

TECHNICAL MEMORANDUM

DATE: February 8, 2024

TO: City of Manor
FROM: Ben Plett, P.E.

RE: Dominion Manor Multifamily Traffic Count Methodology

This memorandum documents the traffic counts methodology for the Dominion Manor Development. The site is located north of US 290 and between FM 973 and Bois D'Arc Road in the City of Manor, Travis County, Texas. The objective of this memo is to summarize the traffic count methodology.

Weekday AM and PM peak period turning movement counts were collected by Quality Counts, LLC. Quality Counts is a national traffic data collection company with 15+ offices nationwide and are a trusted partner to Kimley-Horn and other transportation engineers throughout the county.

Quality Counts records turning movement counts with video cameras and tabulates the data using artificial intelligence, manual review, and a proprietary quality control application. The counts were collected at the following study intersections from 7:00am to 9:00am and from 4:00pm to 6:00pm while school was in session on Thursday, December 7th, 2023. It should be noted that one day of traffic counts is an industry standard and the subconsultant verifies that there are no issues that interfere with the integrity of the data collection including inclement weather, construction, vehicle crashes, and/or any other atypical roadway operations.

The peak hour is defined as the 60-minute period in which the greatest number of vehicles enter an intersection. The peak hour at each intersection was observed as follows:


1. FM 973 at Suncrest Road
 - AM Peak Hour: 7:00 AM – 8:00 AM
 - PM Peak Hour: 4:30 PM – 5:30 PM
2. Suncrest Road at Tower Road
 - AM Peak Hour: 7:00 AM – 8:00 AM
 - PM Peak Hour: 5:00 PM – 6:00 PM
3. Bois D'Arc Road at Tower Road
 - AM Peak Hour: 7:00 AM – 8:00 AM
 - PM Peak Hour: 5:00 PM – 6:00 PM



School times were captured during the AM peak period, however higher volumes of traffic from individuals returning home from work were identified to be during 5-6pm for the PM peak period. While school is let out before the PM peak hour, generally more traffic is observed between 4pm and 6pm, thus this is referred to as the PM peak hour. Through field observation, the existing counts indicate there are no pedestrian volumes near the site. The raw count sheets are provided in **Appendix A**.

Appendix A: Traffic Counts

Volume Count Report

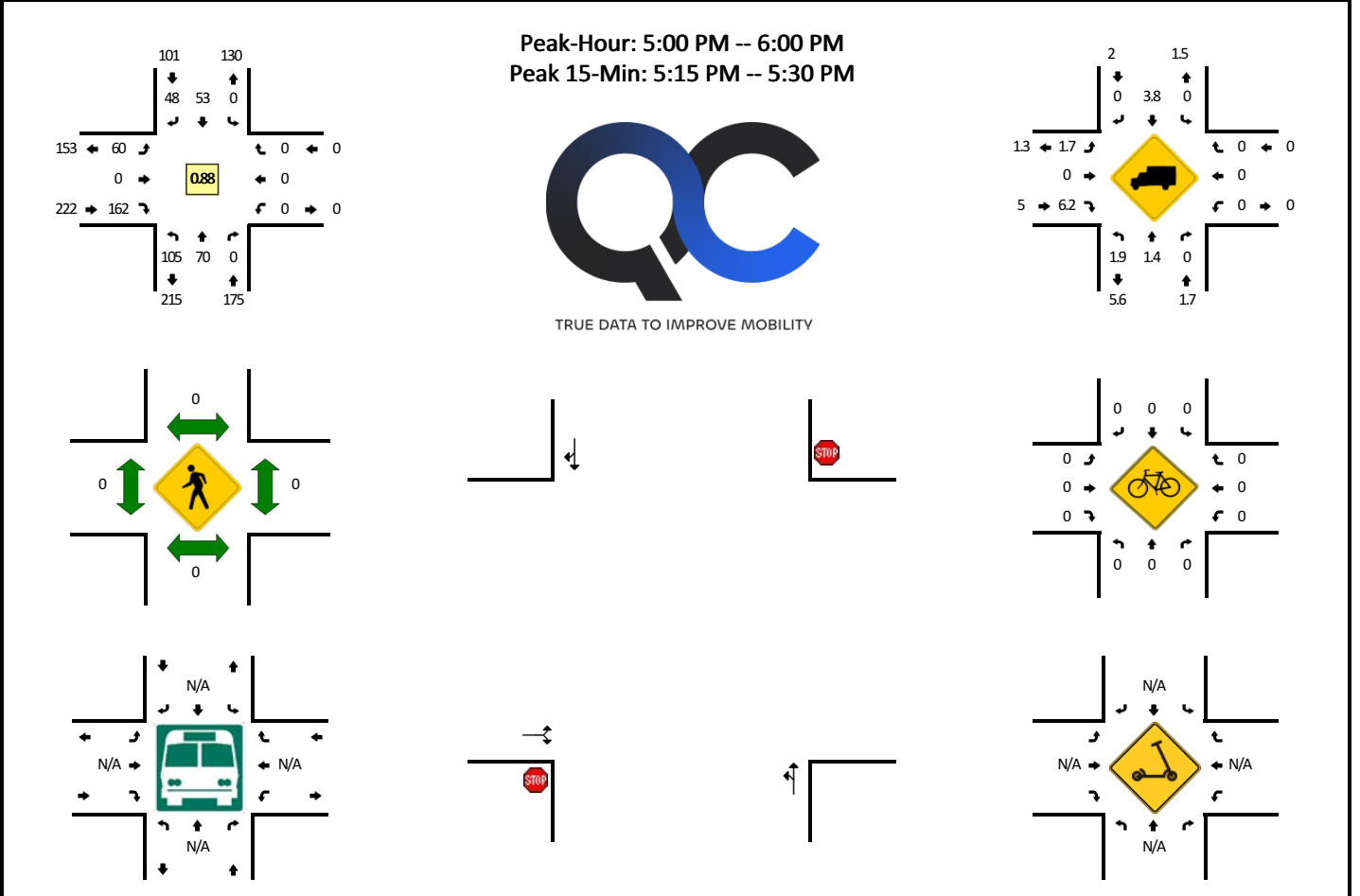
LOCATION INFO	
Location ID	227H31
Type	SPOT
Funct'l Class	4
Located On	FM0973
Loc On Alias	FM0973-KG
Direction	2-WAY
County	Travis
Community	Manor
MPO ID	90
HPMS ID	ASSIGNED
Agency	Texas DOT

COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Mon 12/20/2021
End Date	Tue 12/21/2021
Start Time	4:00:00 AM
End Time	4:00:00 AM
Direction	
Notes	
Station	
Study	
Speed Limit	
Description	
Sensor Type	Axle/Tube
Source	
Latitude,Longitude	30.351029, -97.537562 

INTERVAL:15-MIN					
Time	15-min Interval				Hourly Count
	1st	2nd	3rd	4th	
0:00-1:00	32	35	28	33	128
1:00-2:00	19	19	22	20	80
2:00-3:00	21	20	17	16	74
3:00-4:00 	28	22	35	31	116
 4:00-5:00	39	52	72	65	228
5:00-6:00	125	155	197	221	698
6:00-7:00	226	262	258	294	1,040
7:00-8:00	277	255	254	270	1,056
8:00-9:00	238	228	224	211	901
9:00-10:00	235	212	228	211	886
10:00-11:00	200	183	220	219	822
11:00-12:00	249	229	199	217	894
12:00-13:00	227	236	227	230	920
13:00-14:00	225	228	243	207	903
14:00-15:00	222	228	243	229	922
15:00-16:00	248	250	288	293	1,079
16:00-17:00	313	291	300	310	1,214
17:00-18:00	328	316	312	305	1,261
18:00-19:00	281	295	253	245	1,074
19:00-20:00	176	169	177	164	686
20:00-21:00	137	163	136	127	563
21:00-22:00	125	104	103	99	431
22:00-23:00	101	89	57	71	318
23:00-24:00	65	52	54	32	203
Total					16,497
AADT					15,772
AM Peak					06:15-07:15 1,091
PM Peak					16:45-17:45 1,266

LOCATION: Bois-D-Arc Rd -- Tower Rd
CITY/STATE: Manor, TX

QC JOB #: 16426706
DATE: Thu, Dec 7 2023



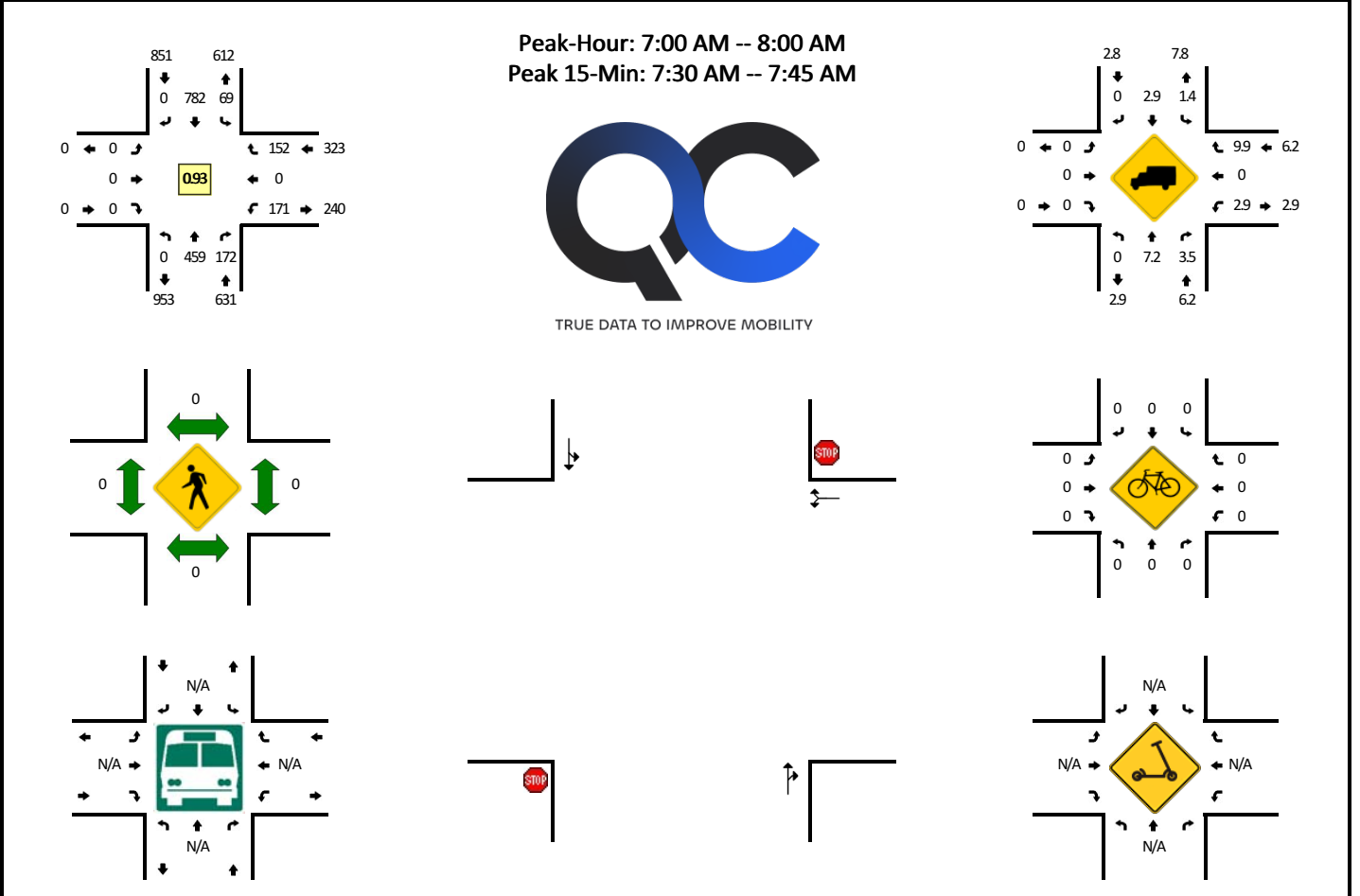
15-Min Count Period Beginning At	Bois-D-Arc Rd (Northbound)				Bois-D-Arc Rd (Southbound)				Tower Rd (Eastbound)				Tower Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	22	14	0	0	0	9	8	0	14	0	42	0	0	0	0	0	109	
4:15 PM	26	11	0	0	0	4	9	0	9	0	29	0	0	0	0	0	88	
4:30 PM	19	12	0	0	0	8	11	0	18	0	39	0	0	0	0	0	107	
4:45 PM	24	23	0	0	0	7	6	0	9	0	29	0	0	0	0	0	98	402
5:00 PM	19	12	0	0	0	9	13	0	12	0	38	0	0	0	0	0	103	396
5:15 PM	26	23	0	0	0	20	14	0	16	0	42	0	0	0	0	0	141	449
5:30 PM	34	12	0	0	0	11	11	0	9	0	47	0	0	0	0	0	124	466
5:45 PM	26	23	0	0	0	13	10	0	23	0	35	0	0	0	0	0	130	498

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	104	92	0	0	0	80	56	0	64	0	168	0	0	0	0	0	564
Heavy Trucks	0	4	0	0	0	4	0	0	0	0	16	0	0	0	0	0	24
Buses																	
Pedestrians		0				0					0						0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scoters																	

Comments:

LOCATION: FM 973 -- Suncrest Rd
CITY/STATE: Manor, TX

QC JOB #: 16426701
DATE: Thu, Dec 7 2023

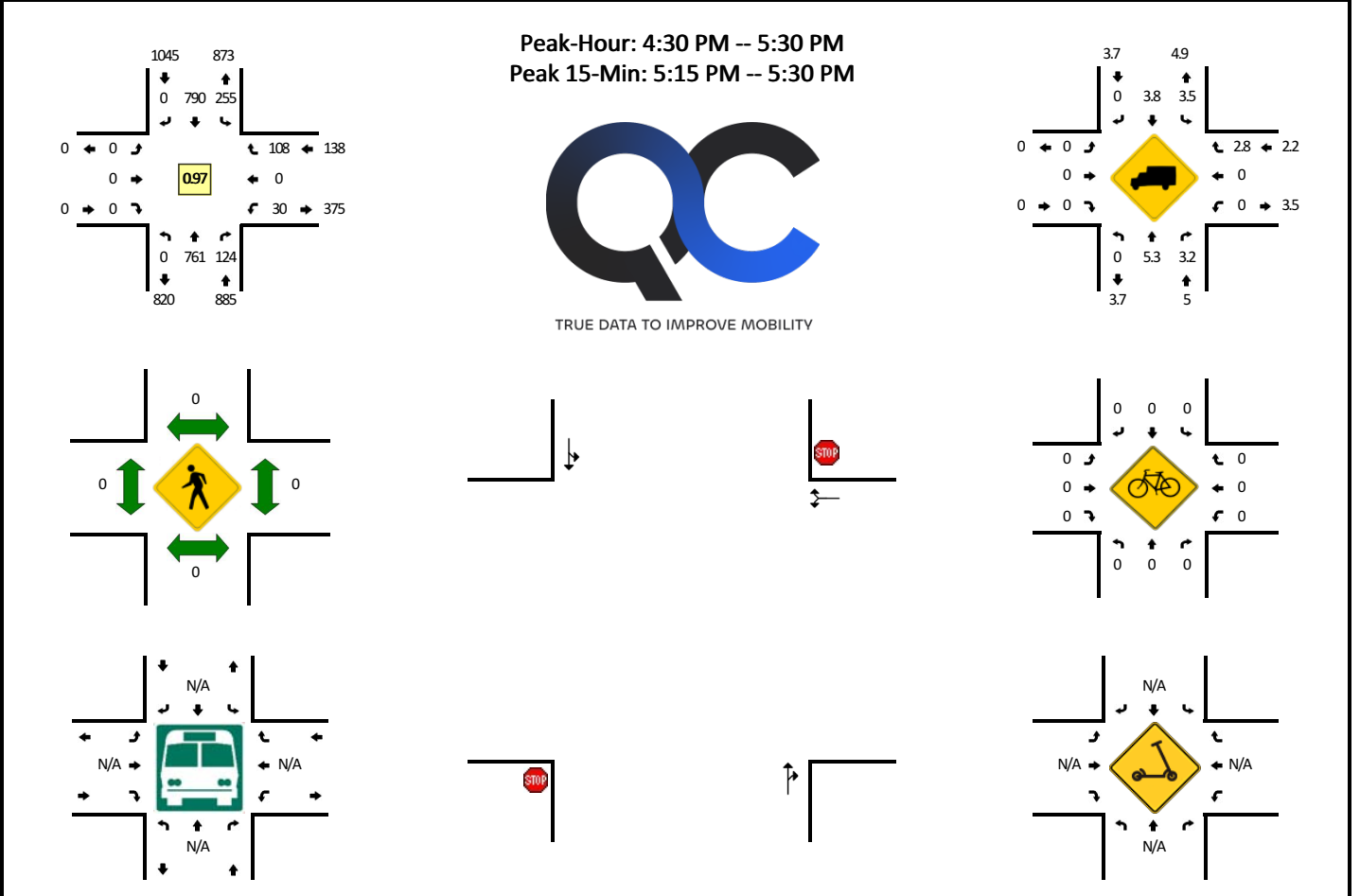


15-Min Count Period Beginning At	FM 973 (Northbound)				FM 973 (Southbound)				Suncrest Rd (Eastbound)				Suncrest Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	101	13	0	10	226	0	1	0	0	0	0	37	0	39	0	427	
7:15 AM	0	97	20	0	15	216	0	0	0	0	0	0	52	0	50	0	450	
7:30 AM	0	149	79	0	19	177	0	0	0	0	0	0	37	0	23	0	484	
7:45 AM	0	112	60	0	24	163	0	0	0	0	0	0	45	0	40	0	444	1805
8:00 AM	0	108	31	0	13	179	0	0	0	0	0	0	29	0	42	0	402	1780
8:15 AM	0	94	22	0	16	166	0	1	0	0	0	0	22	0	32	0	353	1683
8:30 AM	0	124	7	0	14	141	0	0	0	0	0	0	14	0	33	0	333	1532
8:45 AM	0	115	4	0	16	123	0	0	0	0	0	0	11	0	33	0	302	1390
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	596	316	0	76	708	0	0	0	0	0	0	148	0	92	0	1936	
Heavy Trucks	0	28	8		0	28	0		0	0	0		0	0	12		76	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

LOCATION: FM 973 -- Suncrest Rd
CITY/STATE: Manor, TX

QC JOB #: 16426702
DATE: Thu, Dec 7 2023

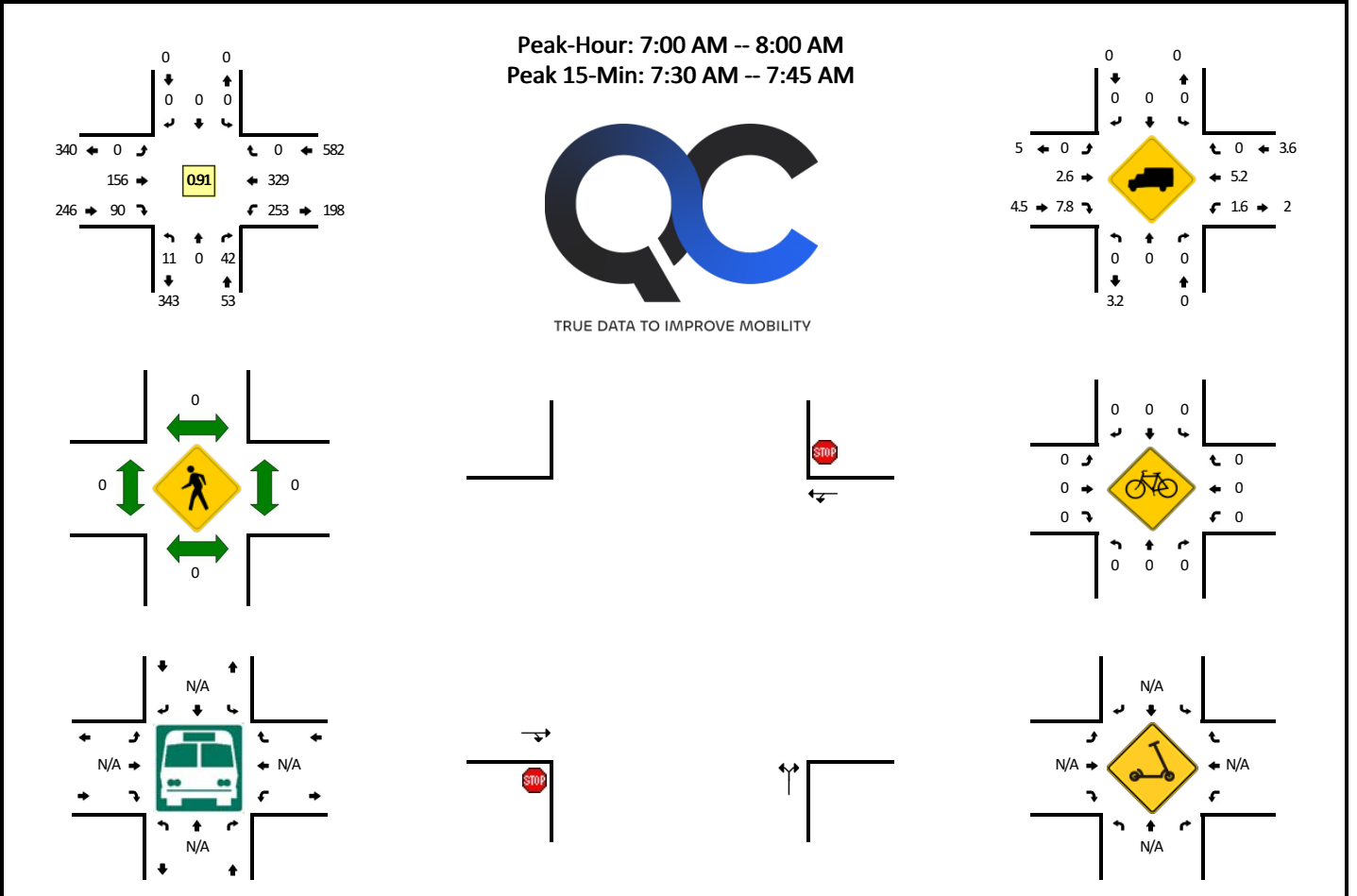


15-Min Count Period Beginning At	FM 973 (Northbound)				FM 973 (Southbound)				Suncrest Rd (Eastbound)				Suncrest Rd (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
4:00 PM	0	174	69	0	45	170	0	0	0	0	0	0	3	0	28	0	489		
4:15 PM	0	173	26	0	57	199	0	2	0	0	0	0	1	0	30	0	488		
4:30 PM	0	187	35	0	63	188	0	2	0	0	0	0	9	0	33	0	517		
4:45 PM	0	192	30	0	55	197	0	1	0	0	0	0	6	0	29	0	510	2004	
5:00 PM	0	186	26	0	65	207	0	0	0	0	0	0	6	0	17	0	507	2022	
5:15 PM	0	196	33	0	68	198	0	1	0	0	0	0	9	0	29	0	534	2068	
5:30 PM	0	178	39	0	45	182	0	5	0	0	0	0	6	0	22	2	479	2030	
5:45 PM	0	110	33	0	71	177	0	4	0	0	0	0	12	0	19	2	428	1948	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	0	784	132	0	272	792	0	4	0	0	0	0	36	0	116	0	2136		
Heavy Trucks	0	24	0		12	36	0		0	0	0	0	0	0	0		72		
Buses																			
Pedestrians		0				0				0				0				0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0		
Scoters																		0	

Comments:

LOCATION: Suncrest Rd -- Tower Rd
CITY/STATE: Manor, TX

QC JOB #: 16426703
DATE: Thu, Dec 7 2023

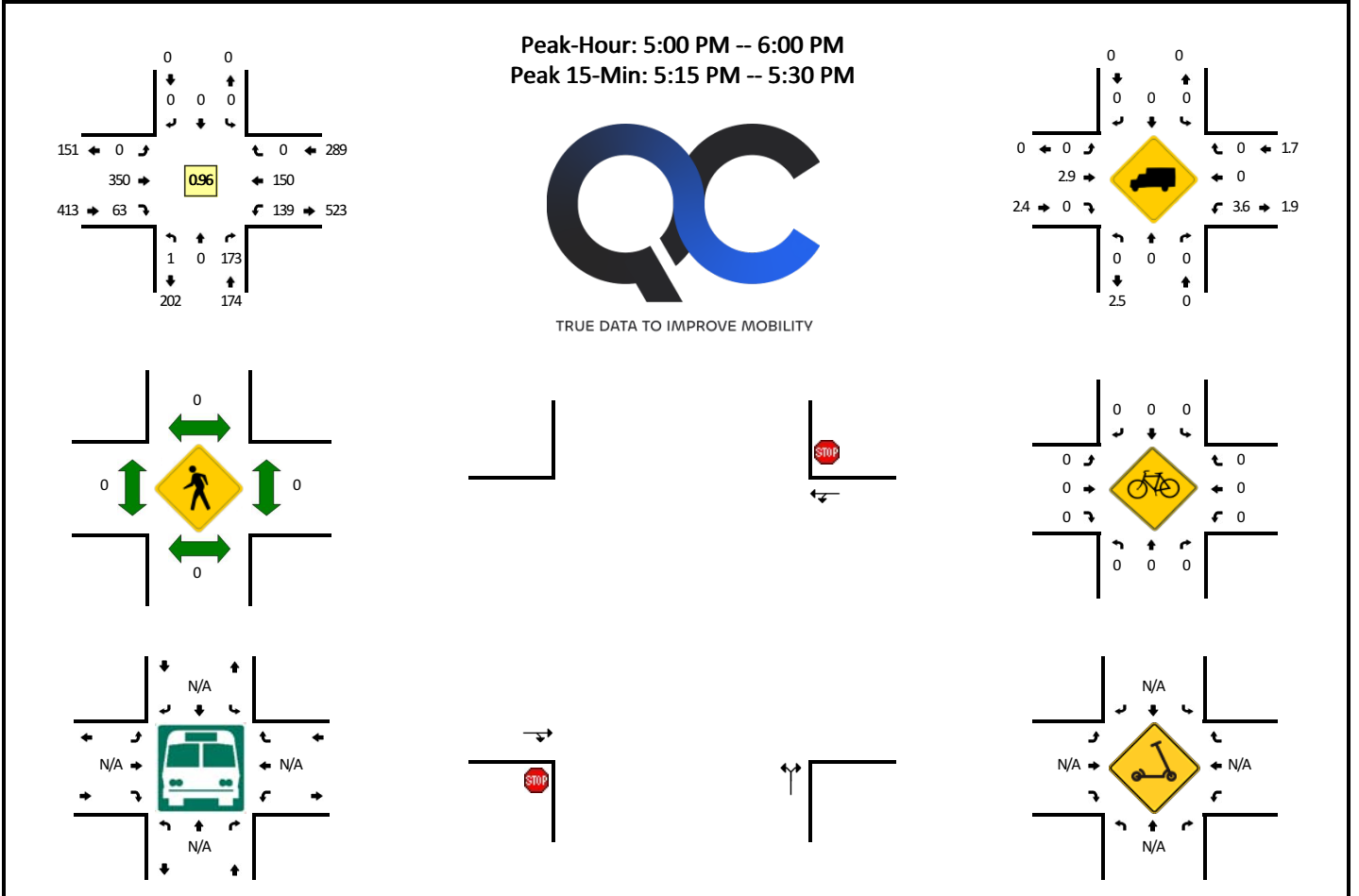


15-Min Count Period Beginning At	Suncrest Rd (Northbound)				Suncrest Rd (Southbound)				Tower Rd (Eastbound)				Tower Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	7	0	0	0	0	0	0	18	7	0	88	91	0	0	211	
7:15 AM	3	0	11	0	0	0	0	0	0	20	15	0	70	94	0	0	213	
7:30 AM	5	0	18	0	0	0	0	0	0	62	34	0	60	64	0	0	243	
7:45 AM	3	0	6	0	0	0	0	0	0	56	34	0	35	80	0	0	214	881
8:00 AM	2	0	10	0	0	0	0	0	0	23	27	0	29	75	0	0	166	836
8:15 AM	1	0	4	0	0	0	0	0	0	27	14	0	49	62	0	0	157	780
8:30 AM	1	0	11	0	0	0	0	0	0	19	12	0	29	56	0	0	128	665
8:45 AM	0	0	14	0	0	0	0	0	0	17	16	0	23	60	0	0	130	581
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	20	0	72	0	0	0	0	0	0	248	136	0	240	256	0	0	972	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	12	0	0	12	0	0	24	
Buses																	0	
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																	0	

Comments: WB stop sign on Tower Rd

LOCATION: Suncrest Rd -- Tower Rd
CITY/STATE: Manor, TX

QC JOB #: 16426704
DATE: Thu, Dec 7 2023

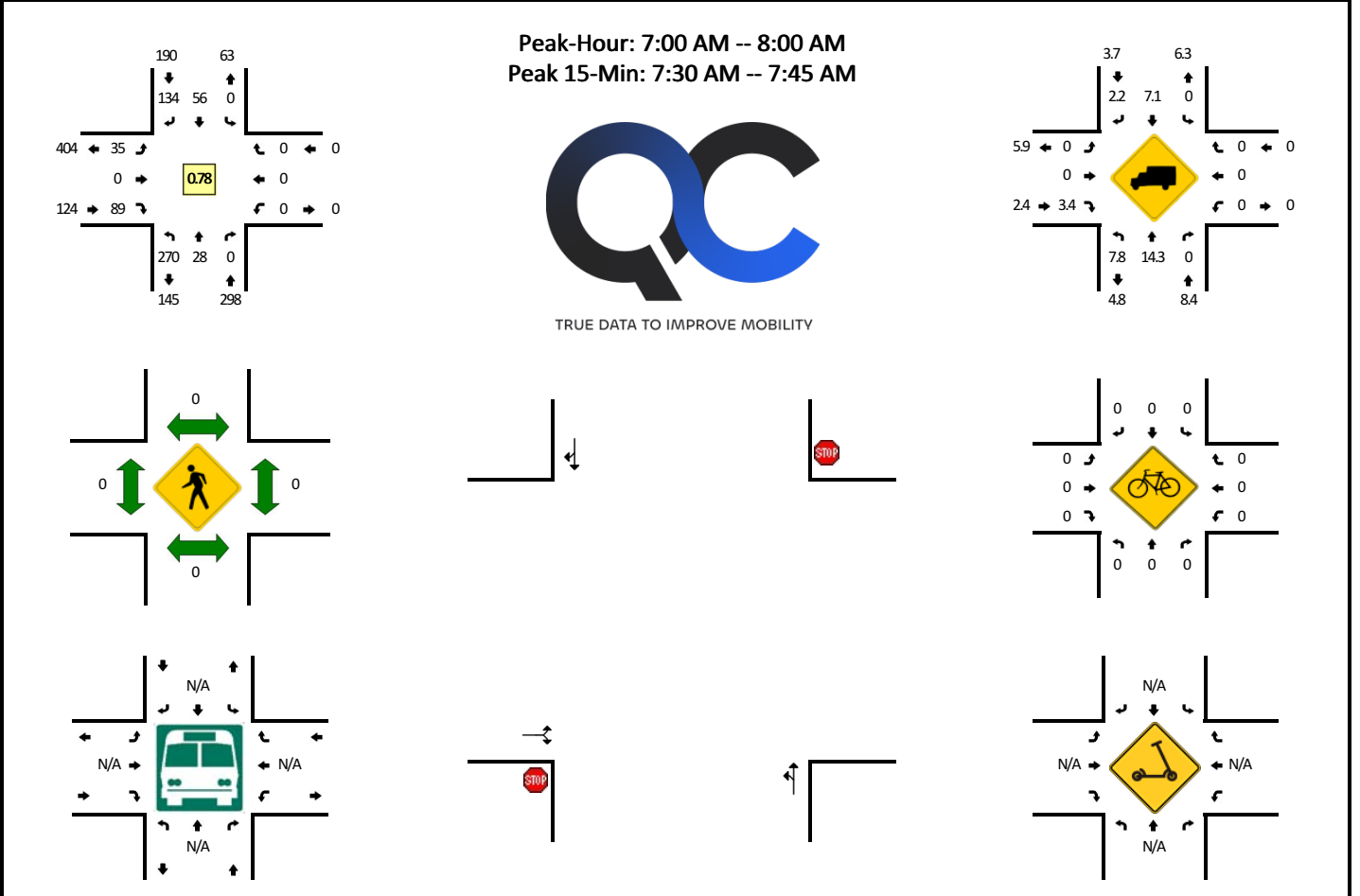


15-Min Count Period Beginning At	Suncrest Rd (Northbound)				Suncrest Rd (Southbound)				Tower Rd (Eastbound)				Tower Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	34	0	0	0	0	0	0	86	38	0	25	33	0	0	216	
4:15 PM	3	0	21	0	0	0	0	0	0	76	20	0	23	36	0	0	179	
4:30 PM	0	0	28	0	0	0	0	0	0	72	21	0	38	44	0	0	203	
4:45 PM	0	0	37	0	0	0	0	0	0	77	14	0	21	36	0	0	185	783
5:00 PM	0	0	43	0	0	0	0	0	0	83	16	0	31	26	0	0	199	766
5:15 PM	0	0	45	0	0	0	0	0	0	95	15	0	30	43	0	0	228	815
5:30 PM	0	0	47	0	0	0	0	0	0	79	13	0	47	38	0	0	224	836
5:45 PM	1	0	38	0	0	0	0	0	0	93	19	0	31	43	0	0	225	876
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	180	0	0	0	0	0	0	380	60	0	120	172	0	0	912	
Heavy Trucks	0	0	0		0	0	0		0	12	0		4	0	0		16	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments: WB stop sign on Tower Rd

LOCATION: Bois-D-Arc Rd -- Tower Rd
CITY/STATE: Manor, TX

QC JOB #: 16426705
DATE: Thu, Dec 7 2023



15-Min Count Period Beginning At	Bois-D-Arc Rd (Northbound)				Bois-D-Arc Rd (Southbound)				Tower Rd (Eastbound)				Tower Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	75	7	0	0	0	13	32	0	7	0	11	0	0	0	0	0	145	
7:15 AM	74	2	0	0	0	9	47	0	7	0	12	0	0	0	0	0	151	
7:30 AM	75	10	0	0	0	23	35	0	13	0	40	0	0	0	0	0	196	
7:45 AM	46	9	0	0	0	11	20	0	8	0	26	0	0	0	0	0	120	612
8:00 AM	43	4	0	0	0	7	18	0	3	0	13	0	0	0	0	0	88	555
8:15 AM	34	10	0	0	0	8	20	0	5	0	18	0	0	0	0	0	95	499
8:30 AM	36	3	0	0	0	5	13	0	1	0	17	0	0	0	0	0	75	378
8:45 AM	23	6	0	0	0	11	9	0	6	0	7	0	0	0	0	0	62	320
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	300	40	0	0	0	92	140	0	52	0	160	0	0	0	0	0	784	
Heavy Trucks	24	8	0	0	0	12	4	0	0	0	0	0	0	0	0	0	48	
Buses																		
Pedestrians		0				0					0				0		0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments: