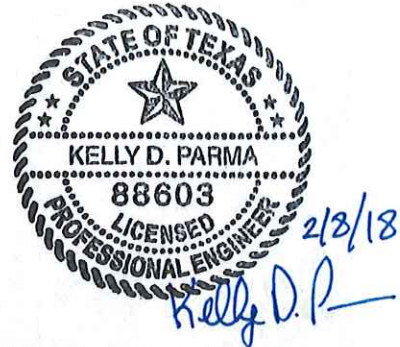




ARIZONA
TEXAS
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OKLAHOMA

TECHNICAL MEMORANDUM

DATE: February 8, 2018
TO: Mary K. Hamann, P.E., Engineer
City of New Braunfels, Texas
FROM: Kelly D. Parma, P.E., PTOE
Lee Engineering, LLC (TBPE Firm F-450)
SUBJECT: Parking Occupancy Study – 500 Block of Hill Avenue (west of Jahn Street) and Jahn Street
between Academy Avenue and Railroad
(Technical Memorandum 128.09)



PURPOSE

The purpose of this study was to determine the amount of on-street curb parking that was being utilized by residents and non-residents on the 500 block of Hill Avenue and on Jahn Street between Academy Avenue and the Railroad. Non-residents use the area streets for parking to access the local bar, Conway's, especially during special events.

METHODOLOGY

The area, illustrated in **Figure 1**, was surveyed on Saturday, January 20, 2018 from 8:00 p.m. until 12:00 a.m. This time period was selected to better capture traffic created by the local bar, Conway's, during special events held on the weekend. Conway's hosted popular rapper, Juvenile, on this particular night who began his performance promptly at 10:30 p.m.

The data collection process consisted of measuring street segments of available curb space for on-street parking and the number of on-street parked vehicles differentiated by resident or non-resident vehicles, based on assumed observations in the field. During the time period data was collected, observations of the number of parked vehicles by side of the street were made every ½-hour and recorded, as shown in **Table 1**. The number of different vehicles was not recorded, only the fact that vehicles were parked on the street.



Figure 1: Study Area



Table 1: On-Street Parking Observations

Number of Vehicles Parked per Segment							
Available Curb Space: Eastside - 318' Westside - 386' Jahn St. - Railroad to Academy Ave.				Available Curb Space: Northside - 396' Southside - 456' Hill Ave. (500 block) west of Jahn St.			
1/20/2018 TIME	Side of Street	Resident	Non- Resident	1/20/2017 TIME	Side of Street	Resident	Non- Resident
8:00 PM	E	0	0	8:00 PM	N	1	0
	W	0	0		S	0	0
8:30 PM	E	0	0	8:30 PM	N	1	0
	W	0	0		S	0	0
9:00 PM	E	0	5	9:00 PM	N	1	0
	W	0	0		S	0	3
9:30 PM	E	0	6	9:30 PM	N	1	0
	W	0	0		S	0	5
10:00 PM	E	0	9	10:00 PM	N	1	1
	W	0	0		S	0	6
10:30 PM	E	0	10	10:30 PM	N	1	1
	W	0	8		S	0	6
11:00 PM	E	0	10	11:00 PM	N	1	1
	W	0	5		S	0	6
11:30 PM	E	0	10	11:30 PM	N	1	1
	W	0	6		S	0	6
12:00 AM	E	0	6	12:00 AM	N	1	1
	W	0	5		S	0	4

Table 2 presents a tabulation of the percentage of available curb space used by parked vehicles (residents and non-residents combined) based on the measured curb lengths, excluding driveway lengths, for each side of the street shown in the header of the table and an effective parked vehicle length of 30 feet. These results quantify the summary of observations presented in Table 1.

Table 2: Percentage of Curb Space Utilized

Percent of Available Curb Space Utilized (Resident + Non-Resident Vehicles)*					
Available Curb Space: Eastside - 318' Westside - 386' Jahn St. - Railroad to Academy Ave.			Available Curb Space: Northside - 396' Southside - 456' Hill Ave. (500 block) west of Jahn St.		
1/20/2018 TIME	Resident + Non-Resident		1/20/2018 TIME	Resident + Non-Resident	
8:00 PM	E	0%	8:00 PM	N	8%
	W	0%		S	0%
8:30 PM	E	0%	8:30 PM	N	8%
	W	0%		S	0%
9:00 PM	E	47%	9:00 PM	N	8%
	W	0%		S	20%
9:30 PM	E	57%	9:30 PM	N	8%
	W	0%		S	33%
10:00 PM	E	85%	10:00 PM	N	15%
	W	0%		S	39%
10:30 PM	E	94%	10:30 PM	N	15%
	W	62%		S	39%
11:00 PM	E	94%	11:00 PM	N	15%
	W	39%		S	39%
11:30 PM	E	94%	11:30 PM	N	15%
	W	47%		S	39%
12:00 AM	E	57%	12:00 AM	N	15%
	W	39%		S	26%

* At 30 feet/vehicle

The measurements on Jahn Street did not include the right-of-way of the railroad. **Figures 2 and 3** show the locations where measurements began for on-street parking for the west and east side of Jahn Street, respectively.

Figure 2: Jahn Street – West Side Measurements



Figure 3: Jahn Street – East Side Measurements



Although the segments between the railroad and measurement starting points for on-street parking (see Figures 2 and 3) were not included in the data collection, vehicles utilized those areas for off-street parking. Figures 4 and 5 show vehicles parked on the west side and east side of Jahn Street, respectively. These off-street parked vehicles were not included in the on-street parking data collected.

Figure 4: Jahn Street - West Side Off-Street Parking

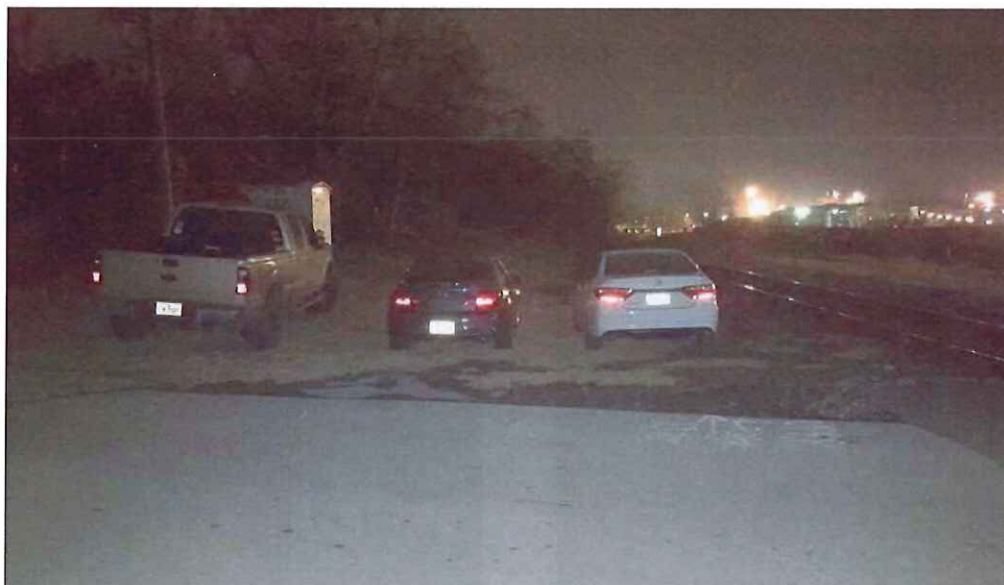
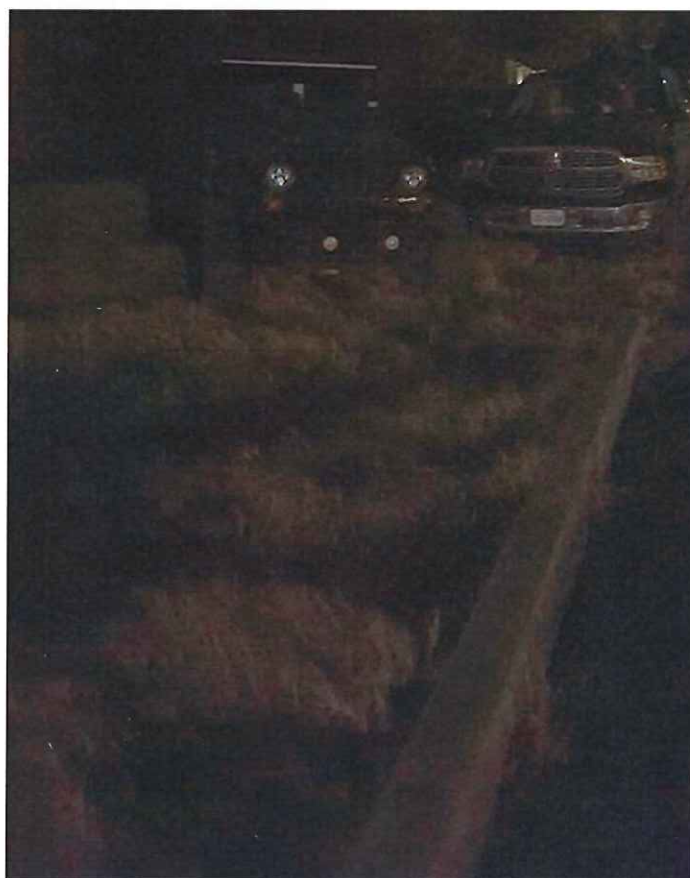


Figure 5: Jahn Street - East Side Off-Street Parking



Upon arrival at the study site, the area was surveyed for existing control devices. There are no existing parking restrictions on either Jahn Street between the Railroad and Academy Avenue or the 500 block of Hill Avenue. However, the resident at 575 S. Hill Avenue, which has driveway access to Jahn Street, had posted generic "No Parking" signs on Jahn Street, adjacent to their property. Three "No Parking" signs were posted along a length of 67 feet, beginning at a wooden powerline pole and ending south of their driveway. Once the resident realized the purpose of this study, he removed these signs between 10:00 p.m. and 10:30 p.m. to provide a more accurate depiction of the on-street parking adjacent to his property. **Figure 6** shows the "No Parking" signs posted by the resident.

Figure 6: 575 S. Hill Ave - "No Parking" signs



Analysis of the data collected showed that:

- Resident on-street parking was consistent during the study period while non-resident on-street parking fluctuated.
- On-street parking, particularly by non-residents, peaked at 94% of on-street occupancy on the east side of Jahn Street around 10:30 p.m.
- On Hill Avenue, west of Jahn Street, on-street parking peaked at 39% on the north side of Hill Avenue around 10:00 p.m.
- The east side of Jahn Street was the most affected by on-street parking.

CONCLUSIONS

On-street parking began accumulating by 9:00 p.m. and peaked at 94% on the east side of Jahn Street. Although the west side of Jahn Street initially had "No Parking" signs posted by the resident of the adjacent house, that parking area filled up after the signs were removed. On-street parking was heaviest in areas closest to the bar, especially Jahn Street north of Hill Avenue and Hill Avenue immediately west of Jahn Street. On-street parking did not extend down to the intersection of Jahn Street and Academy.