April 17, 2018

Mr. Eli Melrod
Gravenstein 116, LLC.
4036 Montgomery Drive Unit B
Santa Rosa, CA 95405

Focused Traffic Study for the Solful Dispensary

Dear Mr. Melrod;

W-Trans has completed a focused traffic study that addresses the potential change in trip generation and access conditions associated with the proposed change in land use for 4036 Montgomery Drive in the City of Santa Rosa.

Project Description

The proposed project would convert approximately 4,000 square feet of existing warehouse space to a cannabis dispensary and associated parking garage. The project would be located on the same site as the Trail House beer garden, coffee house, and bike shop, which would remain unchanged after a recently approved remodel. The dispensary would occupy approximately 1,773 square feet and the remainder of the warehouse space would be used as a parking garage. Proposed improvements to the building include new doors, windows, an aluminum awning, and a 20-foot wide roll-up door to provide access to the parking garage. The facility would be open to the public between the hours of 9:00 a.m. and 9:00 p.m. seven days a week and would require five full-time and five part-time employees.

Trip Generation

The anticipated trip generations for the existing and proposed uses were estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, *10th Edition*, 2017. The warehouse is currently occupied by a low voltage construction company, a general contractor, and office space so rates for "Specialty Trade Contractor" (ITE LU 180) were applied to the construction-related uses and rates for "General Office Building" (ITE LU 710) were applied to the office space. Based on application of these rates, the existing uses collectively would be expected to generate an average of 41 trips per day, including six trips during the morning peak hour and seven trips during the evening peak hour.

To estimate the trip generation associated with the proposed dispensary, standard rates for a new land use introduced in the 10th Edition of the *Trip Generation Manual*, "Marijuana Dispensary" (ITE LU 882) were applied. Based on application of these rates and the total dispensary size of 1,773 square feet, the proposed project would be expected to generate an average of 448 trips per day with 19 trips during the morning peak hour and 39 trips during the evening peak hour. After deductions due to the existing uses that would cease with operation of the project are considered, the proposed project would result in 407 new daily trips, including 13 trips during the a.m. peak hour and 32 trips during the p.m. peak hour; these trips represent the increase in traffic associated with the proposed project compared to existing volumes. These results are summarized in Table 1. Because the project would be expected to generate fewer than the 50 peak hour trips that represent the City's threshold indicating need for a full traffic study, an operational analysis was not prepared.

Table 1 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Existing											
Specialty Trade Contractor	3.000 ksf	10.22	31	1.66	5	4	1	1.97	6	2	4
General Office Building	1.000 ksf	9.74	10	1.16	1	1	0	1.15	1	0	1
Total Existing			41		6	5	1		7	2	5
Proposed											
Marijuana Dispensary	1.773 ksf	252.70	448	10.44	19	10	9	21.83	39	19	20
Net New Trips			**407**		**13**	**5**	**8**		**32**	**17**	**25**

Notes: ksf = 1,000 square feet

Access Analysis

The project site is located on the southeast side of Montgomery Drive, approximately 450 feet southwest of its intersection with Summerfield Road, and would continue to be accessed via two existing driveways. The southwestern driveway is used for ingress and connects to a one-way drive aisle that loops around the Trail House building in a counterclockwise direction where it connects to the northeastern driveway that is used for exiting the site onto Montgomery Drive. Surface parking is provided along the edges of the site.

On-site Circulation

To determine if standard passenger vehicles could navigate the site as intended, site circulation was modeled using the AutoTURN application of AutoCAD. Based on the proposed site plan, circulation within the garage would be expected to operate acceptably and vehicles exiting the parking garage could make a right turn to the one-way loop drive aisle. An exhibit showing the expected travel paths is enclosed. It should be noted that delivery truck circulation was not evaluated as it is understood that deliveries would be made by standard passenger vehicles.

Finding – As proposed in the site plan, the parking layout within the garage complies with City of Santa Rosa standards and circulation would be expected to operate acceptably.

Recommendation – To minimize potential conflicts between vehicles pulling into and out of the parking stalls in the garage, the first employees to arrive at the site should be instructed to park in the stalls near the rear of the garage, as these will be the most difficult to navigate. Additionally, it is recommended that the stall against the back wall of the garage be reserved for use by compact vehicles.

Sight Distance

At private roads and driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting at the driveway and the driver of an approaching vehicle. Adequate time should be provided for the waiting vehicle to either cross, turn left, or turn right, without requiring through traffic to radically alter their speed. Sight distance at the northeastern driveway location used for exiting the site was field measured and evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distances for minor street approaches that are driveways are based on stopping sight distance, with approach travel speeds used as the basis for determining the recommended sight distance. Set-back for the driver on the driveway of 15 feet, measured from the edge of the traveled way, was used.

For the posted 35-mph speed limit on Montgomery Drive, the recommended stopping sight distance is 250 feet. Based on a review of field conditions, sight distance at the northeastern driveway extends more than 300 feet to the northeast, which is more than adequate for the posted speed limit. To the southwest, sight distance extends approximately 300 feet without the presence of a parked vehicle in the street parking slot directly adjacent to the driveway; however, when this area is occupied, sight distance can be restricted to as little as 100 feet if the vehicle is parked at the beginning of the curb cut, which is inadequate for the posted speed limit. In this situation, adequate sight lines can be achieved by pulling forward to the edge of the bike lane, but this type of operation is not preferred for extended periods of time. Field observations confirmed that drivers exiting the site routinely pull up to the bike lane to achieve adequate sight lines.

Finding – At the northeastern driveway, sight distance is more than adequate for the posted speed limit when looking northeast, but sight distance to the southwest is inadequate when the first street parking space adjacent to the driveway is occupied.

Recommendation –The first 20 feet of curb southwest of the driveway should be painted red or signed for no parking.

Conclusions and Recommendations

- The proposed project would result in 407 new daily trips, including 13 trips during the a.m. peak hour and 32 trips during the p.m. peak hour. Based on the minimal number of peak hour trips expected to be generated by the proposed project, it is reasonable to conclude that the change in land use would have a *less-than-significant* impact on traffic operation.

- Based on the proposed site plan, on-site circulation would be expected to continue operating acceptably.

- Sight distance at the northeastern driveway is adequate to the northeast, but inadequate to the southwest when the street parking space directly adjacent to the driveway is occupied.

- The first employees to arrive at the site in the morning should be instructed to park in the spaces at the rear of the parking garage and the space along the back wall of the garage should be marked for use by compact vehicles.

- Parking should be prohibited for the first 20 feet southwest of the driveway by red paint or signing.

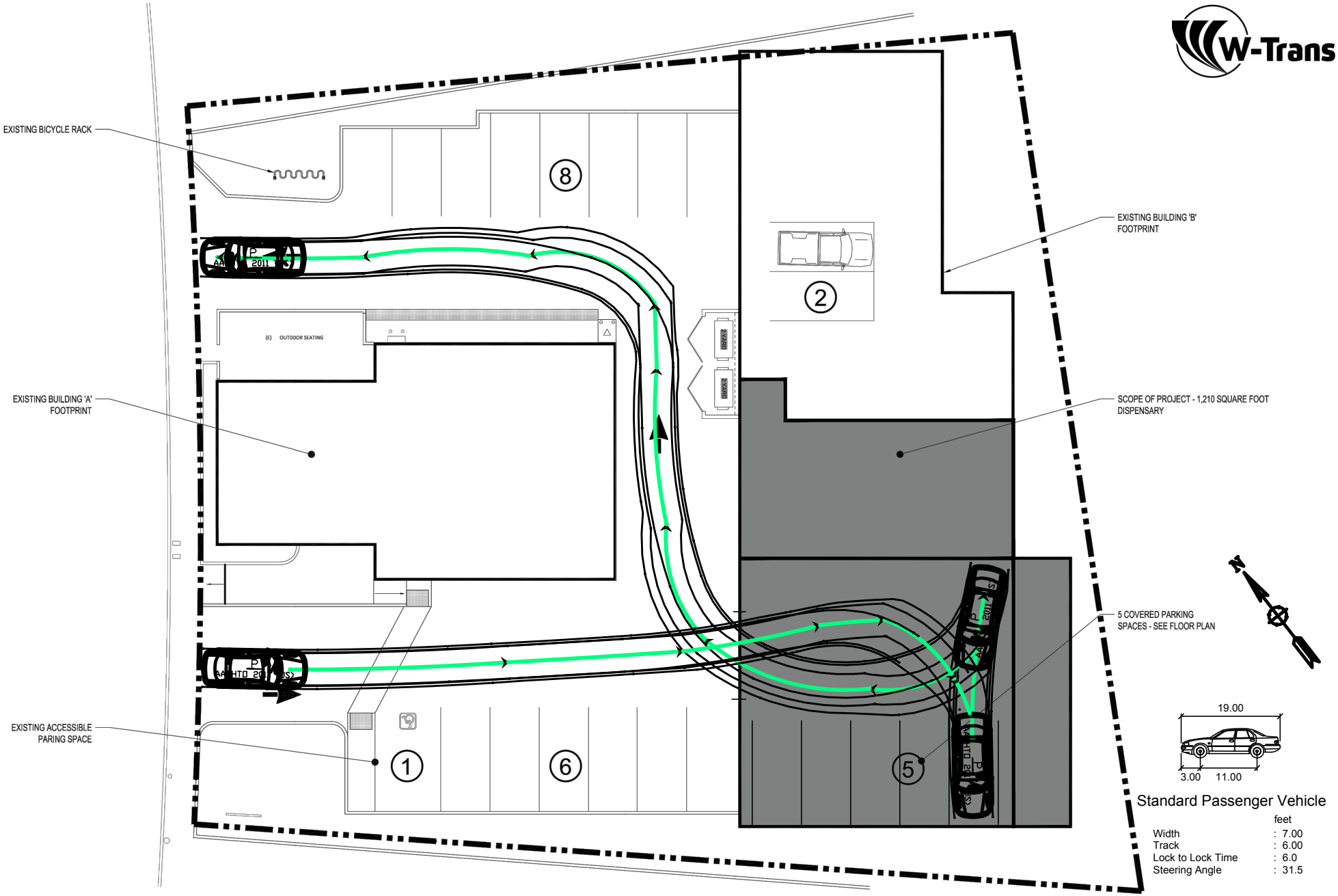
We hope this information is adequate to address the potential traffic impacts associated with the proposed project. Please contact us if you have any further questions. Thank you for giving us the opportunity to provide these services.

Sincerely,

Cameron Nye, EIT
Assistant Engineer

Dalene J. Whitlock, PE, PTOE
Principal

DJW/cn/SRO464.L1 Enclosure: AutoTURN Exhibit



SOLFUL DISPENSARY

4036 Montgomery Drive

AutoTurn Exhibit

April 2018