DOLAN&DEAN
CONSULTING ENGINEERS, LLC

181 WEST HIGH STREET
SOMERVILLE, NJ 08876

908 927 0100 p
908 927 0181 f

TRAFFIC IMPACT ANALYSIS

FOR

JAIN CENTER OF NEW JERSEY

BLOCK 468.07, LOT 45
111 CEDAR GROVE LANE
TOWNSHIP OF FRANKLIN, SOMERSET COUNTY

DECEMBER 20, 2023

ELIZABETH DOLAN, P.E.
NJ LICENSE NO. 37071

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NJ LICENSE NO. 54558

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SF/RLK
Somerset/Franklin/Jain Center/Documents\2023-12-20TIA.doc

INTRODUCTION

Dolan & Dean Consulting Engineers, LLC (D&D) has been commissioned to prepare this Traffic Impact Analysis in support of the site plan application for the proposed archway (sign variance) and driveway improvements at Jain Center located on Block 468.07, Lot 45 in Franklin Township, Somerset County.

Site access is provided via a single driveway along Cedar Grove Lane. The application submitted to the Planning Board is for the construction of an archway over the existing driveway, a gate under the archway, and provision of sidewalk along the site frontage. The driveway will be modified to provide enhanced radii, new curbing, striping, and installation of a STOP sign.

After submission of the application, Township staff requested relocation of the site driveway to align opposite the northern driveway for Cedar Grove Centre, a shopping plaza located opposite the subject property. The driveway relocation was a condition of a prior approval.

D&D has been retained by the applicant to prepare this Traffic Impact Analysis to identify existing traffic during peak street and peak site periods, and to evaluate the site driveway location.

EXISTING CONDITIONS

The subject property is located at 111 Cedar Grove Lane, as shown on Figure 1. The Munisuvrat Swami Jain Temple has 960 seats, and there is one full-movement driveway on Cedar Grove Lane.

Cedar Grove Centre is a multi-tenant shopping plaza, with frontage along northbound Cedar Grove Lane, and New Brunswick Road. The shopping plaza is served via a full-movement driveway on New Brunswick Road and 2 full-movement driveways on Cedar Grove Lane. The northern driveway is located approximately 35 feet north of the Jain Center driveway (measured between driveway centerlines).

Cedar Grove Lane has a north/south orientation and provides travel between Amwell Road to the south and Easton Avenue to the North. Within the general site vicinity, the roadway provides one travel lane in each direction with a posted speed limit of 45 miles per hour Shoulders of varying width are provided and designated as bike lanes. No on-street parking is permitted. The roadway is under Somerset County jurisdiction and is designated Route 619. NJDOT's Straight Line Diagram classifies Cedar Grove Lane as an urban minor arterial.

Cedar Grove Lane is striped with left-turn lanes for movements into the site and both of the Cedar Grove Centre driveways.

TRAFFIC VOLUMES

To examine the existing traffic conditions, D&D performed manual turning movement counts during typical weekday morning, midday, evening, and Sunday peak hours when the Jain Center and adjacent roadway system are busiest.

The traffic counts were conducted during periods of favorable weather conditions on Thursday, December 7, 2023, from 6:00 a.m. to 9:00 a.m., 10:00 a.m. to 2:00 p.m. and 4:00 p.m. to 7:00 p.m.; and on Sunday, December 10, 2023, from 8:00 a.m. to 11:00 a.m. along Cedar Grove Lane, at the Jain Center driveway, and at the northern Cedar Grove Centre driveway.

Appended Figures 2 through 5 show the peak hour traffic volumes based on the collected data.

Table I summarizes the peak hour trips for the existing 960-seat Jain Center and the weekday morning, midday, evening, and Sunday peak hours.

TABLE I
EXISTING TRIP GENERATION
960 SEAT JAIN CENTER

Morning Peak Hour			Midday Peak Hour			Evening Peak Hour			Sunday Peak Hour		
Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
4	24	28	7	11	18	2	2	4	16	53	69

As shown, existing trip generation is relatively low. No more than 28 trips are generated during the weekday peak hours and, at most, 69 trips are generated during the Sunday peak hour. From a traffic or roadway capacity perspective, the impacts are virtually immeasurable

and are not typically considered "significant", which is defined by ITE and NJDOT as an additional 100 or more trips in one hour.

Table II shows the volumes entering and exiting the northern shopping plaza driveway during the studied peak hours:

TABLE II
EXISTING DRIVEWAY VOLUMES
NORTHERN CEDAR GROVE CENTRE DRIVEWAY

Morning Peak Hour			Midday Peak Hour			Evening Peak Hour			Sunday Peak Hour		
Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
34	54	88	101	110	211	67	40	107	31	31	62

As shown on the appended figures, the primary movements at the northern shopping plaza driveway consist of entering left-turns and exiting right-turns. These volumes do not cross the Jain Center driveway.

Volume-capacity/level of service analyses were conducted for the existing peak hour traffic volumes at the site and shopping center driveways and Cedar Grove Lane. This type of analysis is performed to assess intersection operations and to identify any areas of excessive delay or congestion. The analyses were performed using the updated Highway Capacity Manual (HCM) and the Synchro (Version 11) modeling software that follows the HCM procedures.

By definition capacity represents the maximum number of vehicles that can be accommodated given the constraints of roadway geometry, environment, traffic characteristics, and controls. Intersections are usually the critical point in any road network since it is at such points that conflicts exist between through, crossing, and turning traffic. It is at these locations where congestion is most likely to occur.

A description of intersection Levels of Service is noted on the following page:

INTERSECTION LEVELS OF SERVICE AND DELAY

Level of Service	Signalized Delay per Vehicle (seconds)	Unsignalized Delay per Vehicle (seconds)
A	< 10.0	<0-10
B	>10 and <20	>10 to <15
C	>20 and < 35	>15 to <25
D	>35 and < 55	> 25 to <35
E	>55 and < 80	> 35 to <50
F	> 80	>50

As shown on Figures 6 through 9, the critical northbound and southbound left-turns from Cedar Grove Lane into the driveways operate at Levels of Service A and B during the studied peak hours.

Due to the high through volumes along Cedar Grove Lane during the morning peak hour, the site driveway operates at Level of Service F and the shopping plaza operates at Level of Service E. During the midday, evening, and Sunday peak hours, the driveway approaches operate at Levels of Service C and D. Observations made during the traffic counts show that intersections operate free from congestion or any significant delays, thus confirming the Synchro and LOS modeling.

No analysis of "future" conditions is needed inasmuch as the site plan application does not include additional seating capacity or building area, and there are no changes proposed to site operations.

As noted in the August 1, 2023 TRC Memorandum, there are occasional events at the site that require the applicant to work with township staff and the police department to manage event traffic.

SITE ACCESS

As previously noted, the site driveway is slightly offset from the northern shopping plaza driveway. The Jain Center driveway is located south of the shopping plaza, with approximately 35 feet between the driveway centerlines. The current driveway configuration ensures that left-turns into the driveways do not conflict, or "overlap." In addition, designated left-turn lanes are present on northbound and southbound Cedar Grove Lane at the site and Cedar Grove Centre driveways.

The level of service analyses presented in the previous section of this report indicate favorable levels of service for left-turns into the driveways. The only delay results on the driveways, which does not impact thru-moving traffic on Cedar Grove Lane.

Based on the traffic counts, level of service analyses, and review of the exiting driveway and roadway geometry, there is no need or reason to relocate the Jain Center driveway.

The applicant will continue to use police officers to manage peak event driveway volumes.

TECHNICAL APPENDIX

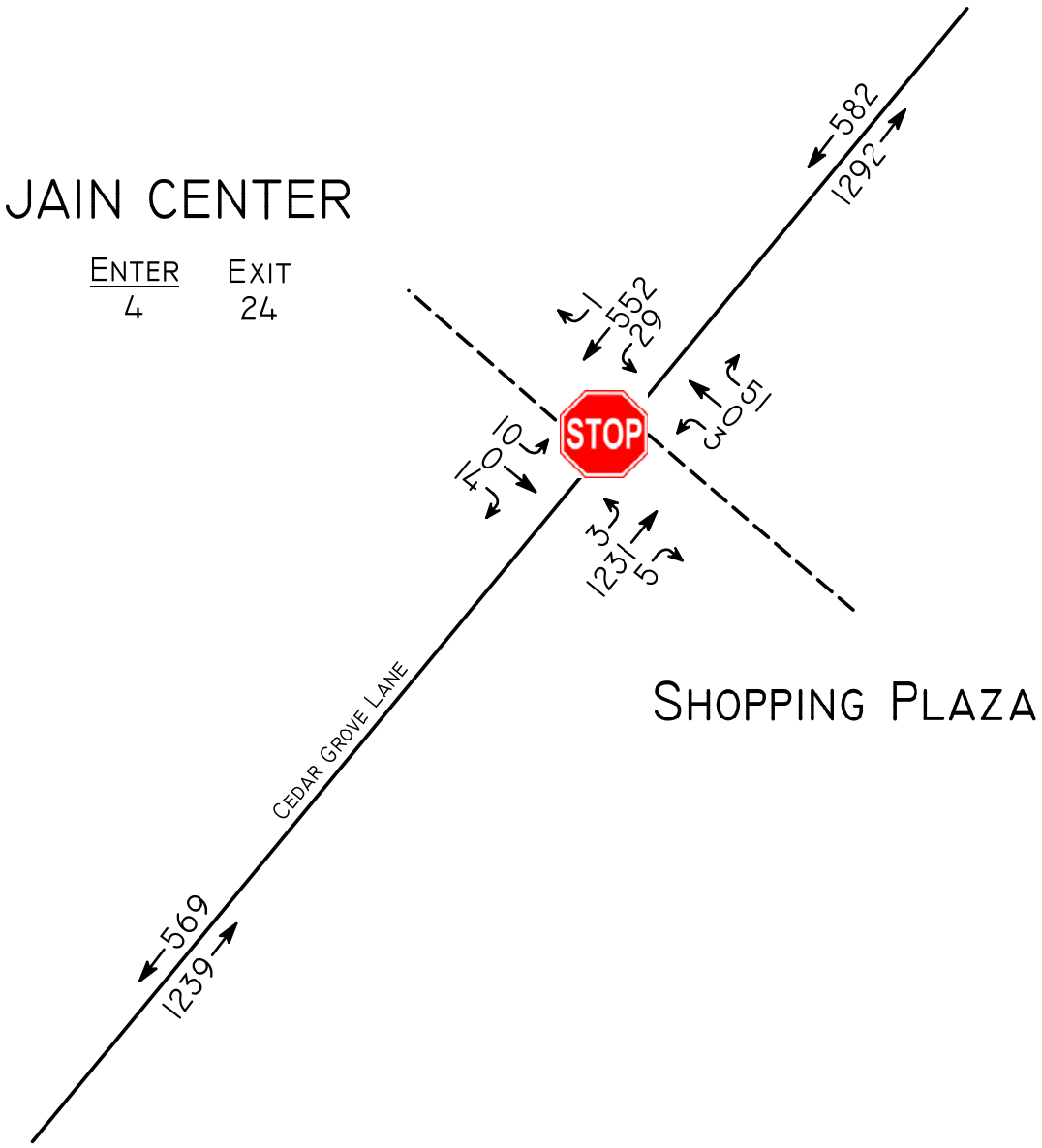
JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 1

DOLAN&DEAN
CONSULTING ENGINEERS, LLC

SITE LOCATION MAP

MORNING PEAK HOUR
7:30 A.M. TO 8:30 A.M.



Legend
—— = Existing Roadway
-- = Existing Driveway

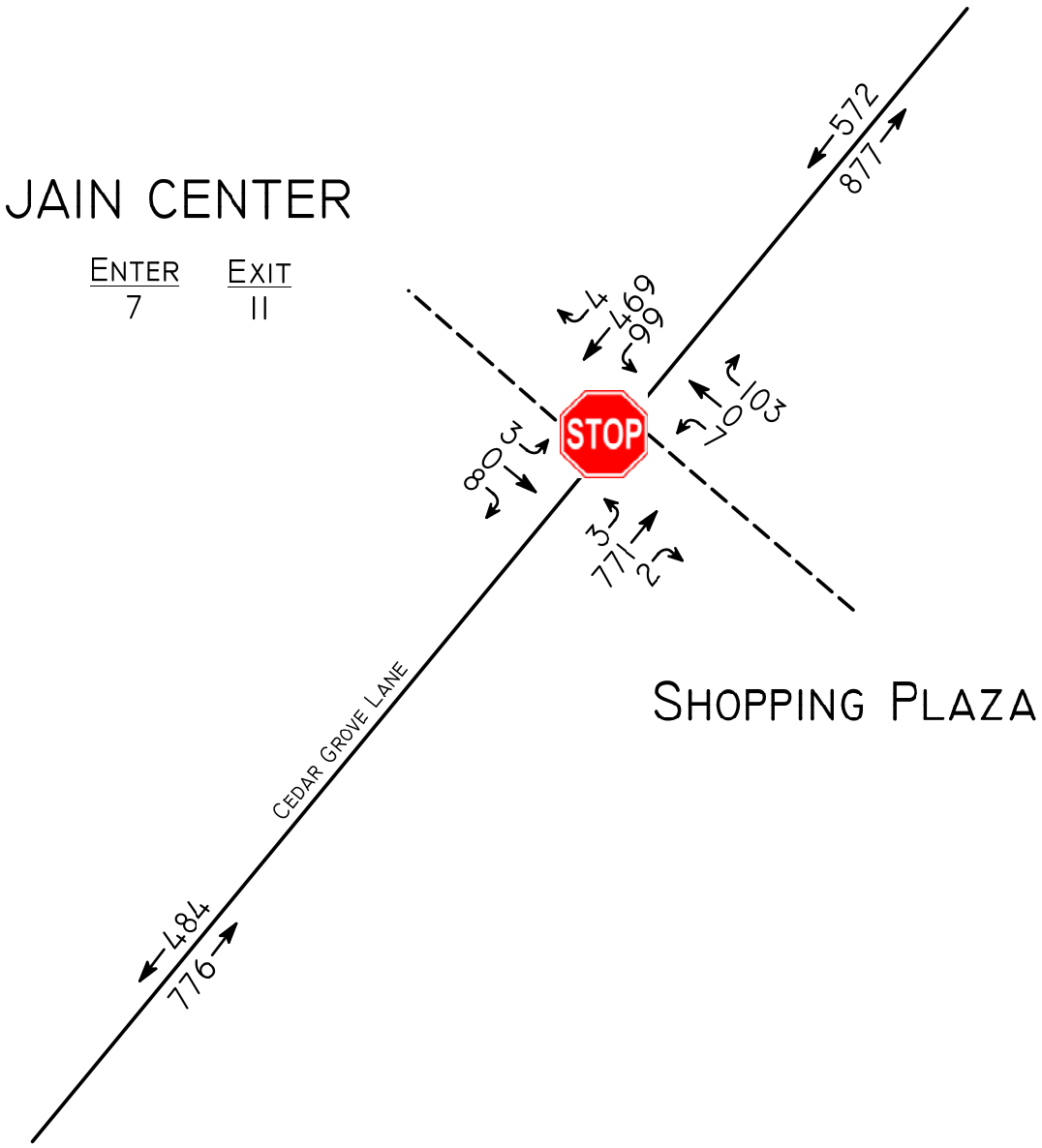
JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 2

DOLAN&DEAN CONSULTING ENGINEERS, LLC

MORNING EXISTING TRAFFIC VOLUMES

MIDDAY PEAK HOUR
12:15 P.M. TO 1:15 P.M.



Legend
—— = Existing Roadway
-- = Existing Driveway

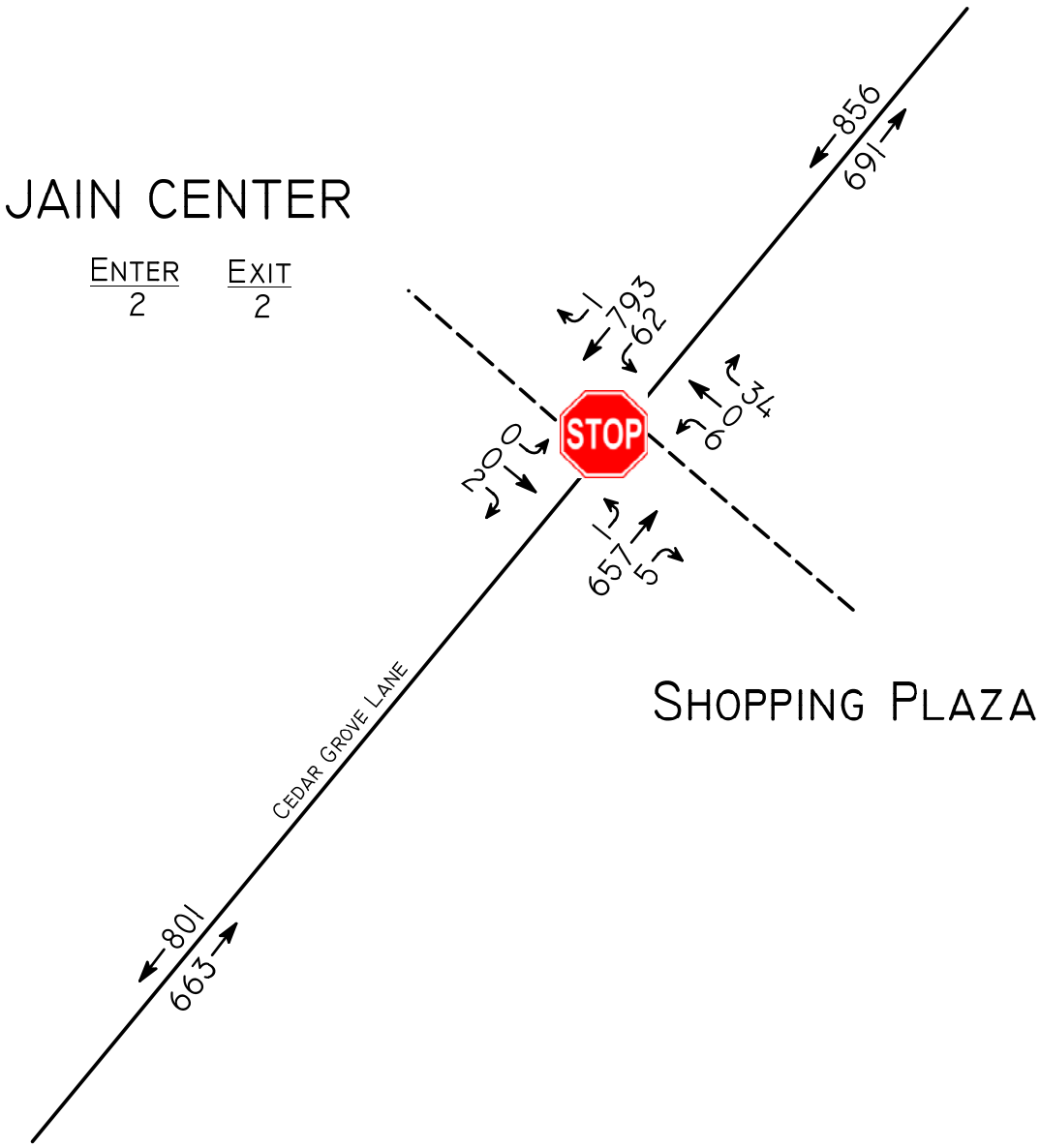
JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 3

DOLAN&DEAN CONSULTING ENGINEERS, LLC

MIDDAY EXISTING TRAFFIC VOLUMES

EVENING PEAK HOUR
4:00 P.M. TO 5:00 P.M.



Legend
—— = Existing Roadway
-- = Existing Driveway

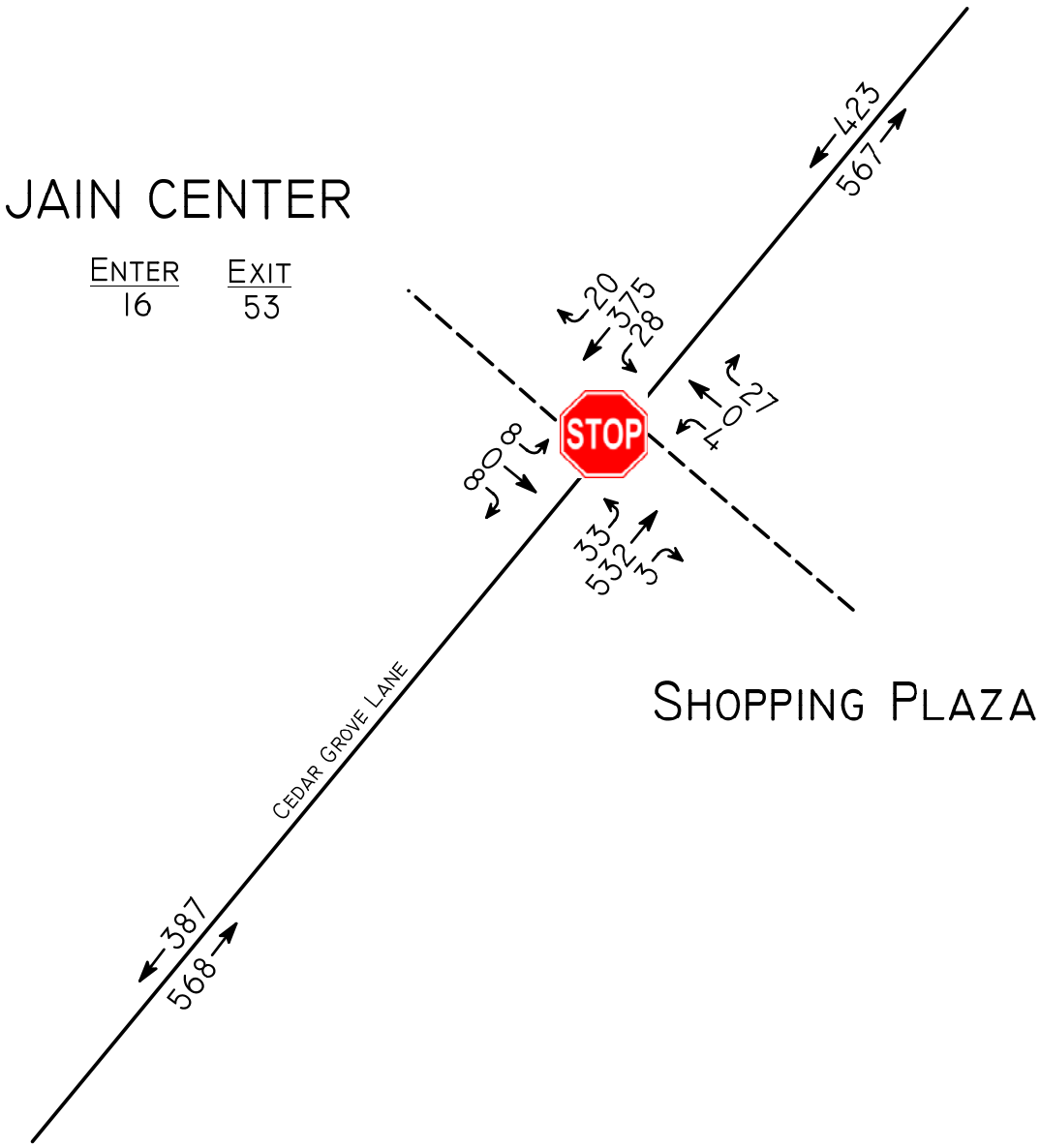
JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 4

DOLAN&DEAN CONSULTING ENGINEERS, LLC

EVENING EXISTING TRAFFIC VOLUMES

SUNDAY PEAK HOUR
10:00 A.M. TO 11:00 A.M.



Legend
—— = Existing Roadway
-- = Existing Driveway

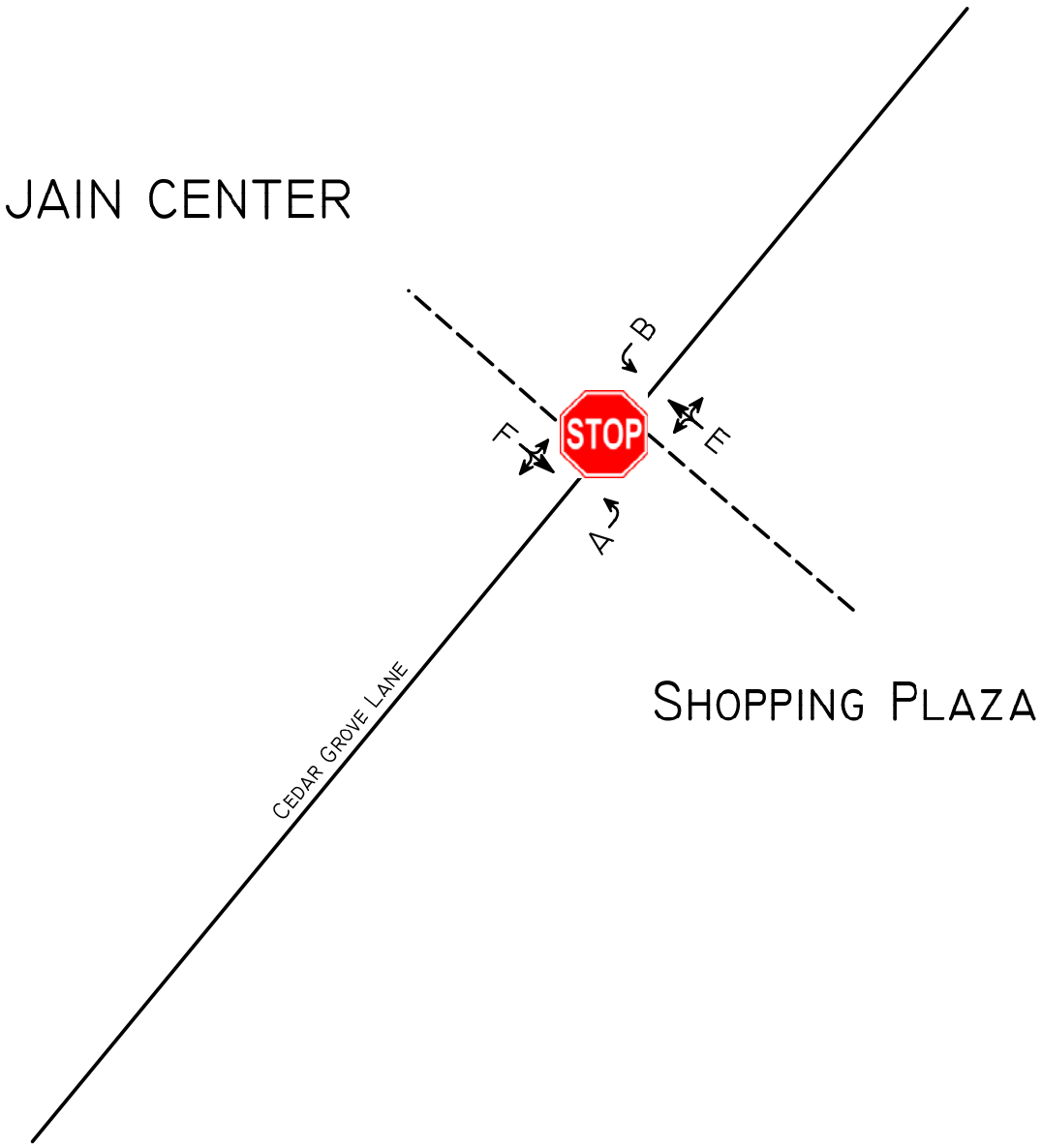
JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 5

DOLAN&DEAN CONSULTING ENGINEERS, LLC

SUNDAY EXISTING TRAFFIC VOLUMES

MORNING PEAK HOUR
7:30 A.M. TO 8:30 A.M.



Legend
—— = Existing Roadway
-- = Existing Driveway

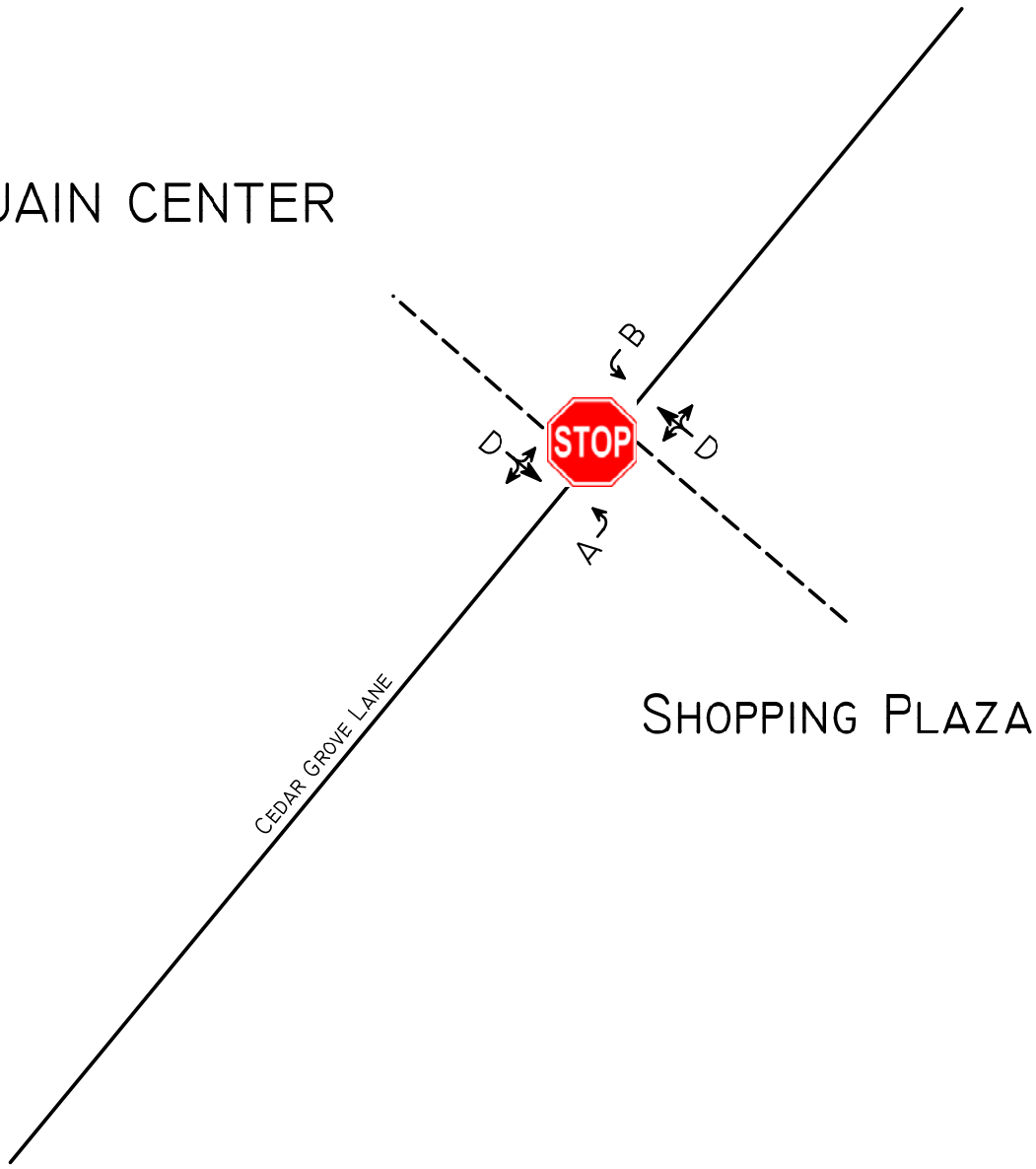
JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 6

DOLAN&DEAN CONSULTING ENGINEERS, LLC

MORNING EXISTING LEVELS OF SERVICE

MIDDAY PEAK HOUR
12:15 P.M. TO 1:15 P.M.



Legend
—— = Existing Roadway
-- = Existing Driveway

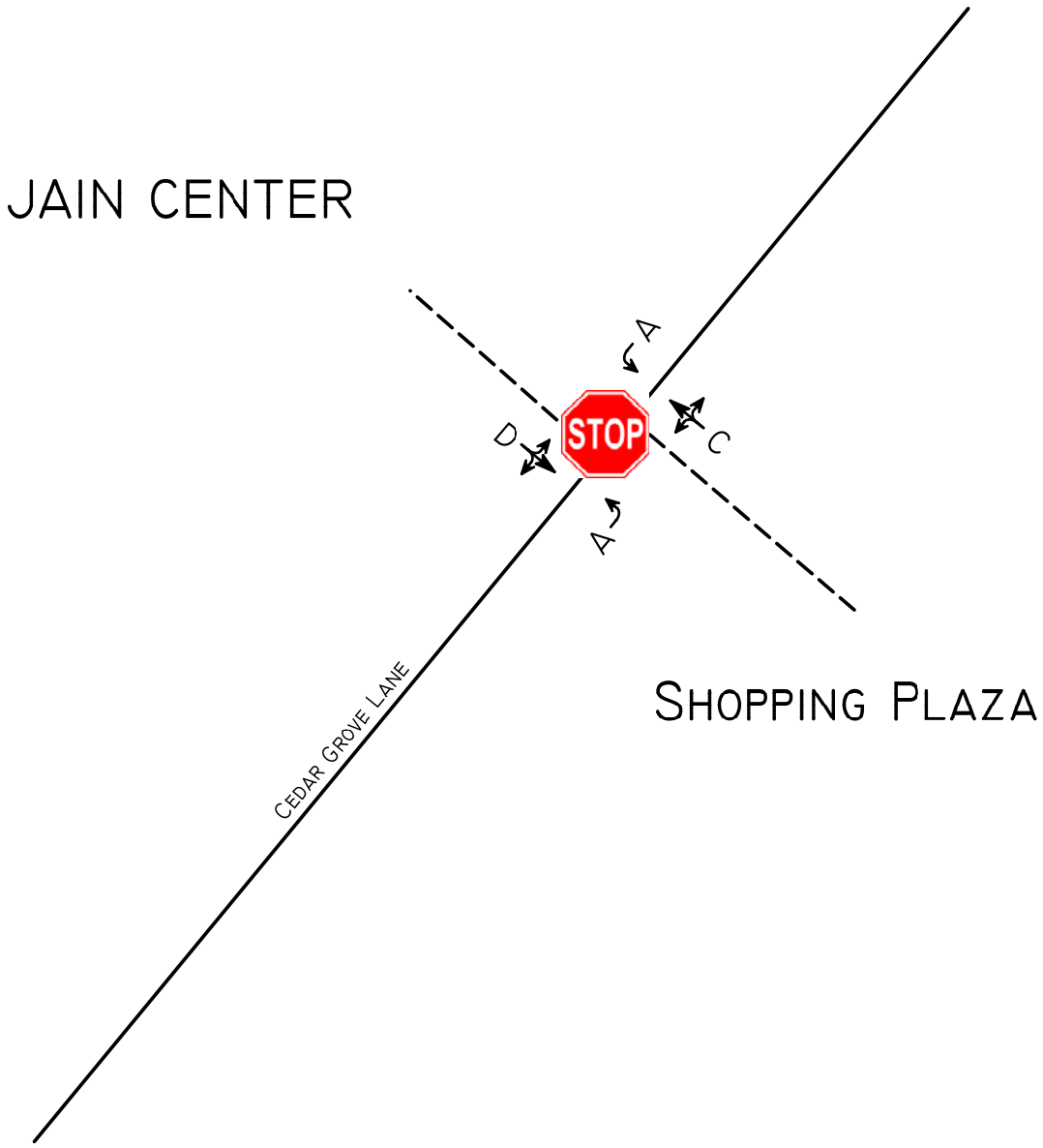
JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 7

DOLAN&DEAN CONSULTING ENGINEERS, LLC

MIDDAY EXISTING LEVELS OF SERVICE

EVENING PEAK HOUR
4:00 P.M. TO 5:00 P.M.



Legend
—— = Existing Roadway
-- = Existing Driveway

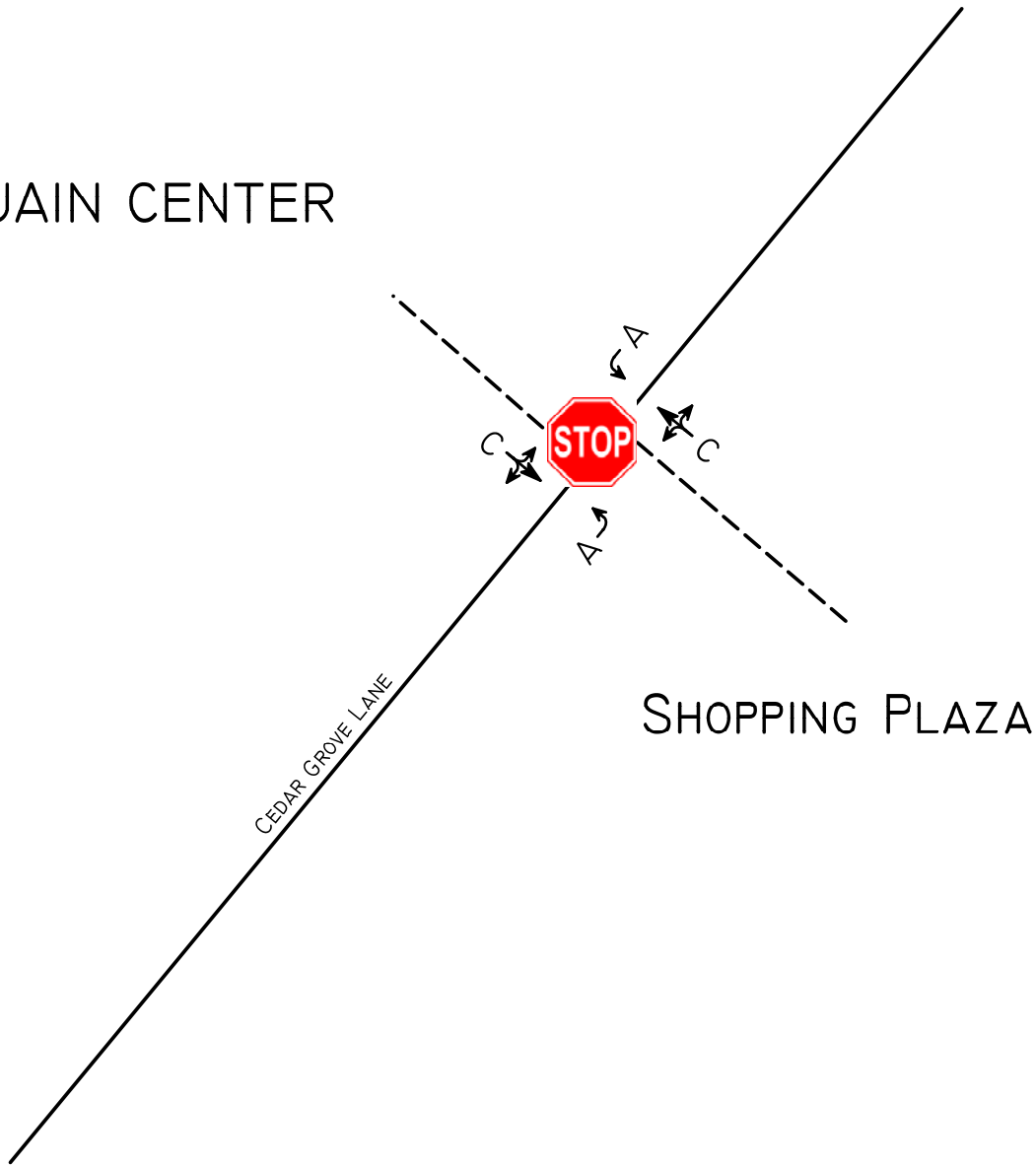
JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 8

DOLAN&DEAN CONSULTING ENGINEERS, LLC

EVENING EXISTING LEVELS OF SERVICE

SUNDAY PEAK HOUR
10:00 A.M. TO 11:00 A.M.



Legend
—— = Existing Roadway
-- = Existing Driveway

JAIN CENTER
FRANKLIN TOWNSHIP
SOMERSET COUNTY, NEW JERSEY

FIGURE 9

DOLAN&DEAN CONSULTING ENGINEERS, LLC

SUNDAY EXISTING LEVELS OF SERVICE

Prepared by National Data & Surveying Services

Cedar Grove Ln & Munisuvrat Swami Jain Temple Dwy/JOYCE Creamery Dwy

Peak Hour Turning Movement Count

ID: 23-340155-001
City: Franklin

Day: Thursday
Date: 12/7/2023

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	6:00 AM - 09:00 AM
12:15 PM - 01:15 PM	10:00 AM - 02:00 PM
04:00 PM - 05:00 PM	4:00 PM - 07:00 PM

SOUTHBOUND (Cedar Grove Ln)

AM	1	552	29	0	1292	AM
NOON	4	469	99	0	877	NOON
PM	1	793	62	0	691	PM

EASTBOUND (Munisuvrat Swami Jain Temple Dwy/JOYCE Creamery Dwy)

AM	NOON	PM	
4	7	2	
0	0	0	0
10	3	0	0
0	0	0	1
14	8	2	0
AM	NOON	PM	

WESTBOUND (Munisuvrat Swami Jain Temple Dwy/JOYCE Creamery Dwy)

PM	NOON	AM	
34	103	51	0
0	0	0	1
6	7	3	0
0	0	0	0
67	101	34	
PM	NOON	AM	

NORTHBOUND (Cedar Grove Ln)

PM	801	0	1	657	5	PM
NOON	484	0	3	771	2	NOON
AM	569	0	3	1231	5	AM

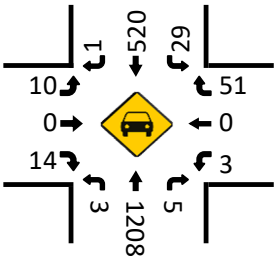
0	1	1	0
0	1	1	0

CONTROL

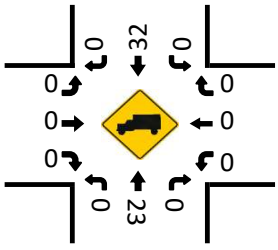
2-Way Stop (EB/WB)

TEV	1899	1469	1561
	AM	NOON	PM
PHF	0.90	0.93	0.88

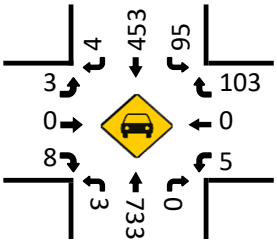
Cars (AM)



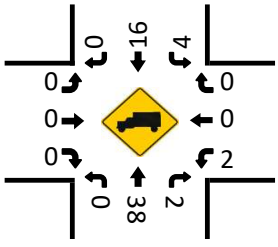
HT (AM)



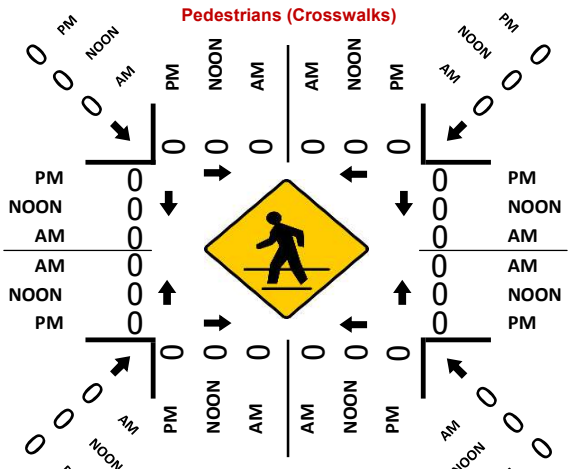
Cars (NOON)



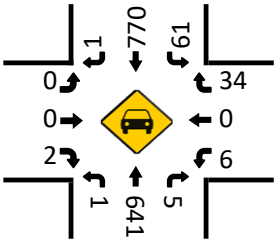
HT (NOON)



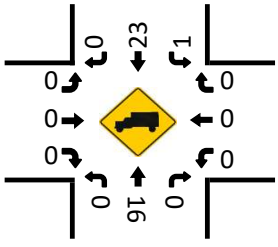
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Cedar Grove Ln & Munisuvrat Swami Jain Temple Dwy/JOYCE Creamery Dwy

Peak Hour Turning Movement Count

ID: 23-340155-001
City: Franklin

Day: Sunday
Date: 12/10/2023

PEAK HOURS	COUNT PERIODS
10:00 AM - 11:00 AM	8:00 AM - 11:00 AM
NONE	NONE
NONE	NONE

CONTROL: 2-Way Stop (EB/WB)

	AM	NOON	PM
TEV	1038	0	0
PHF	0.90		

SOUTHBOUND (Cedar Grove Ln)

	Left	Thru	Right	Peds	Total	
AM	20	375	28	0	567	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Munisuvrat Swami Jain Temple Dwy/JOYCE Creamery Dwy)

	AM	NOON	PM
U-turn	0	0	0
Left	8	0	0
Thru	0	0	0
Right	8	0	0
Peds	0	1	1
Total	53	0	0

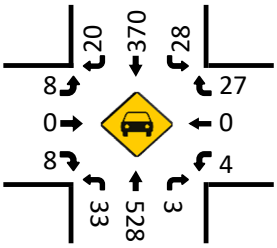
WESTBOUND (Munisuvrat Swami Jain Temple Dwy/JOYCE Creamery Dwy)

	PM	NOON	AM
U-turn	0	0	27
Left	0	0	0
Thru	0	0	4
Right	0	0	0
Peds	0	1	1
Total	0	0	31

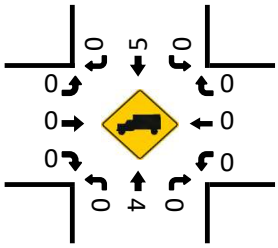
NORTHBOUND (Cedar Grove Ln)

	Left	Thru	Right	Peds	Total	
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	387	0	33	532	3	AM

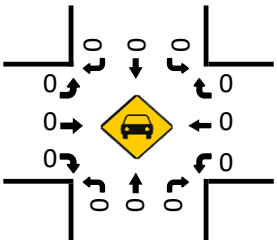
Cars (AM)



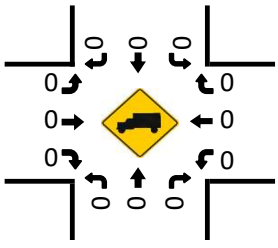
HT (AM)



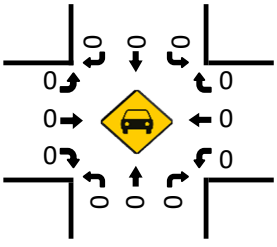
Cars (NOON)



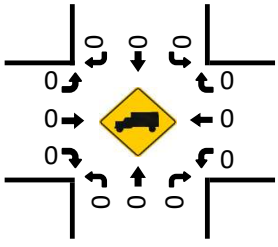
HT (NOON)



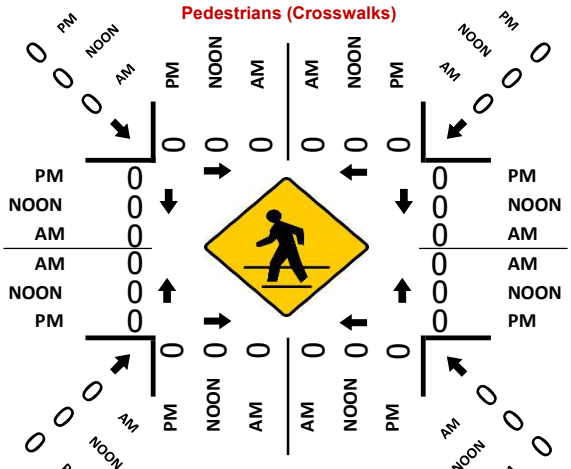
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



Intersection	
Int Delay, s/veh	3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	0	14	3	0	51	3	1231	5	29	552	1
Future Vol, veh/h	10	0	14	3	0	51	3	1231	5	29	552	1
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	-	-	-	-	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	6	2
Mvmt Flow	11	0	16	3	0	57	3	1368	6	32	613	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2084	2058	614	2063	2055	1371	614	0	0	1374	0	0
Stage 1	678	678	-	1377	1377	-	-	-	-	-	-	-
Stage 2	1406	1380	-	686	678	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	39	55	492	40	55	179	965	-	-	499	-	-
Stage 1	442	452	-	179	212	-	-	-	-	-	-	-
Stage 2	172	212	-	438	452	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	25	51	492	37	51	179	965	-	-	499	-	-
Mov Cap-2 Maneuver	25	51	-	37	51	-	-	-	-	-	-	-
Stage 1	441	423	-	178	211	-	-	-	-	-	-	-
Stage 2	117	211	-	397	423	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	117.8	45	0	0.6
HCM LOS	F	E		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	965	-	-	148	56	499	-	-
HCM Lane V/C Ratio	0.003	-	-	0.405	0.476	0.065	-	-
HCM Control Delay (s)	8.7	-	-	45	117.8	12.7	-	-
HCM Lane LOS	A	-	-	E	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.8	1.8	0.2	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	0	8	7	0	103	3	771	2	99	469	4
Future Vol, veh/h	3	0	8	7	0	103	3	771	2	99	469	4
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	-	-	-	-	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	29	2	2	2	5	100	4	3	2
Mvmt Flow	3	0	9	8	0	111	3	829	2	106	504	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1610	1555	506	1559	1556	830	508	0	0	831	0	0
Stage 1	718	718	-	836	836	-	-	-	-	-	-	-
Stage 2	892	837	-	723	720	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.39	6.52	6.22	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.39	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.39	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.761	4.018	3.318	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	84	113	566	79	113	370	1057	-	-	793	-	-
Stage 1	420	433	-	325	382	-	-	-	-	-	-	-
Stage 2	337	382	-	378	432	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	53	98	566	70	98	370	1057	-	-	793	-	-
Mov Cap-2 Maneuver	53	98	-	70	98	-	-	-	-	-	-	-
Stage 1	419	375	-	324	381	-	-	-	-	-	-	-
Stage 2	235	381	-	322	374	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	30	25.6	0	1.8
HCM LOS	D	D		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1057	-	-	291	156	793	-	-
HCM Lane V/C Ratio	0.003	-	-	0.406	0.076	0.134	-	-
HCM Control Delay (s)	8.4	-	-	25.6	30	10.2	-	-
HCM Lane LOS	A	-	-	D	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.9	0.2	0.5	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	6	0	34	1	657	5	62	793	1
Future Vol, veh/h	0	0	2	6	0	34	1	657	5	62	793	1
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	-	-	-	-	-	-	150	-	-	140	-	-
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, %	2	2	2	2	2	2	2	2	2	2	3	2
Mvmt Flow	0	0	2	7	0	39	1	747	6	70	901	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1814	1797	902	1795	1794	750	902	0	0	753	0	0
Stage 1	1042	1042	-	752	752	-	-	-	-	-	-	-
Stage 2	772	755	-	1043	1042	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	60	80	336	62	80	411	754	-	-	857	-	-
Stage 1	277	307	-	402	418	-	-	-	-	-	-	-
Stage 2	392	417	-	277	307	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	51	73	336	58	73	411	754	-	-	857	-	-
Mov Cap-2 Maneuver	51	73	-	58	73	-	-	-	-	-	-	-
Stage 1	277	282	-	402	418	-	-	-	-	-	-	-
Stage 2	355	417	-	253	282	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	15.8	26.2	0	0.7
HCM LOS	C	D		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	754	-	-	215	336	857	-	-
HCM Lane V/C Ratio	0.002	-	-	0.211	0.007	0.082	-	-
HCM Control Delay (s)	9.8	-	-	26.2	15.8	9.6	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0	0.3	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	8	0	8	4	0	27	33	532	3	28	375	20
Future Vol, veh/h	8	0	8	4	0	27	33	532	3	28	375	20
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	-	-	-	-	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	9	4	0	30	37	591	3	31	417	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1172	1158	428	1162	1168	593	439	0	0	594	0	0
Stage 1	490	490	-	667	667	-	-	-	-	-	-	-
Stage 2	682	668	-	495	501	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	169	196	627	172	193	506	1121	-	-	982	-	-
Stage 1	560	549	-	448	457	-	-	-	-	-	-	-
Stage 2	440	456	-	556	543	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	151	183	627	161	181	506	1121	-	-	982	-	-
Mov Cap-2 Maneuver	151	183	-	161	181	-	-	-	-	-	-	-
Stage 1	542	531	-	433	442	-	-	-	-	-	-	-
Stage 2	400	441	-	531	526	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	21	15	0.5	0.6
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1121	-	-	396	243	982	-	-
HCM Lane V/C Ratio	0.033	-	-	0.087	0.073	0.032	-	-
HCM Control Delay (s)	8.3	-	-	15	21	8.8	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.2	0.1	-	-