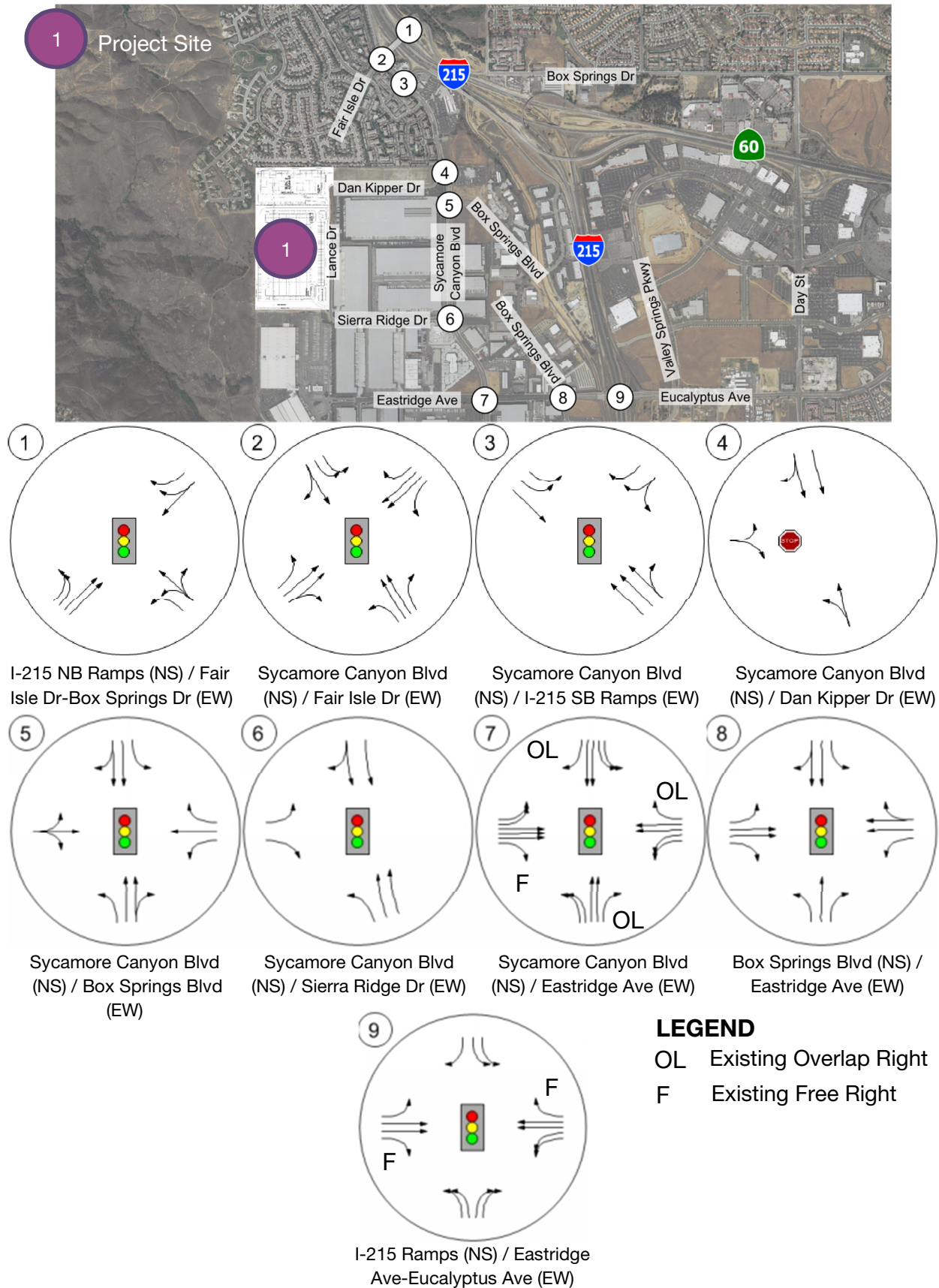


**Figure 6-C – Summary of Intersection Improvements for Existing Plus Ambient Growth Plus Cumulative Plus Project (2018)**



## ▪ **Traffic Signal Warrants**

The California MUTCD states that the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal. Peak hour traffic signal warrant analysis should only be considered as an “indicator” of the likelihood of an unsignalized intersection warranting a traffic signal. Intersections that exceed the peak hour warrant are more likely to meet one or more of the other volume based signal warrants. The Manual on Uniform Traffic Control Devices (MUTCD) also advises that a traffic control signal should not be installed unless:

- One or more of the traffic signal warrants is satisfied;
- An engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection; and
- It will not seriously disrupt progressive traffic flow.

For existing traffic conditions, the peak hour traffic control signal warrant is not satisfied for any of the study area unsignalized intersections (see Appendix D for technical calculations).

For existing plus project traffic conditions, no study area unsignalized intersections are expected to meet the peak hour traffic control signal warrant (see Appendix D for technical calculations).

For existing plus ambient growth plus project traffic conditions, no study area unsignalized intersections are expected to meet the peak hour traffic control signal warrant (see Appendix D for technical calculations).

For existing plus ambient growth plus cumulative plus project traffic conditions, no study area unsignalized intersections are expected to meet the peak hour traffic control signal warrant (see Appendix D for technical calculations).

## ▪ **Circulation Recommendations**

This traffic impact analysis demonstrates that improvements can be made by the project for its direct traffic impacts. To meet the required level of service, the following improvements are recommended:

### **Roadway Improvements**

- Construct partial width improvements on the westerly side of Lance Drive at its ultimate cross-section as an 80' collector adjacent to project boundary line, from southerly project boundary to Lance Drive's connection to Dan Kipper Drive.

## ▪ **Safety and Operational Recommendations**

Figure 6-D shows the truck turning templates with the site plan provided by the architect.

- Sight distance at the project entrance roadway should be reviewed with respect to standard City of Riverside sight distance standards at the time of preparation of final grading, landscape and street improvement plans. The City of Riverside conforms to the Caltrans Highway Design Manual Section 405.1 in sight distance standards.
- Participate in the construction of traffic signals within the City of Riverside through payment of project's fair share of traffic signal mitigation fees as a standard impact fee for all development projects.

- Signing/stripping should be implemented in conjunction with detailed construction plans for the project site.

### **Site Queuing Analysis**

Per discussion with the City of Riverside, the threshold in which queuing for the Project would cause an impact would be when trucks begin to queue onto Lance Drive. It should be noted however that Lance Drive is a small collector road, which will only carry traffic for the Project and the development southeast from the Project.

Operationally, queuing for industrial land uses can be the worst during the morning when trucks arrive but the gates have not opened yet. Trucks would then queue outside of the gate. Based on Table 4-2, 21 trucks are expected to arrive during the AM Peak Hour between 7 and 9 AM for Building 1 and 9 trucks for Building 2. Figure 6-E and Figure 6-F show the queuing capacity of Buildings 1 and 2 outside of the gate for trucks with a 53' trailer and a 48' trailer, respectively. Building 1's site plan can accommodate approximately 32 53'-trailer trucks and 35 48'-trailer trucks. Building 2's site plan can accommodate approximately five 53'-trailer trucks and six 48'-trailer trucks. The trucks used to model the storage space are WB-62 and WB-67 trucks from "A Policy on Geometric Design of Highways and Streets, 6<sup>th</sup> Edition" (AASHTO 2011).

### **Regional Funding Mechanisms**

The project will participate in the cost of off-site improvements through payment of the following "fair share" mitigation fees:

- Transportation Uniform Mitigation Fee (TUMF), current at time of construction.
- City of Riverside Development Impact Fee (DIF), current at time of construction.

These fees should be collected and utilized as needed by the City of Riverside to construct the improvements necessary to maintain the required level of service.

Figure 6-D – Truck Turning Movements with Site Plan

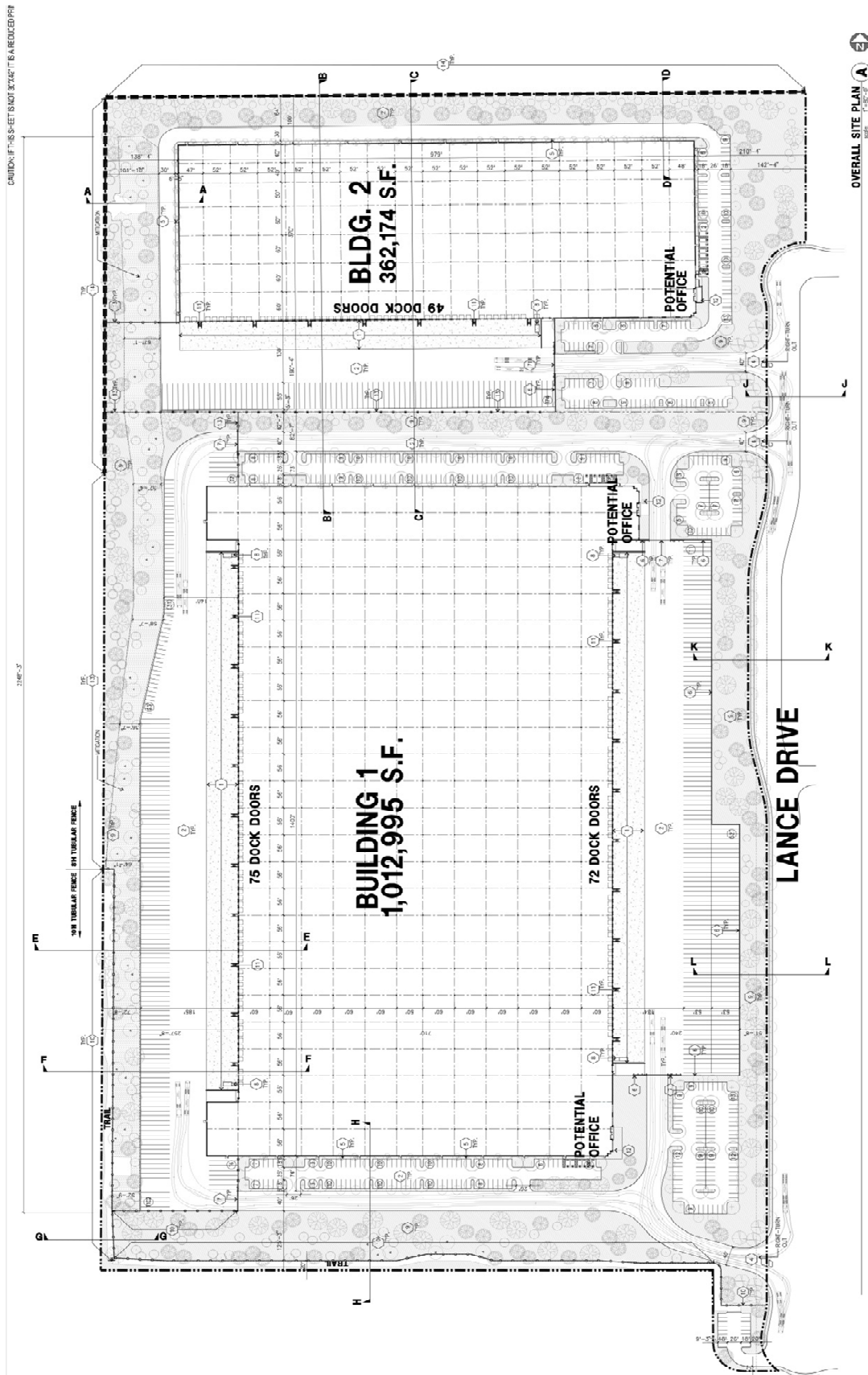


Figure 6-E – Site Queuing Analysis with 53' Trailer Trucks

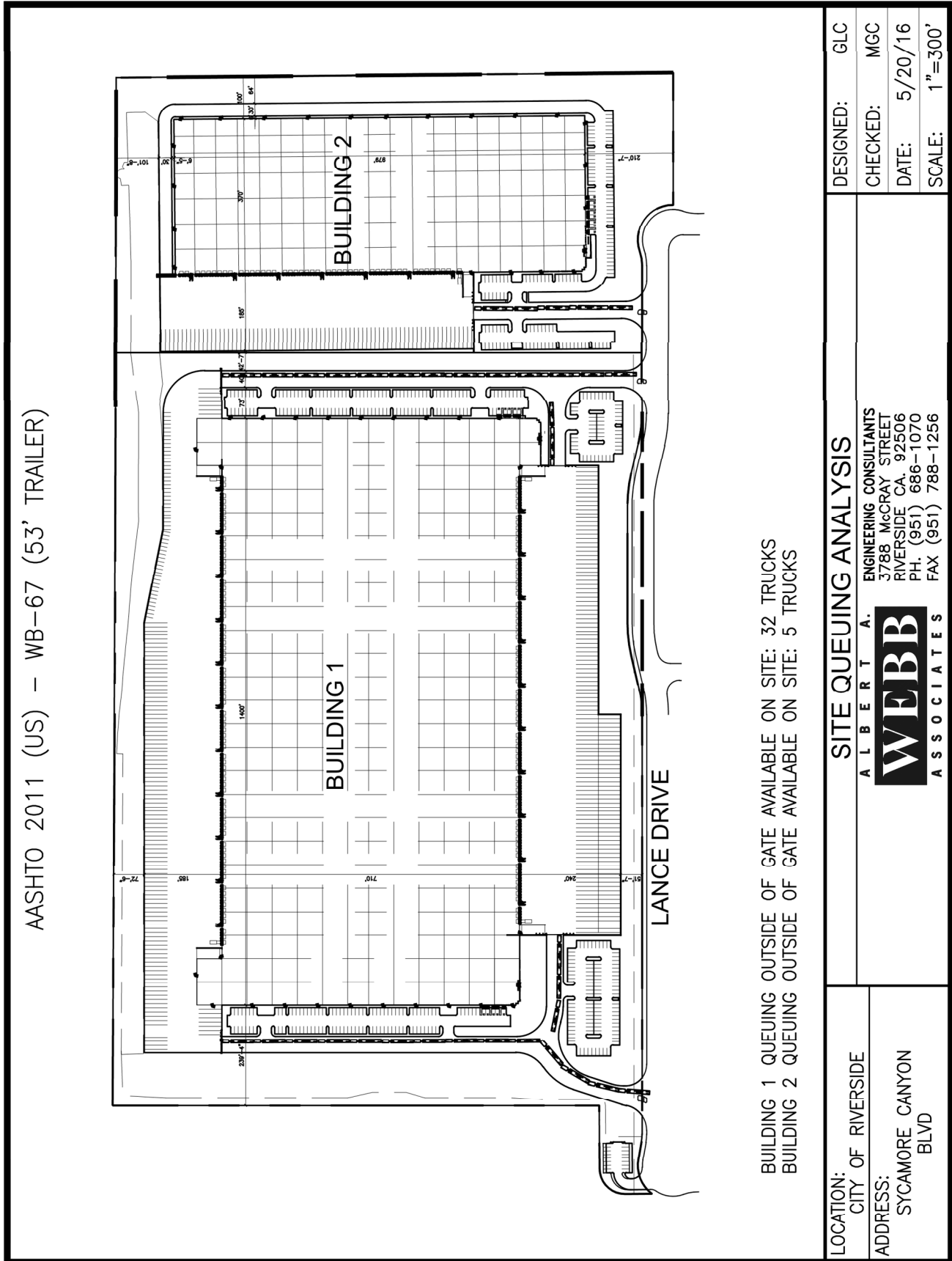
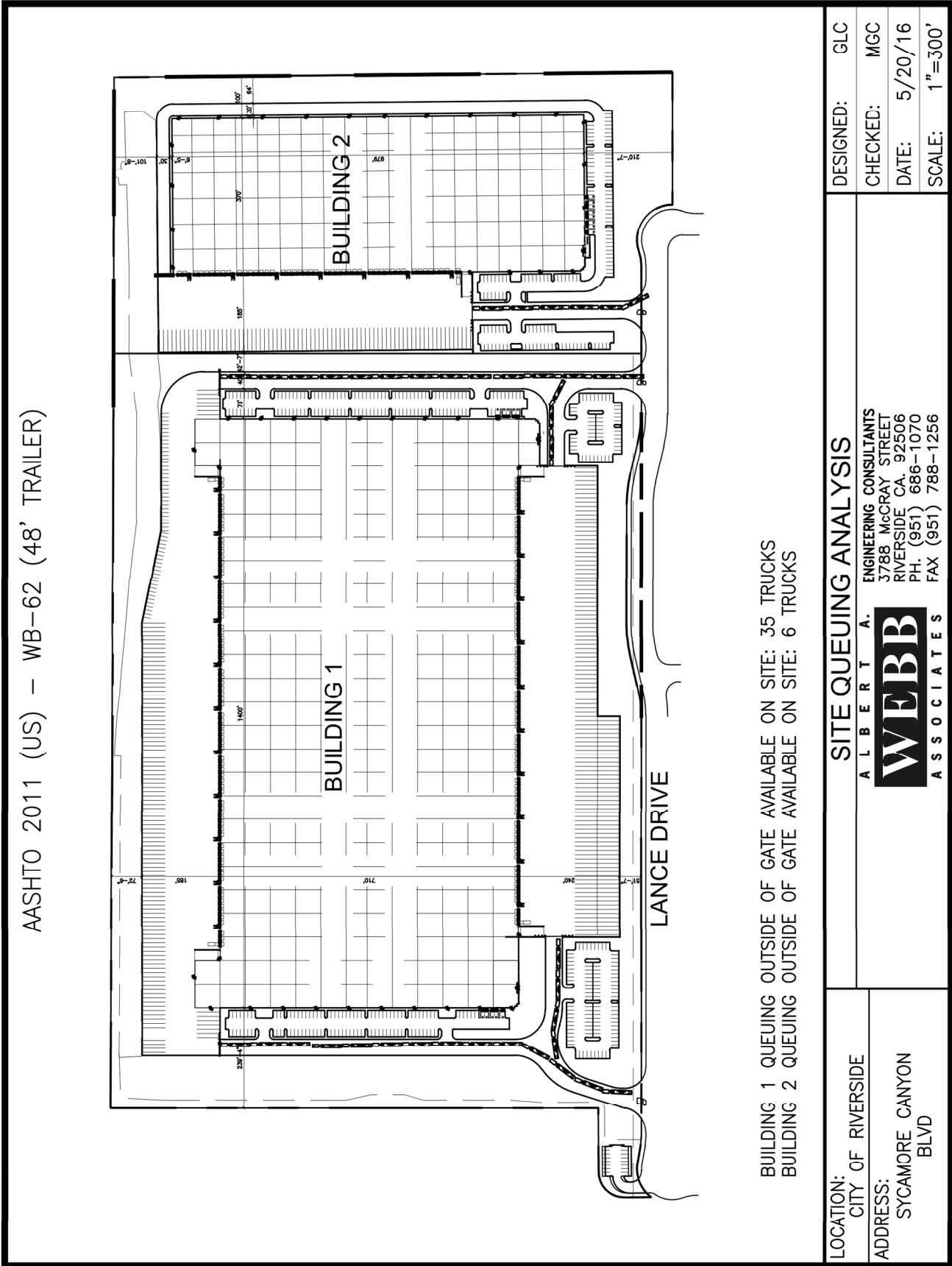


Figure 6-F – Site Queuing Analysis with 48' Trailer Trucks





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