



Administrative Report

J.3., File # PW20-1470

Meeting Date: 9/28/2020

To: PUBLIC WORKS COMMISSION

From: Department of Public Works

TITLE

NORTH PIER PARKING STRUCTURE CIRCULATION PATTERN MODIFICATION

RECOMMENDATION

Review the Review the engineering report, receive public input and provide direction to Staff regarding proceeding with potential modifications to the circulation pattern at the north pier parking structure.

EXECUTIVE SUMMARY

Business owners in the Pier area recently requested that Staff consider modifying the traffic circulation pattern in the north pier parking structure from the existing counterclockwise movement to a clockwise movement. Motorists currently enter the parking area and veer right to circulate in a counterclockwise manner. The requested modification would permit motorists entering the parking area to travel straight and begin circulating through the area along the east side, travelling to the end of the covered parking portion, the returning back along the west side of the parking area.

Both the existing and requested traffic circulation patterns have advantages and disadvantages compared to each other. The general circulation pattern throughout the pier parking areas is counterclockwise, which is consistent with the existing pattern. Primary factors to consider when determining which circulation pattern to use include the following:

- Convenience of access to desirable parking stalls;
- Limitation of conflict points (safety);
- Ease of access to all parking stalls and levels; and,
- Entrance/exit convenience.

Regardless of which circulation pattern is adopted, additional regulatory and guide signage, markings and channelizers are recommended to provide enhanced direction to motorists.

BACKGROUND AND ANALYSIS

The north pier parking structure is located immediately south of the intersection of Harbor Drive and Pacific Avenue. It takes access from the intersection and consists of an uncovered parking area on the north side and a contiguous covered parking area to the south. There is no outside vehicular access from the covered portion. Access to lower level parking is also provided on the northwest corner of the parking area. Parking is controlled via three pay stations and numbered stalls.

The existing traffic circulation pattern in this parking area is counterclockwise. Vehicles enter the lot, veer to the right and then either turn left to find a parking stall or turn right to access the lower parking level. Parking

is in 90-degree stalls. Vehicles exiting the parking area turn right at the northeast corner and exit onto Harbor Drive/Harbor Avenue. Motorists wishing to continue looking for a parking stall can also turn left to continue circulating through the area, or access the lower level. The existing circulation pattern is indicated in Attachment 2.

ANALYSIS:

There are advantages and disadvantages to both the existing and alternate circulation patterns. Maintaining the existing circulation pattern has the following advantages, compared to the alternate pattern:

- Maintains the current circulation pattern, eliminating potential motorist confusion often associated with changes in traffic patterns and controls.
- Allows quick access to underground parking spaces since the access driveway to this area is located immediately after entering the north pier parking structure.
- Allows motorists quicker access to reach spaces closest to the walking area/beach, which are along the west side of the north pier parking structure.

The primary disadvantages of maintaining the existing circulation pattern is that motorists parking in the western spaces, the two northernmost spaces and the underground level must circulate through the entire parking area to exit.

If the existing traffic circulation pattern is retained, additional regulatory and guidance signage, markings and channelization should be installed to clearly direct motorists. These traffic controls are illustrated in Attachment 3.

The alternative traffic circulation pattern is illustrated in Attachment 4. Changing to this alternative pattern has the following advantages, compared to the existing traffic circulation pattern:

- Allows a more natural straight entering movement to the parking stalls.
- Allows quicker access to the closest parking spaces for entering traffic.

The disadvantages of establishing the alternative traffic circulation pattern, as compared to the existing pattern, are as follows:

- It forces exiting traffic to cross entering traffic, creating a new conflict point and the potential for collisions.
- It creates a clockwise circulation pattern, which is opposite of the majority of the parking structure (counterclockwise) and may be confusing to motorists.
- It forces motorists to circulate through the entire parking area to reach spaces closest to the walking area/beach and to the lower level access driveway, which may result in disobeying the marked circulation pattern.

If the alternative traffic circulation pattern is established, regulatory and guidance signage, markings and channelization should be installed to clearly direct motorists. These traffic controls are illustrated in Attachment 5.

COORDINATION

Staff coordinated with the Waterfront and Economic Development department and various tenants of the business owners' association for the pier to discuss the request and alternatives. They were also notified of the Public Works Commission meeting to provide comments in advance of the meeting or attend the meeting to provide public input. The Harbor Commission was notified of the item as well.

FISCAL IMPACT

The costs to modify the traffic controls would slightly vary depending upon the alternative chosen. However, the cost would not exceed \$10,000 for signage, markings and channelizers. Funding for the items is available through the Public Works Operational Budget.

APPROVED BY:

Ted Semaan, Public Works Director

ATTACHMENTS

Attachment 1 - Correspondence

Attachment 2 - Existing Circulation Pattern

Attachment 3 - Alternative Circulation Pattern

Attachment 4 - Existing Circulation Traffic Control Modifications

Attachment 5 - Alternative Circulation Traffic Control Modifications