

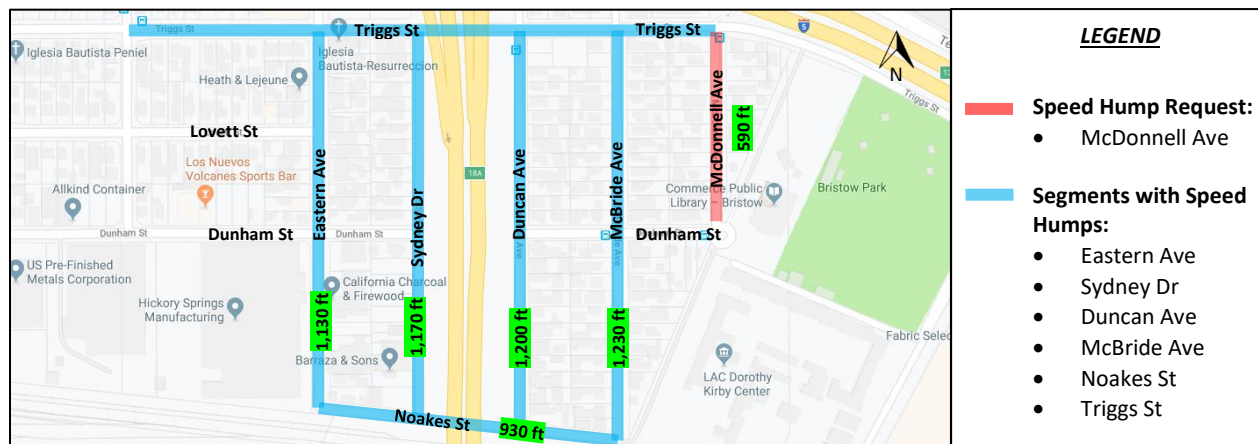
# TRAFFIC MEMO

**DATE:** September 25, 2020  
**SUBJECT:** SPEED HUMP REQUEST ON MCDONNELL AVENUE SOUTH OF TRIGGS STREET

## INTRODUCTION/BACKGROUND

The City of Commerce received a request for the installation of speed humps on McDonnell Avenue. Speed Humps have been recently installed along the surrounding streets such as Triggs Street, Eastern Avenue, Sydney Drive, Duncan Avenue, McBride Avenue, and Noakes Street. Staff has completed a traffic review due to speeding concerns along McDonnell Avenue. The location of the request is depicted in Figure 1: Vicinity Map below.

**Figure 1: Vicinity Map**

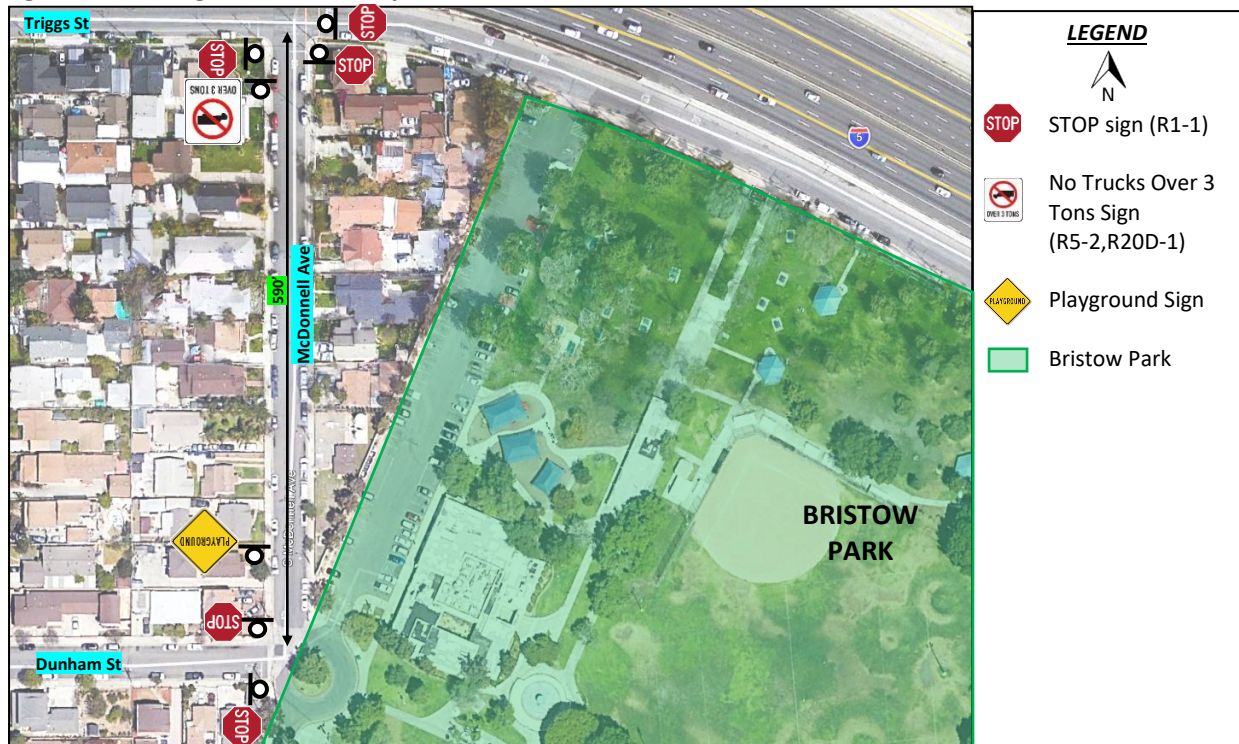


## EXISTING CONDITIONS

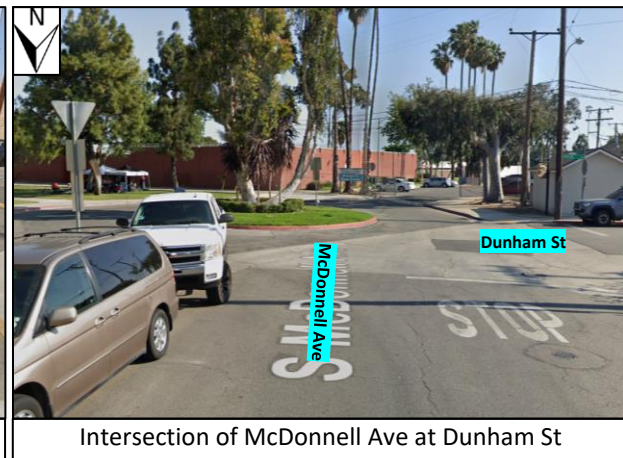
**McDonnell Avenue:** McDonnell Avenue is approximately 35-feet in width with one lane in each direction and no yellow center line. McDonnell Avenue has a prima facie speed limit of 25 MPH with no posted speed limit signs. Parking is generally permitted on both sides of the roadway with the exception of street sweeping restrictions and where the curb is painted red. The intersection of McDonnell Avenue and Triggs Street is all-way stop controlled. The intersection of Dunham Street and McDonnell Avenue is stop controlled in the north and west legs where there is a roundabout. McDonnell Avenue extends for approximately 590-feet from Triggs Street to Dunham Street. Land use along McDonnell Avenue at this location is considered medium density residential and public facilities with Bristow Park and Bristow Public Library being located to the east.



**Figure 2: Existing Conditions Map.**



## Picture



## ACCIDENT INVESTIGATION

An accident investigation was conducted using data available for the last 5 years from SWITRS (Statewide Integrated Traffic Records Systems) records (2015-2019). The investigation found that there was a total of 1 vehicle collision recorded along the segment McDonnell Avenue between Triggs Street and Dunham Street over the 5-year period. The reported collision was due to an improper turn, the driver crashed into 4 parked vehicles, and it resulted in a severe injury for the driver.



**Table 1: Summary of Collision History Along McDonnell Ave between Triggs St and Dunham St**

ID #	Date	Location	Dist.	Time	Collision Type	Severity	# Injured	Factor	PCF
1	04/08/18	MCDONNELL AV AT DUNHAM ST	200'N	16:54	HEAD-ON	INJ- SEVERE	1	NB THRU VEH HIT SB PARKED VEH (X4)	IMPROP TURN

### **COMMERCE SPEED HUMP POLICY**

The City's Revised 2020 Speed Hump Policy states that the Department will determine which streets are eligible for speed humps based on site and roadway conditions, traffic conditions and proper engineering principles including, but not limited to, the following:

1. The street must be functionally classified as a local street. The street cannot be designated a arterial or higher classification. (met – McDonnell Avenue is considered a Local Street)
2. The street should be primarily residential in nature, but streets in commercially or industrially zoned areas can be eligible for speed humps, consistent with engineering analysis and safety concerns. (met – McDonnell Avenue is a residential road on both sides of the street)
3. The street should not be a truck, transit (bus) route, or emergency service route. (met – McDonnell Avenue is a local street and not a truck route or emergency service route)
4. The street does not have more than one traffic lane in each direction. (met – McDonnell Avenue carries one lane in each direction)
5. The street should have a minimum length of at least 500 feet, preferably 750 feet. (met – approximately 560-ft)
6. The street must have a posted or prima facie speed limit not exceeding 30 miles-per-hour. (met – McDonnell Avenue has a prima facie speed limit of 25 mph)
7. The street must have a minimum ADT volume of 500 average daily vehicle trips and a maximum ADT volume of 4,000 vehicles per day and with additional assessment of potential impacts on streets with 4,000 to 10,000 average daily vehicle trips. (met – based on the counts collected on the surrounding segments it is expected that the ADT will be below the max ADT of 4,000)
8. The street must have adequate drainage and ADA access at street entrances and intersections. (met)
9. The street must have roadway pavement, curbs, gutters, adjoining parkways, and sidewalks in good condition. (met)



10. The street cannot have any alignment, grade or sight-distance problems that would be affected or created by speed humps. (met)
11. Speed humps should not be spaced closer than 200 feet when two humps are installed on a single block and should not be spaced closer than 350 feet when three humps are installed on a single block. A speed hump should not be placed within 150 feet of any intersection. A speed hump shall never be installed within any intersection. (met – segment allows for 2 speed humps to be installed)
12. A speed hump should not be installed if it conflicts or interferes with:
  - Drainage features including gutters, channels, drains, catch basins and manholes.
  - Compliance with NPDES regulations for storm water run-off.
  - Fire hydrants, water valves, water meters, utility manholes or other utility facilities.
  - Traffic control devices, including in-pavement signal detector devices.
  - Driveways, crosswalks, ramps and/or other ADA facilities/regulations.
  - Bicycle lanes.
  - Horizontal or vertical curves in the street alignment or street profile
13. A speed hump shall not be placed within 35 feet of any property edge where the resident of the subject property failed to endorse the petition or had specifically submitted a written objection to the speed hump.
14. Installation of speed humps should be based on the general guidelines in the Commerce Speed Hump Policy as well as Engineering Judgment.

## **RECOMMENDATIONS**

The segment of McDonnell Avenue between Triggs Street and Dunham Street met the criteria for installation of speed humps. It is recommended that speed cushions be installed along the segment specified. Placement of official traffic control devices on public streets is guided by the California Manual of Uniform Traffic Control Devices (CA-MUTCD) Section 2B.04 for right of way assignment.

1. Install 2 sets of speed humps (more specifically speed cushions, as speed cushions are designed to obstruct and slow ordinary passenger vehicles, while allowing free passage for emergency vehicles) with reflective triangular markings pointing in the direction of travel along the segment of McDonnell Avenue between Triggs Street and Dunham Street.
2. Install white thermoplastic “HUMP” pavement markings approaching the speed humps per CAMUTCD Section 3B.26.
3. Install “Speed Humps Ahead” (W84 (CA), 30x30) signs approaching the first set of speed humps per CAMUTCD Section 2C.29.





4. Install "Speed Hump" (W17-1, 30x30) signs approaching the second set of speed humps per CAMUTCD Section 2C.29.

Figure 3: Proposed Recommendations Diagram.

