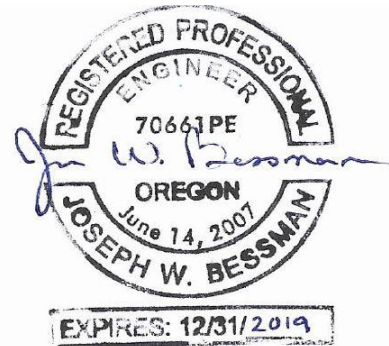




Date:	October 11, 2019
To:	Julia Warncke, City Planning Manager
From:	Joe Bessman, PE
Project Reference No.:	1040
Project Name:	Greencrest Street Alignment



The purpose of this memorandum is to further clarify the Greencrest Street alignment options with State Street. The alignment of this road within the City's adopted Transportation System Plan (TSP) shows a connection with Cougar Court, east of the proposed connection at Oakmont Court.

As part of the August 1, 2019 supplemental memorandum our team further reviewed various connection options and the various trade-offs with traffic operations, connectivity, queuing impacts, sight lines, circulation, and multimodal connectivity. While the City and County both preferred the connectivity provided to the south with alignment at 49th Avenue, the concern was that the short spacing from the much more critical intersection with Cordon Road/State Street would result in queue spillover between intersections. The current alignment at Cougar Court avoided this issue, but created additional conflicts with adjacent accesses.

To help illustrate this issue, Figure 1 shows the projected vehicular queues that are forecast with build-out of the Pictsweet property in the year 2039 and signalization at Cougar Court as shown in the adopted TSP. This scenario assumes that the Auburn Road corridor includes a traffic signal at its intersection with Cordon Road, helping to reduce the parallel State Street demands. This shows that the anticipated queues from this signal will block the mobile home park entrance to the west, which serves as the only entrance to the 46-unit mobile home park.

Figure 2 shows the proposed alignment of Greencrest Street with Oakmont Court in the recommended alignment. This location does not result in blockages to any of the adjacent intersections and provides adequate spacing from the Cordon Road/State Street intersection to support the long-term needs.

By providing the Greencrest Street traffic signal on State Street in alignment with Oakmont Court the adjacent intersection with 49th Avenue benefits by having additional breaks in the east-west traffic flows. In addition, because of the low demands from the south the new signal can more efficiently support the major east-west traffic flow on State Street. With the separation from Cordon Road this alignment provides (925 feet) it is unlikely that during normal traffic conditions that queues will extend between intersections within the planning horizon. Accordingly, our team recommends this alignment, which is also supported by City and County staff.

I trust that these materials provide additional clarity as to why the Oakmont Court alignment is proposed with this project. Please let me know if you have any additional questions or comments via email at joe@transightconsulting.com or at (503) 997-4473.

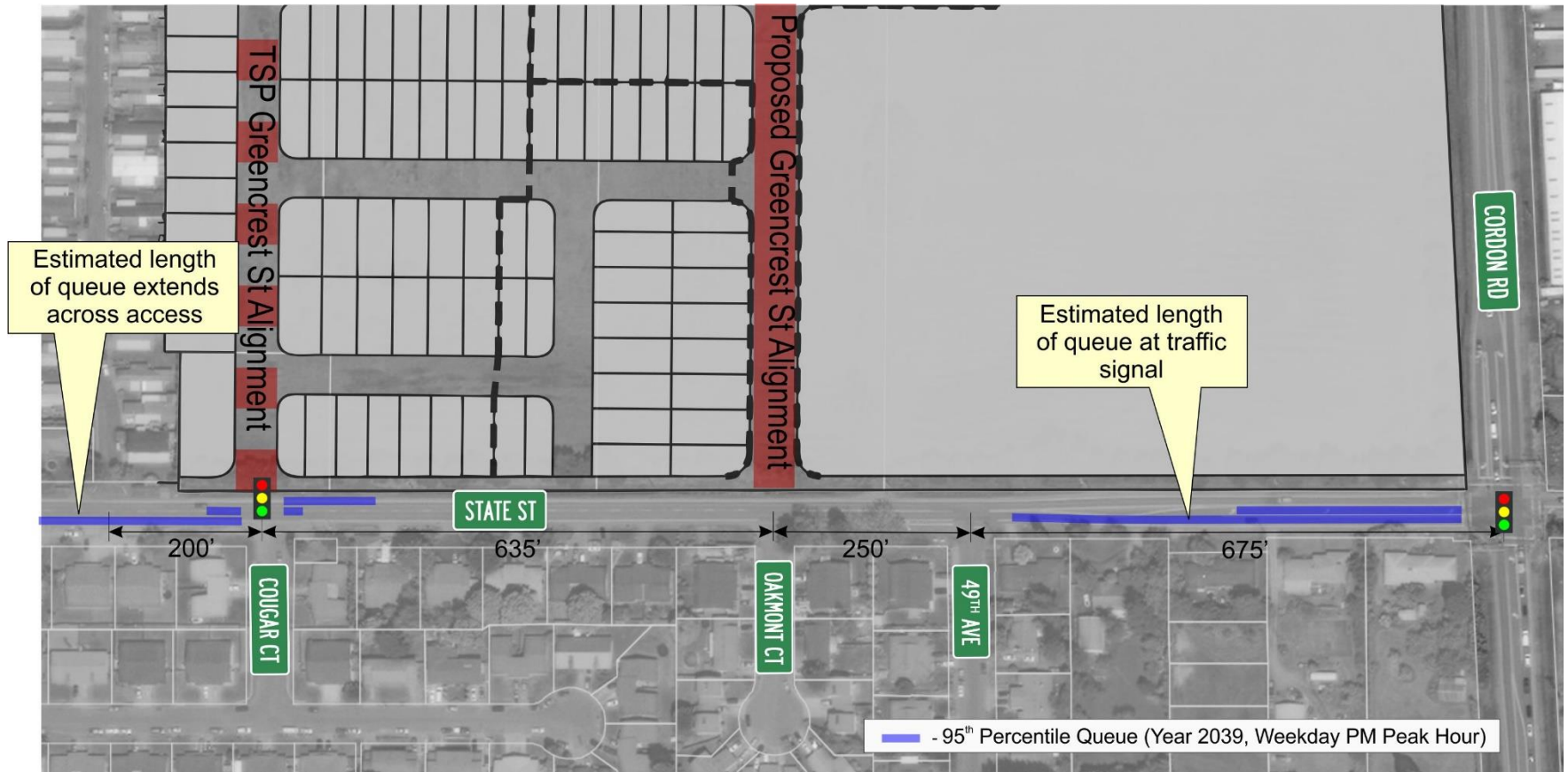


Figure 1. Street Spacing and Projected Year 2039 Vehicular Queuing on State Street with Signalization Shown in TSP Alignment.

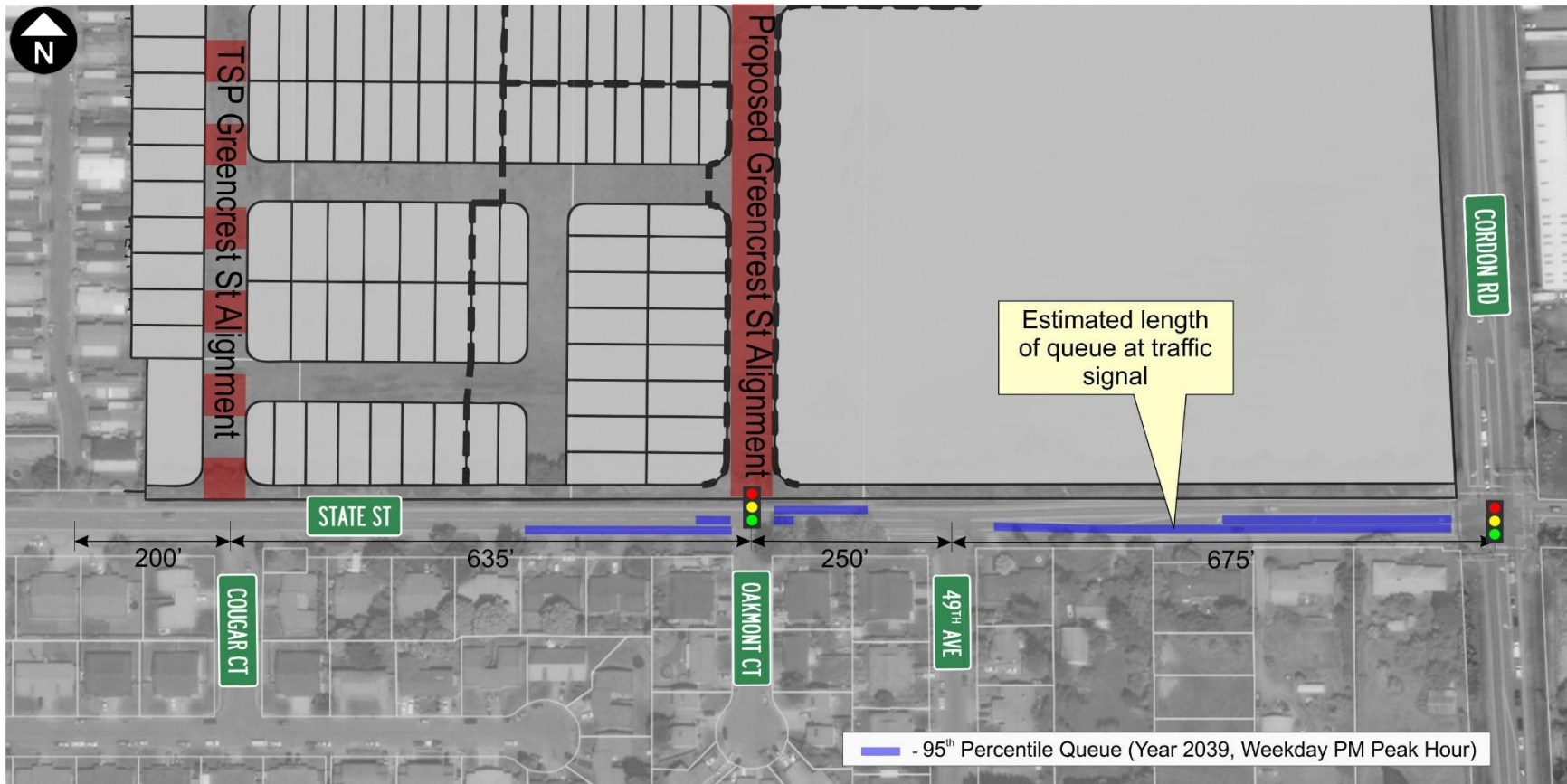


Figure 2. Street Spacing and Projected Year 2039 Vehicular Queuing on State Street with Signalization as Proposed.