



Staff Report

C-1

To: City of Imperial Traffic Commission
From: Othon Mora
Date: November 20, 2020
Subject: Traffic Concerns at the intersection of Brewer Road and Monterey Park Lane.

Background:

At a City Council meeting during reports, a council member requested an evaluation of the above referenced location, be conducted in order to formulate possible mitigation measures regarding the rising safety concerns. The City of Imperial has received various concerns regarding pedestrian safety, speeding, and visibility from residents, at this intersection. The ideal mitigation for the residents, is the placement of a three-way stop.

Monterrey Park Ln. is controlled by stop sign while Brewer Rd. is uncontrolled. Sidewalks are provided at all approaches to the intersection, there are no marked crosswalks, and there are no parking restrictions at the approaches of the intersection. On July 8, 2020, the Traffic Commission recommended a 30' no parking red curb on the south side of Brewer to mitigate the sight visibility concerns at the intersection.

The item was reviewed by the Traffic Commission on July 22nd, 2020. The Commission requested staff additional information, including, other mitigation measures and cost estimate for review.

Analysis:

The Development Review Committee explored various traffic and safety mitigation measures regarding the intersection of Monterey Park Lane and Brewer Road.

The following Development Review Committee members reviewed the item:

- Public Services Director, Jackie Loper

- Parks Superintendent, Tony Lopez
- Imperial County Fire Representative, Andrew Loper
- Community Development Director, Othon Mora
- Imperial Police Chief, Leonard Barra
- Planner, Lisa Tylenda

The Development Review Committee (DRC) has based the recommendation on the following guidelines from the “Manual on Uniform Traffic Control Devices (MUTCD)” as follows:

Based on the concerns expressed by residents, the placement of a three-way stop may provide and fulfill the sought-after traffic safety mitigation. the Development Review Committee (DRC) has based the recommendation on the following guidelines from the “Manual on Uniform Traffic Control Devices (MUTCD)” as follows:

Section 2B.04, “Right of Way at Intersections”, of the CA-MUTCD states that “In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:

- The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches average more than 2,000 units per day
- The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary
- Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period
- Section 2B.07, “Multi-way Stop Application”, of the CA-MUTCD stipulates that multi way stops to be considered as an option on “Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.”
- YIELD or STOP signs should not be used for speed control.

Staff’s findings are as follows:

- The CA-MUTCD defines minimum requirements for traffic volumes, pedestrian volumes, and bicycle volumes to warrant an all-way stop controlled intersection. Based on field observations, the intersection of Monterey Park Lane and Brewer Road would not meet these minimum volume requirements. Currently, there is not a recent traffic study available for the area.

- IPD provided traffic counts and speed survey at this intersection (Please see attached data). Days and times that data was obtained by IPD were the following:
 - October 26, 27 and 28, 2020 (twice a day)
 - 8:45am-9:15am
 - 4:45pm-5:15pm
- Utilizing the Statewide Incident Traffic Reporting System and the City's database, a review of the collision history at the intersection was conducted for a three-year period. Reports show that there have been 2 collisions (Property damage) and 1 citation or traffic violation have been reported.
- Based on field observations, there is limited "visibility" challenge at the intersection for drivers "stopping" on Monterey Park Lane going north and try to turn in either direction due to cars parking on Brewer Road.

Residents Comments:

- Staff received an email from a resident in the vicinity opposing placement of a stop sign. The resident's comments are as follows:
 - *I am against the placing of new stop signs in the city of Imperial, especially at the intersection of Brewer Road and Monterey Park Lane. I live in this area, north of Brewer and drive these roads every day. I have never encountered an issue of too much traffic at this intersection. I want to know where the stop signs would be located. If you put them on east bound Brewer at Monterey Park Lane, then you are creating more of a traffic issue. People who enter Brewer from Zircon Drive heading east would have to stop at Brewer, and then stop right away at the new stop sign at Monterey Park. Also, where will you put the sign on west bound Brewer? Will it be at Monterey Park which would put the stop sign in the middle of the block on the north side of the road. Will you put it at Zircon Drive? If so then you create the same situation from above where the people on Monterey Park turn left will have to make a stop once on Brewer. These will increase traffic congestion in this area. Traffic flows smoothly right now, please leave it that way.*
 - My final point is the city of Imperial has way too many stop signs as it is. We don't need more. Right now you cannot go more than 2 or three blocks in any direction without hitting a stop sign. All this stopping and going is costing residence money using extra gas in their vehicles. It also increases the air pollution as more fuel is burned every time a car leaves a stop sign. If vehicles are allowed to travel without stopping the engines are more efficient and saves gas and reduces pollution.*
- On November 4, 2020 City Council meeting, a councilmember read correspondence received from a resident, stating the following:
 - *This intersection is a blind spot and within a few months there has been 2 major accidents. Is this the City waiting for another accident to happen?*

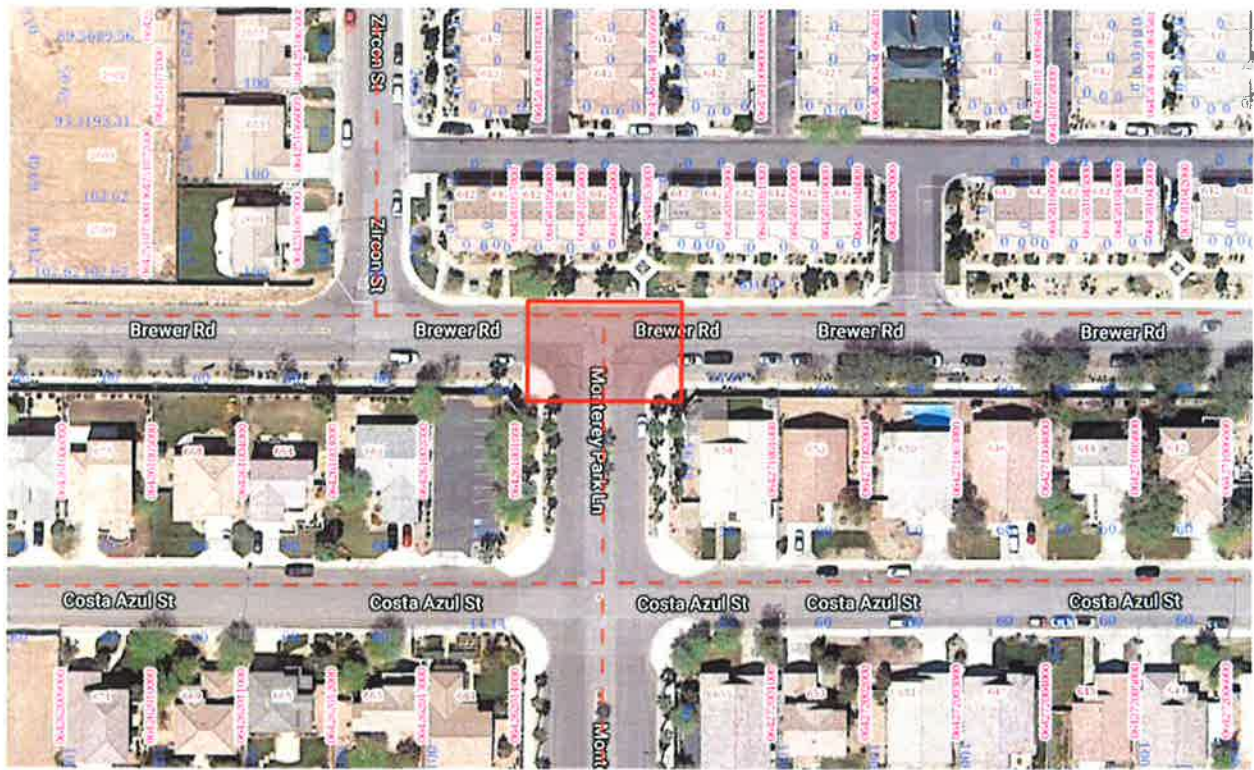
Other Mitigation Measures Options and Cost:

- Stop Signs \$6,348.00
- RRPF (Rectangular Rapid Flashing Beacons) Pedestrian Crosswalk Systems \$17,732
- Asphalt Speed Bumps \$12,000.00
- Asphalt Speed Humps \$15,000.00
- Rubber Speed Bumps \$2,000.00
- Rubber Speed Humps \$2,250.00
- Speed Radar Signs \$29,500.00

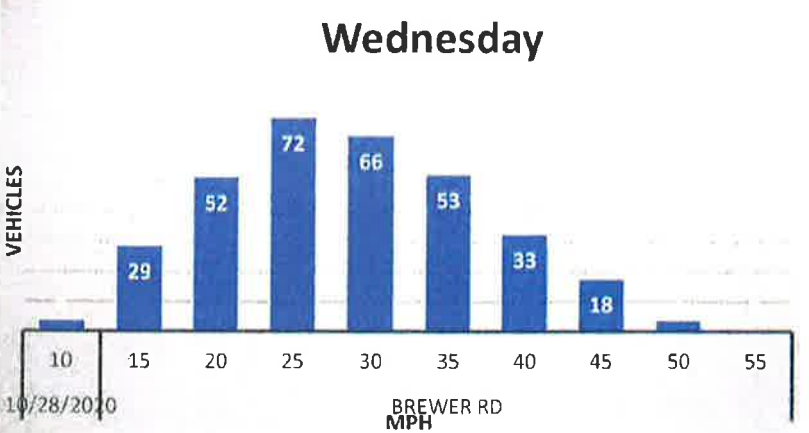
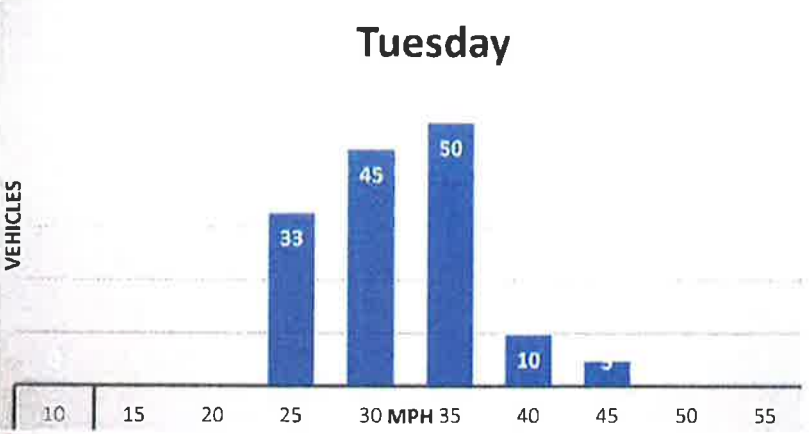
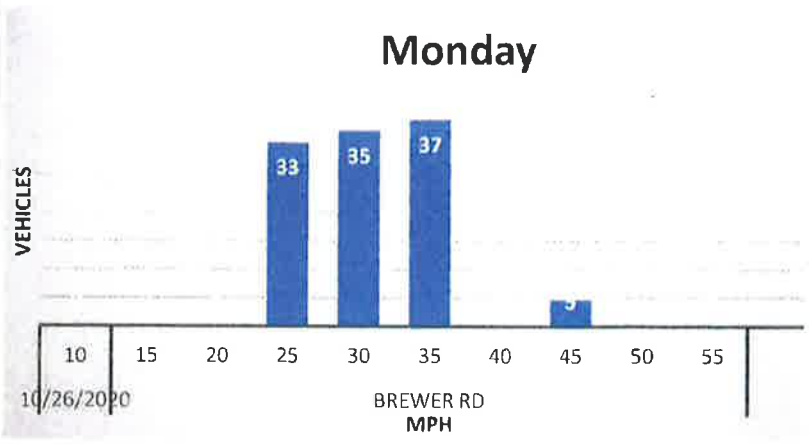
Staff Recommendation:

Based on these findings, staff do not recommend installation of a three-way stop sign at Monterrey Park Ln and Brewer Rd.

Location Map:



Monday	MPH	Vehicles
10/26/2020	10	0
BREWER RD	15	0
	20	0
	25	33
	30	35
	35	37
	40	0
	45	5
	50	0
	55	0
Tuesday		
	MPH	
10/27/2020	10	0
BREWER RD	15	0
	20	0
	25	33
	30	45
	35	50
	40	10
	45	5
	50	0
	55	0
Wednesday		
	MPH	
10/28/2020	10	4
BREWER RD	15	29
	20	52
	25	72
	30	66
	35	53
	40	33
	45	18
	50	4
	55	0



CITY OF IMPERIAL
COST ESTIMATE
 FOR
Asphalt Speed Humps

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	Installation of 12' Asphalt Speed Hump & Striping	EA	2	\$ 7,500.00	\$ 15,000.00
	TOTAL				\$ 15,000.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Rubber Speed Humps

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	36" x 120" Rubber Speed Hump	EA	2	\$750.00	\$ 1,500.00
2.	Speed Bump/Hump Installation	LT	1	\$750.00	\$750.00
TOTAL					\$2,250.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Speed Radar Signs

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	TC-500 New Speed Radar Sign	EA	2	\$ 13,500.00	\$ 27,000.00
2.	Speed Radar Sign Installation	LT	2	\$1,250.00	\$2,500.00
TOTAL					\$ 29,500.00

CITY OF IMPERIAL COST ESTIMATE

FOR

3 Way Stop / Pedestrian Crossing Stop and No Parking Signs/Striping at Monterrey Park Lane and Brewer Road Intersection

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	R1-1 36" x 36" Aluminum Stop Sign	EA	3	\$ 90.00	\$ 270.00
2.	Square Perforated Sign Post 10'	EA	6	\$ 63.00	\$ 378.00
3.	R26 (CA) 12" x 18" White Aluminum No Parking Sign	EA	3	\$ 25.00	\$ 75.00
4.	Miscellaneous Brackets	LT	1	\$ 150.00	\$ 150.00
5.	Sign Installation (Labor) T.C. Included	LT	1	\$ 2,100.00	\$ 2,100.00
6.	Striping (Street and Curb) Labor & Materials T.C. Included	LT	1	\$ 3,375.00	\$ 3,375.00
	TOTAL				\$ 6,348.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Asphalt Speed Bumps

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	Installation of 12' Asphalt Speed Bump & Striping	EA	2	\$6,000.00	\$12,000.00
TOTAL					\$12,000.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
PEDESTRIAN CROSSING
Rectangular Rapid Flash Beacon (RRFB) System

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	RRFB Assembly with Universal Mounting Kit, RRFB - Amber Light Bar, Current Controlled.	EA	2		\$6,700.00
2.	Controller, 12V, Sun saver, 136921, Radio.				
3.	Push Button Bulldog Add-On Kit w 9"x12" Frame.				
4.	Push Button Yellow sign (Optional)				
5.	R10-25,9"x12"x.080 EGP,Push Button to turn on warning lights with hand symbol.				
6.	W11-2,36"x36"x.080 DG3 FYG,Pedestrian Crossing (Symbol) Fed Spec, Fluorescent Yellow Green Sign.	EA	4	\$ 115.00	\$ 460.00
7.	W16-7PL,24"x12" DG3 FYG,Down Diagonal Left Arrow	EA	2	\$ 35.00	\$ 70.00
8.	W16-7PR,24"x12" DG3 FYG,Down Diagonal Right Arrow	EA	2	\$ 35.00	\$ 70.00
9.	Pole Package, 15', 4.5" OD, 18" J-Bolts Includes: Pole Base, J-Bolts, Standard Aluminum Pole,15' Schedule 40 Base, Aluminum Square Pedestal, No Paint.	EA	2	\$633.00	\$ 1,266.00
10.	Type III Traffic Marking Yellow Paint, Liquid Thermoplastic. 5 Gal.	EA	1	\$ 197.00	\$ 197.00
11.	Swarco Premium Glass Beads. 1 Bulk.	EA	1	\$ 49.00	\$ 49.00
12.	24" x 24" x 36" Concrete Footing with 18" x 18" Round Concrete Base.	EA	2	\$ 1,500	\$ 3,000.00
13.	Freight.	EA	1	\$ 650.00	\$ 650.00
14.	Striping	EA	1	\$ 2,500.0	\$ 2,500.00
15.	Labor	EA	1	\$ 3,000.0	\$ 3,000.00
	TOTAL				\$ 17,732.00

CITY OF IMPERIAL
COST ESTIMATE
 FOR
Rubber Speed Bumps

Item No.	Description	Units	Estimate Quantity	Unit Price	Amount
1.	12"x72" Portable/Permanent Rubber Speed Bump	EA	4	\$ 350.00	\$ 1,400.00
2.	Speed Bump/Hump Installation	LT	1	\$600.00	\$ 600.00
TOTAL					\$2,000.00