

**CATHY LEONG DIRECT TESTIMONY**

**PRESENTATION HEARING**

**Block D (Land Block 4, Project 1) (KAK 23-037)**

**Q Please state your name, place of employment, and position.**

A Cathy Leong, Licensed Professional Civil Engineer and Director, Transportation Group, Wilson Okamoto Corporation (WOC).

**Q How long have you been employed by WOC?**

A I joined WOC in 1997 as a Traffic Engineer. I became a Senior Project Manager with the Traffic and Transportation Engineering Group in 2001, and Director of the Transportation Group in 2017.

**Q Please describe your educational background and experience.**

A Please see my resume, which is marked as an exhibit in this proceeding. I have prepared various traffic reports such as impact studies, parking and loading studies, construction traffic management plans, queuing and delay studies, transportation management plans, and other types of traffic-related documents, including the design of roadways, intersections, and traffic signal systems.

**Q How have you been involved with this Project, Block D?**

A WOC was retained by Victoria Ward, Limited (VWL) to prepare a traffic impact report (TIR) to identify and assess the potential traffic impacts resulting from Block D, and to identify necessary measures to mitigate such impacts. The TIR is included as Appendix F to the Planned Development Permit Application for Block D, which is marked as Exhibit 1 in this proceeding.

**Q Please summarize the aspects of Block D relevant to the TIR.**

A Block D is included in Phase 4 of the overall Ward Village Master Plan.

The project site for Block D is bounded by Auahi Street to the north, Ala Moana Boulevard to the south, Kamakee Street to the west, and Block E to the east, and is further identified as TMK No. 2-3-05:006.

Primary access to Block D will be via a new two-way driveway near the west end of the project site. A secondary access located near the center of the parcel is expected to serve loading and service operations for both Blocks D and E.

**Q Please summarize the methodology, findings, and recommendations of the TIR.**

**A** The TIR analyzes the potential traffic-related effects of Block D, as well as Block E. Although Blocks D and E are independent projects, they are expected to be developed within the same time frame. As such, due to their proximity and similar development timeline, both projects were assessed under a single TIR.

A previous assessment, which included Blocks D and E, was included in the “Transportation Master Plan and Assessment for the Ward Villages Master Plan” (the Ward Village TMP) dated October, 2020 and updated in October, 2022. This TIR is a supplemental study to specifically address Blocks D and E and incorporate the most recent development plans.

Traffic conditions were evaluated for the following conditions: Baseline Year 2026, Year 2027 Without Project, Year 2027 With Project. Traffic projections were based on the Institute of Transportation Engineers (ITE) methodology for trip generation and on the Oahu Metropolitan Planning Organization (OMPO) regional travel forecast model for network distribution. Capacity analyses procedures were performed to identify the operational traffic impacts to the surrounding intersections as a result of the Project.

Based on the regional growth rates as well as the anticipated traffic generation as a result of the Project, the TIR makes several recommendations to mitigate Project-related traffic impacts. The recommendations include the following:

1. Provide sufficient sight distance for motorists to safely enter and exit the project driveways to ensure visibility between pedestrians, bicyclists, motorists, or other users at these conflict points.
2. Provide adequate on-site loading and off-loading service areas to accommodate all anticipated vehicle types and prohibit off-site loading operations.
3. Provide adequate turn-around areas for service, delivery, and refuse collection vehicles to maneuver on-site to avoid vehicle-reversing maneuvers onto public roadways.
4. Provide sufficient turning radii at all project driveways to avoid or minimize vehicle encroachments to oncoming traffic lanes.
5. If access to the entrances to the parking areas are controlled, provide sufficient storage for entering vehicles at the parking area access controls (i.e., automatic gate, etc.) to ensure that queues do not extend onto the adjacent roadway. The layout and dimensions shall be determined during the design phase.

6. Restrict turning movements at the proposed primary project access for Block D along Auahi Street to right-turn in right-turn out movements only due to this driveway's proximity to Kamakee Street. Provide adequate channelization to reinforce the turning restriction. The specific configuration shall be determined during the design phase.
7. Restrict turning movements at the proposed loading/service driveway for Blocks D and E along Auahi Street to right-turn in right-turn out movements only due to this driveway's proximity to an existing signalized intersection with the adjacent South Shore Market/East Village Shops. Access to this driveway should be actively managed to ensure the turning restrictions are adhered to and that there are no reversing maneuvers onto the adjacent roadways. Consideration should also be given to scheduling deliveries and other services during off peak periods when traffic volumes are less.
8. Work with the City and County of Honolulu Traffic Review Branch with regards to the proposed project access points. Modifications to traffic circulation in the vicinity as a result of the restriction of right-turns from Ala Moana Boulevard to Kamakee Street have limited and/or extended the available routes to and from the project site given the anticipated turning restrictions at the project driveways. In addition, the proposed driveways are in close proximity to an existing signalized intersection with the driveway for the adjacent South Shore Market/East Village Shops. As such, refinement of driveway connections may be needed to minimize potential vehicular conflicts and driver confusion regarding the right-of-way.
9. Provide improved pedestrian connections within the project boundaries to facilitate access to the surrounding roadways. Pedestrian facilities should be in conformance with the Americans With Disabilities Act (ADA).
10. Provide bicycle facilities within the project boundaries including designated and secured bicycle parking to encourage the use of this alternative mode of transportation. Access to these facilities should be safe, convenient, and clearly delineated, especially within the designated parking areas where conflicts with vehicular traffic are expected.
11. Update the study should development phasing, land use intensity, or land use mix change.
12. Continue to develop and/or enhance bicycle and pedestrian facilities, as well as public transportation services in the project vicinity as described in the "Transportation Master Plan and Assessment for the Ward Village Master Plan," dated October 2022.

13. Coordinate the management of Blocks D and E with those discussed in the Ward Village TMP including the overall Transportation Demand Management (TDM) Plan.

**Q As part of the TIR you made a level of service determination. What is a level of service determination and how is that prepared?**

A Level of Service (LOS) is a quantitative and qualitative assessment of traffic operations. Levels of Service are defined by LOS "A" through LOS "F"; where LOS "A" represents ideal or free-flow traffic operating conditions and LOS "F" representing unacceptable or potentially congested traffic operating conditions. The LOS rating is generally based on delays experienced by motorists associated with movements at an intersection.

**Q Please summarize the level of service determinations made in connection with the TIR for this Project, Block D.**

A The intersections in the study area included:

- Along Ward Avenue at the intersections with Queen Street, Halekauwila Street, Auahi Street, and Ala Moana Boulevard,
- Along Kamakee Street at the intersections with Queen Street, Auahi Street, and Ala Moana Boulevard,
- Along Queen Street at the intersection with Queen Lane,
- Along Auahi Street at the intersection with Queen Lane and Queen Street, and
- Along Ala Moana Boulevard at the intersection with Queen Street.

As more fully described in the TIR, with the implementation of the recommendations to mitigate project-related traffic impacts, the operating conditions at the study intersections in the vicinity of Block D are expected to remain similar to conditions without Block D.

**Q The TIR also describes the concept of "trip generation". What is "trip generation" and how is that relevant to your analysis?**

A Trip generation is an estimate of the number of trips that would be generated by the Project during the commuter peak hours of traffic. The methodology to calculate the number of trips generated is based on generally accepted techniques developed by ITE. The ITE trip generation rates are developed empirically by correlating vehicle trip generation data with various land use characteristics such as the number of trips generated per dwelling unit. The trip generation methodology developed by ITE also

includes provisions for multi-modal trips, *i.e.*, trips utilizing non-motorized modes of travel such as walking and biking, as well as trips made using transit. The calculated trips are then superimposed over projected conditions without the project to measure the traffic impacts associated with the Project utilizing the concept of LOS.

**Q How does the Project impact pedestrian, bicycle, and transit facilities?**

**A *Pedestrian Facilities***

Improved pedestrian facilities such as sidewalks and crosswalks are currently provided along the roadways adjacent to Block D, including Auahi Street, Kamakee Street, Queen Street, and Ala Moana Boulevard.

Existing pedestrian facilities along the adjacent roadways are generally expected to be improved / maintained with Block D. The existing sidewalks fronting the project site along Auahi Street will be reconstructed with the frontage improvements associated with the project, but the existing sidewalk width will be maintained. An elevated pedestrian walkway along the project frontage will also be provided running parallel to the sidewalk. In addition, the overall pedestrian environment in the vicinity of the project is expected to be enhanced by the addition of an open plaza adjacent to Block D at the corner of Auahi Street and Kamakee Street along with trees and other landscaping treatments.

***Bicycle Facilities***

Block D will provide short-term and long-term bicycle facilities on-site for residents, guests, and employees to encourage the use of alternate modes of transportation. In addition, the Project is located within close proximity to a number of BIKI bikeshare facilities. Figure 13 of the TIR depicts the existing and proposed bicycle facilities in the vicinity of the Project.

In addition, the additional improvements planned in conjunction with the overall Ward Village Master Plan will also enhance bicycle connectivity within the area as well as to the surrounding areas. In conjunction with the Auahi Street project, the roadway is expected to convert to a 2-lane roadway to accommodate enhanced multimodal facilities with additional pavement striping installed to provide buffered bike lanes resulting in additional separation between bicyclists and vehicles.

There are also other bicycle improvements planned by the City and County of Honolulu Department Transportation Services in the vicinity of the Project as included in the Oahu Bike Plan (updated 2019). These additional bicycle improvements, including those listed below, are expected to improve the level of traffic stress along the roadways in the project vicinity.

- Bike lanes along Kamakee Street between Auahi Street and Ala Moana Boulevard;
- Bike lanes along Auahi Street between South Street and Ward Avenue; and
- Protected bike lanes along Halekauwila Street between Ala Moana Boulevard and Ward Avenue.

*Transit Facilities*

There is good transit quality of service in the Project vicinity. Levels of service for transit in the vicinity of the project are anticipated to remain similar to existing conditions.

In conjunction with the planned improvements along Auahi Street, the existing bus stops will be relocated to facilitate access to future planned developments within Ward Village with additional bus stops provided to further enhance convenient access to transit. Service to these stops is not expected to change significantly. All bus and trolley stops along Auahi Street will be modified to include bus/trolley pull-in areas to facilitate through traffic along the roadway.

East of Kamakee Street, the existing bus stops along Auahi Street fronting Block D is also expected to be relocated. Any modifications to bus stops in connection with the project will be coordinated with the Department of Transportation Services (DTS), which oversees transit service in the vicinity.

**Q Do you know if VWL intends to implement all of the recommended mitigation measures that you have proposed?**

A Yes. It is my understanding that VWL intends to implement all of the recommended mitigation measures identified in the TIR.

**Q In summary, is there an impact to traffic from this Project, Block D?**

A The project is expected to add traffic to the surrounding roadway network but any impacts can be mitigated by the recommendations in the TIR, which VWL intends to pursue and implement.

**Q Did the City and County of Honolulu Traffic Review Branch (TRB) review and comment on the TIR?**

A Yes, the City and County of Honolulu TRB confirmed in an email dated May 16, 2023 that TRB accepts the TIR dated March 2023.

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