



City of Arts & Innovation

City Council Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: MARCH 23, 2021
FROM: PUBLIC WORKS DEPARTMENT WARD: 6
SUBJECT: NORTHGATE GONZALEZ MARKET TRAFFIC SIGNAL REQUEST

ISSUE:

Consider a request by Northgate Gonzalez Market to install a midblock traffic signal along Magnolia Avenue west of Tyler Street.

RECOMMENDATIONS:

That the City Council:

1. Approve the median opening and traffic signal installation project on Magnolia Avenue west of Tyler Street to serve Northgate Gonzalez Market located at 10391 Magnolia Avenue; and
2. Require as part of the signal construction, the installation of safety enhancements by Northgate Gonzalez Market at the intersection of Magnolia Avenue at Tyler Street.

COMMITTEE RECOMMENDATION:

On September 10, 2020, the Mobility and Infrastructure Committee met with Chair Conder, Vice-Chair Perry and Member Hemenway present. Following discussion, it was moved by Vice Chair Perry and seconded by Member Hemenway to (1) approve the median opening and traffic signal installation project on Magnolia Avenue west of Tyler Street to serve Northgate Gonzalez Market located at 10391 Magnolia Avenue; (2) continue to have discussions with Northgate Gonzalez Market to assist with providing additional safety enhancement features; and (3) refer the request by Northgate Gonzalez Market to City Council for full discussion. The motion carried unanimously.

BACKGROUND:

On March 6, 2019 the Northgate Gonzalez Market was presented to the Development Review Committee as a Conceptual Development Review item. At the time of the project's final action and acceptance, the Northgate Gonzalez Market was not proposing signalized access on Magnolia Avenue.

Following project approval, the Public Works Department was approached by the property owner with a request to install a signalized driveway access on Magnolia Avenue. As a compromise, in October 2019, staff and the property owner agreed to partner to modify the traffic signal at Magnolia Avenue at Tyler Street to allow eastbound U-turns to facilitate access onto Northgate Gonzalez Market in preparation of the site's grand opening, which was scheduled for November 2019. Following this operational change, the property owner determined that they still wished to seek a median opening and signalization at their driveway on Magnolia Avenue. At the July 9, 2020 Mobility & Infrastructure Committee meeting, staff was requested to bring a report regarding the property owner's proposal before the committee.

At the September 10, 2020 Mobility & Infrastructure Committee meeting, the committee favored the installation of the requested traffic signal and moved to bring the item forward to the City Council for discussion.

DISCUSSION:

The Northgate Gonzalez Market has requested an additional, signalized access point at their project driveway along Magnolia Avenue. The property owner has expressed that current means of access are insufficient for their customers' needs.

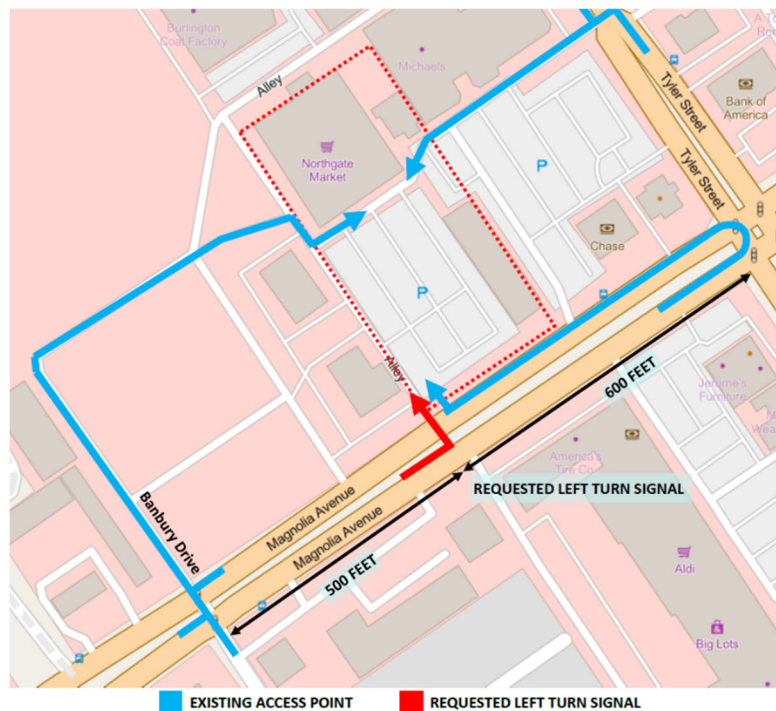


Figure 1: Existing and requested access to Northgate Gonzalez Market

The Northgate Gonzalez Market has requested to install a “half-signal” that would require a new opening in the median along Magnolia Ave. The requested signal would be installed at the cost of the property owner and would signalize left turns into the site. The proposed signal concept is pictured below in Figure 2; progression was analyzed by LLG Engineers (Attachment 1)

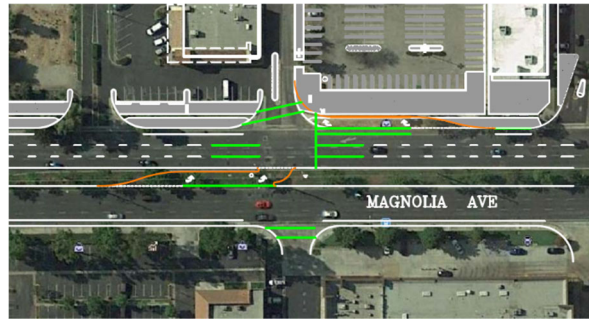


Figure 2: Requested Half-Signal and Median Opening

At the September 10, 2020 Mobility & Infrastructure Committee meeting, staff identified several key concerns related to the requested traffic signal:

1. Existing Collision Record: The requested signal would be approximately 600' west of Magnolia Avenue at Tyler Street, the intersection that experiences the highest number of collisions in the City. Magnolia Avenue between Polk Street and Hole Avenue falls on the Southern California Association of Government's (SCAG) Regional High Injury Network because of the rate of Auto-Pedestrian fatalities and serious injuries.
2. Intersection Spacing: There are currently seven traffic signals within one linear mile of each other along this stretch of Magnolia Avenue; the National Cooperative Highway Research Program's (NCHRP) report 900 identifies that signal density along this portion of Magnolia is such that additional signals at similar intervals may degrade safety.

According to the AASHTO Policy on Geometric Design of Urban Highways and Streets, at 40 MPH, the recommended decision sight distance for a stop on an urban road is 690 feet – the proposed intersection is less than 600 feet from adjacent intersections.

3. Signal Warrants: The anticipated traffic signal volumes presented by Northgate Gonzalez Market's Traffic Engineer does not meet California Manual of Uniform Traffic Control Devices traffic signal warrants. NCHRP Report 491 notes that, "Accident experience frequently increases at unwarranted traffic control signals." Installation of an unwarranted traffic signal can increase liability exposure for the City.
4. Cost: While the Northgate Gonzalez Market has offered to construct the traffic signal and median opening, the City of Riverside would incur all energy, preventative maintenance, and equipment replacement costs for the intersection.
5. Magnolia Avenue Specific Plan: The plan was adopted by the Riverside City Council. A corridor-wide policy objective within the specific plan involves the closure of left turn median openings along Magnolia Avenue. "Policy 2.5: Study the feasibility of left turn lane closures at minor intersections to allow for increased continuity of the landscaped median along the corridor."

After careful consideration of staff's presentation, the Committee recommended to approve the installation of the requested traffic signal but asked that staff discuss the inclusion of additional traffic safety measures at the intersection of Magnolia Avenue & Tyler Street to reduce safety concerns. The engineer representing Northgate Gonzalez Market proposed the following improvements (also shown in Attachment 2), which were agreed upon by the property owner, to

take place at the intersection of Magnolia Avenue & Tyler Street:

1. Replace existing traffic signal heads
2. Install yellow, fluorescent traffic signal head backplates
3. Install video detection cameras for dilemma zone detection and to detect cyclists
4. Upgrade pedestrian push buttons to "Accessible Pedestrian Signal" type buttons
5. Install LED signs to regulate right turn movements during the U-Turn movement
6. Make any bicycle & pedestrian related signal timing adjustments as-needed

Many of the above listed improvements are recognized as proven safety countermeasures by the Federal Highway Administration, and should boost pedestrian, bicyclist and motorist safety at the intersection of Magnolia Avenue & Tyler Street.

The Northgate team anticipates that the cost of these improvements total \$86,640. These improvements would be designed and implemented by the Northgate Gonzalez Market alongside the construction of their requested traffic signal. All improvements would be required to go through the permitting and plan check process prior to implementation.

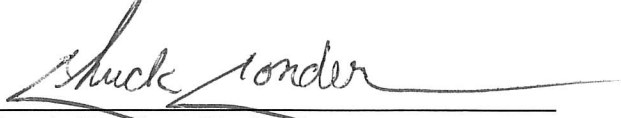
City staff plan to install high-visibility crosswalks at the intersection of Magnolia Avenue & Tyler Street as part of upcoming paving work on Magnolia Avenue.

FISCAL IMPACT:

The project costs will be paid for by the property owner, Northgate Gonzalez Market. Should the Northgate Gonzalez Market construct a traffic signal, the City would incur maintenance costs of approximately \$3,000 per year (preventative maintenance, signal timing & electricity costs). The maintenance costs are budgeted in General Fund Signal Maintenance accounts 4110400-411100 (personnel) and 4110400-422201 (non-personnel). The City would be additionally responsible to replace damaged or aging equipment. A common occurrence is for the traffic signal cabinet housing the computer to be knocked down, which costs approximately \$10,000 to replace.

Prepared by: Kris Martinez, Public Works Director
Certified as to
availability of funds: Edward Enriquez, Chief Financial Officer/City Treasurer
Approved by: Rafael Guzman, Assistant City Manager
Approved as to form: Kristi J. Smith, Interim City Attorney

Concurs with:



Chuck Conder, Chair
Mobility and Infrastructure Committee

Attachments:

1. Northgate Progression Analysis (LLG Engineers)
2. Proposed Magnolia & Tyler Safety Enhancements (LLG Engineers)