End Date	Thu 10/31/2024
Start Time	11:00:00 AM
End Time	11:00:00 AM
Direction	2-WAY
Notes	
Station	63-5479
Study	
Speed Limit	
Description	
Sensor Type	Video (Length-based)
Source	TcdsBinToVol
Latitude,Longitude	

INTERVAL:15-MIN					
Time	15-min Interval				Hourly Count
	1st	2nd	3rd	4th	
0:00-1:00	60	64	52	41	217
1:00-2:00	32	36	35	27	130
2:00-3:00	17	25	29	19	90
3:00-4:00	27	22	21	23	93
4:00-5:00	26	38	58	78	200
5:00-6:00	73	110	148	177	508
6:00-7:00	192	288	331	390	1,201
7:00-8:00	410	538	635	745	2,328
8:00-9:00	680	685	679	650	2,694
9:00-10:00	552	511	538	557	2,158
10:00-11:00	513	516	486	570	2,085
11:00-12:00	527	541	563	589	2,220
12:00-13:00	567	596	589	597	2,349
13:00-14:00	663	582	681	631	2,557
14:00-15:00	661	649	632	676	2,618
15:00-16:00	712	737	759	716	2,924
16:00-17:00	768	771	736	805	3,080
17:00-18:00	769	797	749	675	2,990
18:00-19:00	656	732	640	615	2,643
19:00-20:00	611	577	516	455	2,159
20:00-21:00	432	384	429	377	1,622
21:00-22:00	326	295	274	228	1,123
22:00-23:00	225	191	163	128	707
23:00-24:00	121	130	112	92	455
Total					39,151
AADT					39,151
AM Peak	07:45-08:45 2,789				
PM Peak	16:45-17:45 3,120				



# Volume Count Report

LOCATION INFO	
Location ID	63-5479_NB
Type	SPOT
Funct'l Class	3
Located On	SOUTHFIELD RD
Direction	NB
County	Oakland
Community	Lathrup Village
MPO ID	40482
HPMS ID	
Agency	MDOT

INTERVAL:15-MIN					
Time	15-min Interval				Hourly Count
	1st	2nd	3rd	4th	
0:00-1:00	27	38	30	22	117
1:00-2:00	20	21	15	13	69
2:00-3:00	9	17	12	14	52
3:00-4:00	13	12	11	15	51
4:00-5:00	10	21	23	40	94
5:00-6:00	21	52	70	102	245
6:00-7:00	90	148	164	195	597
7:00-8:00	173	267	312	385	1,137
8:00-9:00	324	344	364	376	1,408
9:00-10:00	300	286	276	295	1,157
10:00-11:00	275	269	255	320	1,119
11:00-12:00	279	259	278	316	1,132
12:00-13:00	285	286	319	301	1,191
13:00-14:00	303	264	289	277	1,133
14:00-15:00	304	295	301	324	1,224
15:00-16:00	347	356	382	372	1,457
16:00-17:00	379	367	372	382	1,500
17:00-18:00	386	358	415	394	1,553
18:00-19:00	402	339	313	291	1,345
19:00-20:00	258	272	236	205	971
20:00-21:00	190	187	197	164	738
21:00-22:00	144	142	109	108	503
22:00-23:00	100	78	85	69	332
23:00-24:00	47	71	54	54	226
Total					19,351
AM Peak	07:45-08:45				1,417
PM Peak	17:15-18:15				1,569

COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Wed 10/30/2024
End Date	Thu 10/31/2024
Start Time	11:00:00 AM
End Time	11:00:00 AM
Direction	NB
Notes	
Station	63-5479
Study	
Speed Limit	
Description	
Sensor Type	Video (Length-based)
Source	TcdsBinToVol
Latitude,Longitude	



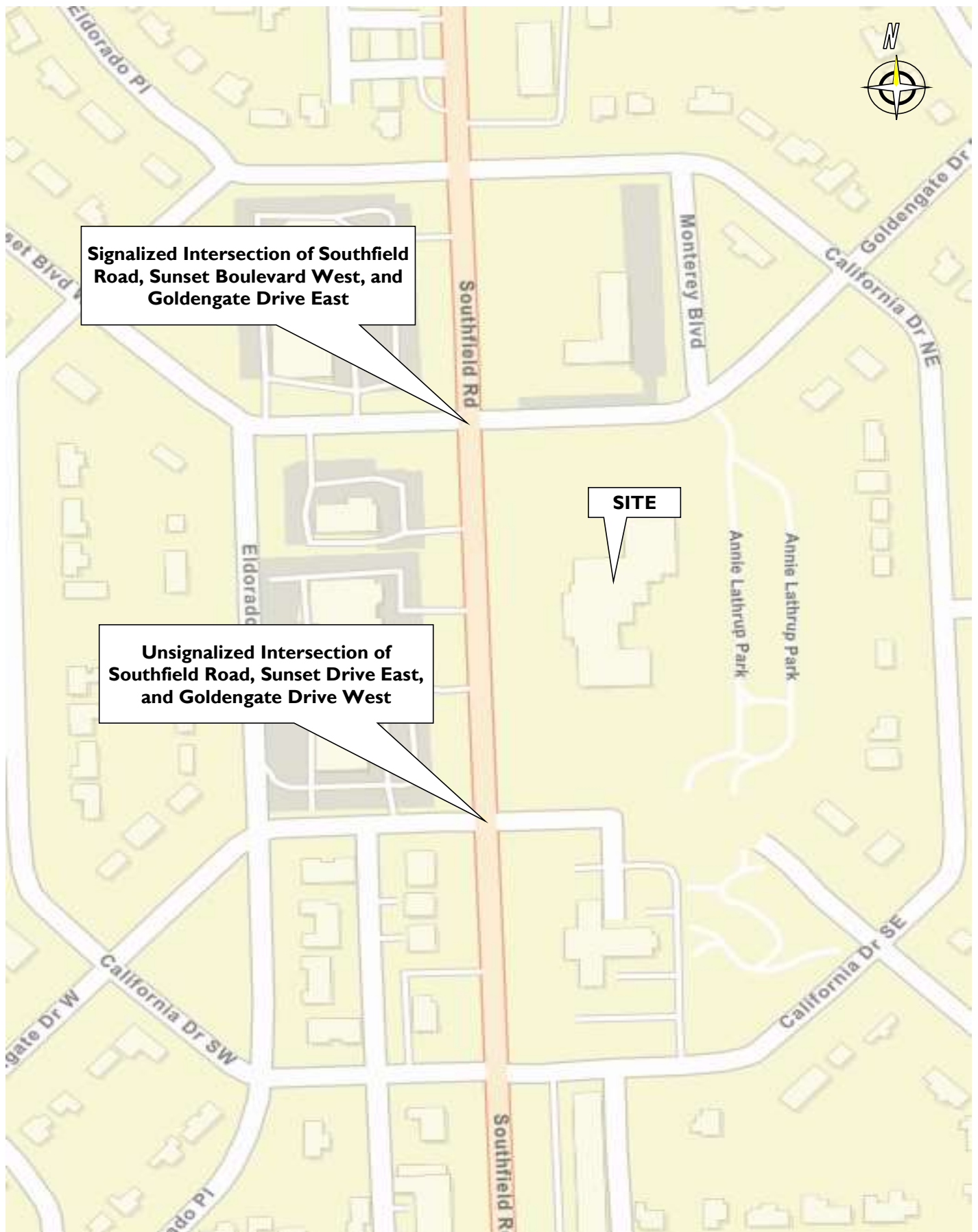
# Volume Count Report

LOCATION INFO	
Location ID	63-5479_SB
Type	SPOT
Funct'l Class	3
Located On	SOUTHFIELD RD
Direction	SB
County	Oakland
Community	Lathrup Village
MPO ID	40483
HPMS ID	
Agency	MDOT

COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Wed 10/30/2024
End Date	Thu 10/31/2024
Start Time	11:00:00 AM
End Time	11:00:00 AM
Direction	SB
Notes	
Station	63-5479
Study	
Speed Limit	
Description	
Sensor Type	Video (Length-based)
Source	TcdsBinToVol
Latitude,Longitude	

INTERVAL:15-MIN					
Time	15-min Interval				Hourly Count
	1st	2nd	3rd	4th	
0:00-1:00	33	26	22	19	100
1:00-2:00	12	15	20	14	61
2:00-3:00	8	8	17	5	38
3:00-4:00	14	10	10	8	42
4:00-5:00	16	17	35	38	106
5:00-6:00	52	58	78	75	263
6:00-7:00	102	140	167	195	604
7:00-8:00	237	271	323	360	1,191
8:00-9:00	356	341	315	274	1,286
9:00-10:00	252	225	262	262	1,001
10:00-11:00	238	247	231	250	966
11:00-12:00	248	282	285	273	1,088
12:00-13:00	282	310	270	296	1,158
13:00-14:00	360	318	392	354	1,424
14:00-15:00	357	354	331	352	1,394
15:00-16:00	365	381	377	344	1,467
16:00-17:00	389	404	364	423	1,580
17:00-18:00	383	439	334	281	1,437
18:00-19:00	254	393	327	324	1,298
19:00-20:00	353	305	280	250	1,188
20:00-21:00	242	197	232	213	884
21:00-22:00	182	153	165	120	620
22:00-23:00	125	113	78	59	375
23:00-24:00	74	59	58	38	229
Total					19,800
AM Peak	07:30-08:30				1,380
PM Peak	16:30-17:30				1,609

## FIGURES



**STONEFIELD**

**Proposed Multi-Family Residential Development**  
**27700 Southfield Road**  
**City of Lathrup Village, Oakland County, Michigan**  
**Traffic Assessment Report**

**FIGURE I**  
**Site Location Map**

