



July 1, 2021

Mr. Keenan Soares  
Green Pen, LLC  
353 College Avenue  
Santa Rosa, CA 95401

## Updated Focused Traffic Study for the Green Pen Dispensary

Dear Mr. Soares;

W-Trans has completed an updated focused analysis that addresses the potential transportation impacts and traffic effects associated with the proposed Green Pen cannabis dispensary to be located at 353 College Avenue in the City of Santa Rosa. This updated focused traffic study addresses comments from the Planning Commission hearings held on March 14, 2019 and September 12, 2019 and supersedes all previous documentation prepared for the project.

### Project Description

The proposed project would result in repurposing an existing 2,943 square-foot commercial building to a cannabis dispensary. As proposed, the project would include 1,772 square feet of retail space and 338 square feet of storage; office, employee administration, and delivery operations would occupy the remainder of the building. 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. As part of the project, the adjacent parcel would be redeveloped for surface parking and improved circulation to serve the dispensary. Additionally, the following components are proposed in an effort to reduce the project's trip generating potential and parking demand.

- Consolidated delivery service with vans to reduce trips made by repeat customers.
- Twelve (12) covered bicycle parking spaces on-site to encourage biking.
- Employees will not be permitted to park on-site.
- Customer parking on-site will be limited to 30 minutes.

An aerial showing the existing conditions of the site and the project site plan are enclosed for reference.

### Trip Generation

The trip generation for the proposed project was estimated using rates that we have developed based on data collected at local dispensaries. Over the last two years, W-Trans has collected data at seven dispensaries in the North Bay Area, including four in the City of Santa Rosa. Our data collection effort has identified that local dispensaries are expected to generate about 85 vehicle trips per day per 1,000 square feet of gross floor area, including two trips per 1,000 square feet during the weekday a.m. peak hour and 21 trips per 1,000 square feet during the weekday p.m. peak hour. A spreadsheet summarizing the local trip generation data and resulting rates is enclosed for reference.

For comparative purposes, the theoretical trip generation for the most recent previous use of the site was estimated using standard ITE rates for "Nursery (Garden Center)" (LU #817) as the building was most recently occupied by a retail hydroponics operation. It is noted that the *Trip Generation Manual* does not specify the percentage of trips in or out for the Nursery land use, so splits for "Building Materials/Lumber Store" (LU #812) were applied based on the probable similarity of the trip generation patterns.

As shown in Table 1, the proposed project would be expected to generate an average of 251 trips per day at the project driveway, including five trips during the weekday a.m. peak hour and 63 p.m. peak hour trips. Compared to the prior retail hydroponics use, the proposed dispensary would be expected to result in 51 more daily trips on average with two fewer trips during a.m. peak hour, but with 43 more trips during the p.m. peak hour.

**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
Previous											
Nursery (Garden Center)	2.943 ksf	68.10	200	2.43	7	5	2	6.94	20	10	10
Proposed											
*Marijuana Dispensary	2.943 ksf	85.12	251	1.59	5	4	1	21.27	63	33	30
Net Difference from Previous Use		51		-2   -1   -1				43   23   20			

Note: ksf = 1,000 square feet; North Bay rates developed based on local data

The proposed project would result in fewer than 50 new trips during each peak hour, so a full traffic impact study with an operational analysis is not required per the City's *Standard Guidance for the Preparation of Traffic Impact Analysis*.

## Delivery Consideration

Two of the seven dispensaries that were subject of the data collection effort had delivery services operating at the time the data was collected so the trip generation characteristics for those two individual dispensaries were reviewed and it was determined that such a service may reasonably be expected to reduce the trip generation potential of a dispensary, not increase it. Deliveries are intended to serve multiple customers in one trip so the trips associated with several customers that would otherwise visit the site individually are replaced by a single round trip made by the delivery vehicle. The trip generation data collected at the two dispensaries with a delivery service indicated an average trip rate of 7.92 trips per 1,000 square feet during the weekday p.m. peak hour compared to the combined average rate of 21.27 trips per 1,000 square feet. The delivery service rate as sampled was approximately 63 percent lower than the combined rate, making application of the combined rate conservative.

Because only two dispensaries had an operational delivery service, it is preferred that data be collected at additional local dispensaries with a delivery service to confirm the rates before using them to estimate the trip generation potential of a proposed project. However, the data indicates that the presence of a delivery service could be expected to reduce the trip generating potential of the dispensary.

## Vehicle Miles Traveled

Senate Bill (SB) 743 established a change in the metric to be applied to determining transportation impacts associated with development projects. Rather than the delay-based criteria associated with a Level of Service (LOS) analysis, the change in Vehicle Miles Traveled (VMT) as a result of a project will be the basis for determining California Environmental Quality Act (CEQA) impacts with respect to transportation and traffic.

Although not yet officially adopted, the City of Santa Rosa is in the process of preparing guidelines for VMT analysis, as outlined in *Vehicle Miles Traveled (VMT) Guidelines Final Draft*, dated June 5, 2020. This document identifies several criteria that may be used to identify certain types of projects that are unlikely to have a significant VMT impact and can be "screened" from further analysis. One of these screening criteria pertains to local-serving

retail, which the City defines as having up to 10,000 square feet of gross floor area. The theory behind this criteria is that while a larger retail project may generate interregional trips that increase a region's total VMT, small retail establishments do not necessarily add new trips to a region, but change where existing customers shop within the region, and often shorten trip lengths. The proposed cannabis dispensary is a total of 2,943 square feet, which is well below the City's local-serving retail threshold of 10,000 square feet; therefore, it is reasonable to conclude that the project would have a less-than-significant transportation impact on VMT. Further, the project site is within an area for which employee-based trips are pre-screened as having a less-than-significant impact in terms of VMT.

**Finding** – Based on the screening criteria published by the City of Santa Rosa, the project is anticipated to result in a less-than-significant transportation impact on VMT.

## Site Access and Circulation

The proposed project would be located on an existing non-conforming site and as a result the applicant has secured the neighboring parcel to the west of the dispensary parcel to improve on-site circulation and provide additional parking. An existing building on the northern part of the neighboring parcel would be demolished to make room for the circulation and parking improvements. As proposed, on-site circulation would flow in one direction counterclockwise with the entrance on Glenn Street and the exit on College Avenue. With the proposed improvements, the drive aisle and parking stalls would meet the minimum dimensions required under the City's design standards.

The AutoTURN application of AutoCAD was used to determine if motorists would be able to access the parking stalls and navigate the site as intended, and it was determined that there would be no anticipated issues with motorists pulling into or out of any of the parking stalls. Although there would be adequate space behind the two easternmost parking stalls for motorists to turn around and exit the Glenn Street driveway, it is recommended that circulation be limited to one direction, as proposed, in an effort to keep circulation consistent throughout the entire parking lot and to limit the number of customers that drive through the Glenn Street neighborhood after exiting the site. One-way directional arrows should be marked on the pavement in the parking lot to the north of the dispensary and to the west of the dispensary and "Not an Exit" signage should be installed at the Glenn Street driveway facing internally, while "Do Not Enter" signage should be installed at the College Avenue driveway facing externally. Additionally, given that the driveway exit is approximately 80 feet east of the College Avenue/Glenn Street intersection, it is recommended that the College Avenue driveway be limited to right-turn outbound movements only. The proposed improvements to on-site circulation with incorporation of the adjacent parcel would be a superior alternative to the existing layout where many motorists have to back out of the site onto Glenn Street. The AutoTURN exhibits are enclosed for reference.

**Finding** – On-site circulation would be improved over existing conditions and would be expected to function acceptably with the proposed improvements and circulation pattern.

**Recommendation** – One-way directional arrows should be marked on the pavement to clarify the direction of on-site circulation and the College Avenue exit should be limited to right-turns only; signing indicating the directional and turning restrictions should be installed at the driveways.

## Sight Distance

Sight distances along College Avenue at the driveway exit were field measured and evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance for driveway approaches is based on stopping sight distance and uses the approach travel speed as the basis for determining the recommended sight distance.

For the posted 35-mph speed limit, the minimum stopping sight distance needed is 250 feet. Based on a review of field conditions, sight lines to and from the project driveway extend more than 300 feet in each direction

without the presence of parked vehicles along College Avenue; however, can be restricted to as little as 100 feet with the presence of vehicles parked in the slots directly adjacent to the driveway. In order to achieve adequate sight lines for right-turn movements, it is recommended that parking be prohibited for the first 25 feet to the east of the driveway, which would result in the elimination of one existing on-street parking space. It should be noted that if left turns were to also be permitted at the driveway then parking would need to be prohibited for the first 25 feet to the west of the driveway as well, which would result in elimination of a second street parking space. The issue of stopping sight distance further supports the recommendation to restrict the driveway exit to right-turn movements only.

**Finding** – Existing sight lines are adequate at the College Avenue driveway without vehicles parked on the street but can be restricted by vehicles parked in either of the spaces immediately adjacent to either side of the driveway.

**Recommendation** – Parking should be prohibited on College Avenue for the first 25 feet to the east of the driveway to accommodate right-turn movements out of the site. This would result in the loss of one existing on-street parking space in front of the dispensary.

## **Pedestrian Crossing on College Avenue**

Employees would park off-site which may require them to use the flashing pedestrian warning beacon on College Avenue at Glenn Street when walking between their vehicle and the project site, so consideration was given to the potential for the additional crossings generated by the project to increase delays to through traffic on College Avenue. Based on pedestrian counts collected on April 11, 2019 during clear weather and typical traffic conditions, three pedestrians activated the flashing beacon and crossed College Avenue at this location during the p.m. peak hour.

The SimTraffic application of Synchro was used to model the section of College Avenue between Morgan Street and Mendocino Avenue and it was determined that eastbound vehicles typically experience an average delay of 1.4 seconds per vehicle at the flashing pedestrian warning beacon, while westbound vehicles experience an average delay of 5.3 seconds per vehicle. To model conditions with implementation of the proposed project, it was conservatively assumed that six employees would use the crosswalk during the p.m. peak hour (three employees departing and three employees arriving) even though shift changes would be scheduled during off-peak hours. Additionally, it was assumed that two customers would use the crossing bringing the total number of pedestrian crossings during the p.m. peak hour up to 11. Based on these assumptions, the project would increase delays on College Avenue by an average of 1.0 second per vehicle in the eastbound direction and 1.1 seconds per vehicle in the westbound direction. There are no standards of significance for allowable delay at activated pedestrian crossings; however, drivers would not be expected to notice an additional second of travel time added to their commute. Copies of the SimTraffic reports are enclosed.

**Finding** – The project would be expected to add approximately one second of average delay per vehicle to traffic on College Avenue, which would be an imperceptible change from existing conditions.

## **Parking**

Parking was evaluated to determine if the proposed supply would be adequate to satisfy City requirements. As proposed, the project would provide 11 parking spaces on-site, including four on the dispensary parcel and seven on the neighboring parcel. Additionally, 12 covered bike parking spaces would be provided on-site to encourage biking by both employees and customers. Finally, employees would not be allowed to park on-site to maximize the availability of on-site spaces for customers and customer parking would be limited to 30 minutes.

Section 20-36.00 of the Santa Rosa City Code requires cannabis retail uses to provide parking at a rate of one space for every 250 square feet of floor area. Additionally, a small office building would remain on the neighboring

parcel, which is non-conforming and currently has two on-site parking spaces both of which would need to be retained with the project. Based on the dispensary floor area size of 2,943 square feet and the existing parking supply provided for the office building, 14 parking spaces would need to be provided on-site to satisfy City requirements. The proposed parking supply and City requirements are shown in Table 2. Although the on-site supply would be three spaces short, the project would provide covered bike parking, is located on a connected pedestrian network, and is within walking distance of transit stops so the anticipated parking demand would reasonably be expected to be lower than would be expected for a site without good pedestrian, bicycle, or transit access. The proposed demand management measures, including restricting employees from parking on-site and limiting customer parking to 30 minutes would further reduce demand.

**Table 2 – Parking Summary**

<b>Land Use</b>	<b>Units</b>	<b>Rate</b>	<b>Parking Spaces</b>
<b>City Required Parking</b>			
Cannabis Retail	2,943 sf	1 space/250 sf	12
Office	1,250 sf	n/a	2
Total City Requirements			14
<i>Existing Supply</i>			8
<b>Proposed Supply</b>			<b>11</b>

Notes: sf = square feet

It should further be noted that although the on-site supply would not meet City requirements, the project would improve the existing parking deficiency. Currently, there are six spaces provided on the dispensary parcel and two spaces on the neighboring office parcel. The project would result in a net increase of three parking spaces between the two parcels increasing the total on-site supply from eight to eleven. The project would also allow for shared parking since on-site circulation would be shared and the two uses are complimentary meaning that would experience their respective peak parking demands at different times. The dispensary would be expected to experience its peak parking demand in the evening or on weekends, while the office use would typically experience its peak parking demand during work hours on weekdays.

### Street Parking

There are five existing on-street spaces located directly adjacent to the site, two on Glenn Street and three on College Avenue, though the recommendation to prohibit parking for 25 feet to the east of the College Avenue driveway would result in elimination of one of these spaces. Additionally, there are three spaces on the opposite side of Glenn Street in the northbound direction within easy walking distance of the site. During field visits conducted during the morning and evening peak hours, there was one vehicle parked along the College Avenue frontage and one vehicle parked along the opposite side of Glenn Street during the morning period and that same vehicle was parked on Glenn Street during the evening period, resulting in at least five of the seven on-street spaces being available during each peak hour. Although not expected to be needed, there were additional on-street parking spaces available during both peak hours to the north of the site on Glenn Street. Conservatively assuming three of the seven on-street spaces in the immediate vicinity of the site are available when needed, the project's total supply would be up to 14 spaces, meeting the City-required supply.


**Finding** – The on-site parking supply would be three spaces short of meeting City requirements, but the total parking supply including on-street parking in the vicinity would be adequate to meet the anticipated demand, especially with the transportation demand management techniques proposed as part of the project.

## Conclusions and Recommendations

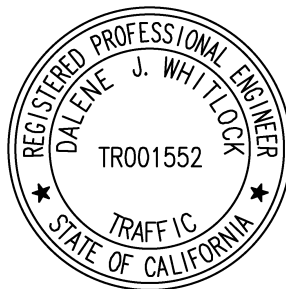
- Based on local trip generation data, the proposed project would be expected to generate an average of two fewer trips during the morning peak hour and 43 more trips during the evening peak hour compared to the previous use of the site. Because the proposed project would be expected to result in fewer than 50 new trips during each peak hour, a full traffic impact study is not required per the City's *Standard Guidance for the Preparation of Traffic Impact Analysis*.
- The proposed project is classified as local-serving retail under the City's VMT screening criteria and the site is located in an area where employee trips are pre-screened as being below the City's threshold; the project can therefore be presumed to have a less-than-significant impact on VMT.
- On-site circulation would be expected to operate acceptably with the proposed improvements and one-way circulation pattern, though it is recommended that directional arrows be marked on the pavement to clarify the direction of on-site circulation. Appropriate signage should be installed at the driveways such as "Not an Exit" at Glenn Street and "Do Not Enter" at College Avenue to alert drivers of the one-way circulation scheme.
- It is recommended that the College Avenue exit be limited to right-turns only; a sign indicating this restriction should be installed at the driveway.
- Existing sight lines are adequate at the College Avenue driveway without vehicles parked on the street but can be restricted by vehicles parked in the spaces immediately adjacent to either side of the driveway. To accommodate right-turn movements, parking should be prohibited on College Avenue for the first 25 feet to the east of the driveway.
- Although the proposed on-site parking supply is three spaces short of the minimum number needed to satisfy City requirements, the total supply available with street parking in the vicinity would be adequate to serve demand. Further, the project would improve the existing parking deficiency by adding three new spaces to the site. For these reasons, along with the demand management measures proposed and because the site has good access for alternative modes, the City may wish to consider approving the project with less on-site parking than required based on standard City rates.
- The project would be expected to add approximately one second of average delay per vehicle to traffic on College Avenue, which would be imperceptible.


We hope this information is adequate to address City staff comments on the previous documentation as well as comments made by commissioners at the public hearings. Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

  
Cameron Nye, EIT  
Associate Engineer

DJW/cn/SRO470-3.L2



  
Dalene J. Whitlock, PE, PTOE  
Senior Principal

Enclosures: Existing Site Conditions Aerial, Project Site Plan, North Bay Dispensary Trip Generation Data, AutoTURN Exhibits, SimTraffic Reports



**Existing Site Conditions**

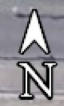
Green Pen Dispensary

**Legend**

353 College Ave

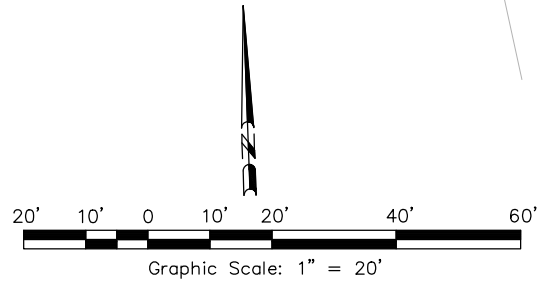
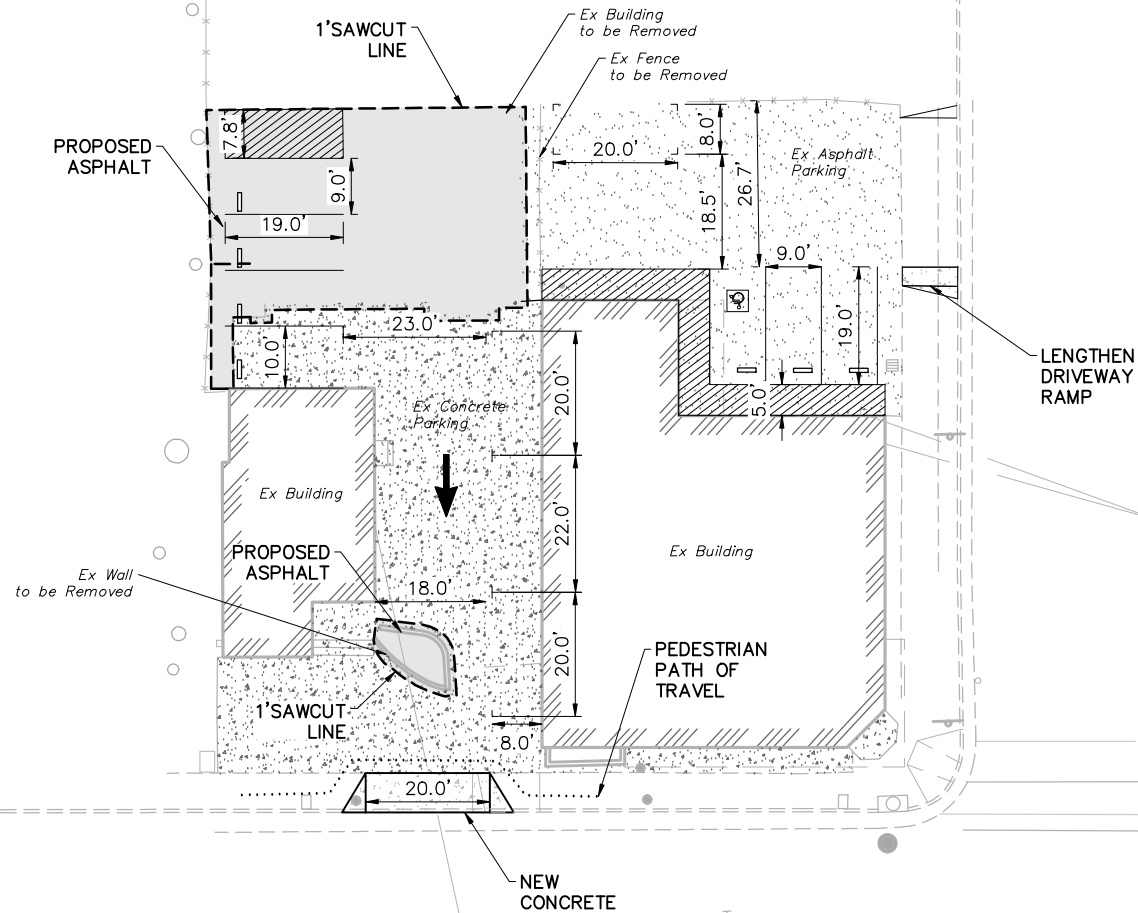
353 College Ave

Google Earth



100 ft

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May 12, 2021

## PARKING EXHIBIT

353 College Ave, Santa Rosa, CA  
180-750-046

**adobe associates, inc.**  
civil engineering | land surveying | wastewater

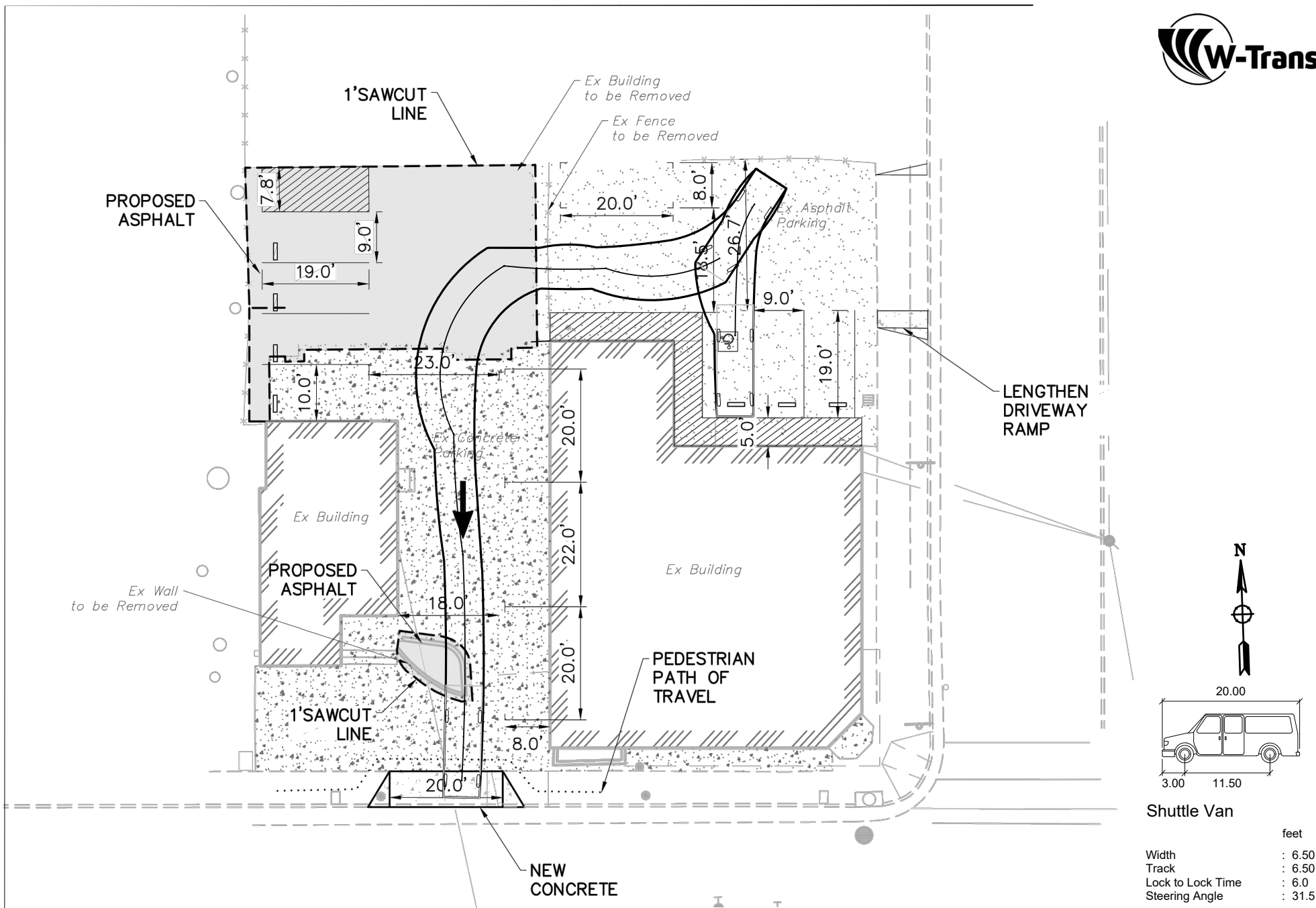
1220 N. Dutton Ave., Santa Rosa, CA 95401  
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# NORTH BAY DISPENSARY RATES

NORTH BAY DISPENSARY RATES					DAILY		AM PEAK HOUR (7-9)								PM PEAK HOUR (4-6)							
LOCATION	No. of Units	Units	DATE	Setting/Location	Trip Rate per Unit	Total Trips	Trip Rate per Unit	Number of Trips	In (%)	In (Rate)	In (Trips)	Out (%)	Out (Rate)	Out (Trips)	Trip Rate per Unit	Number of Trips	In (%)	In (Rate)	In (Trips)	Out (%)	Out (Rate)	Out (Trips)
Dispensary 1	3.8	ksf	12/18/2018	General Urban/Suburban			4.47	17	88%	3.95	15	12%	0.53	2	20.00	76	42%	8.42	32	58%	11.58	44
Santa Rosa	3.8	ksf	12/19/2018	General Urban/Suburban			4.21	16	94%	3.95	15	6%	0.26	1	23.68	90	44%	10.53	40	56%	13.16	50
AVERAGE							4.34		91%	3.95		9%	0.39		21.84		43%	9.47		57%	12.37	
Dispensary 2	1.17	ksf	12/12/2018	General Urban/Suburban			1.71	2	100%	1.71	2	0%	0.00	0	48.72	57	53%	25.64	30	47%	23.08	27
Santa Rosa	1.17	ksf	12/17/2018	General Urban/Suburban			1.71	2	100%	1.71	2	0%	0.00	0	53.85	63	54%	29.06	34	46%	24.79	29
AVERAGE							1.71		100%	1.71		0%	0.00		51.28		53%	27.35		47%	23.93	
Dispensary 3	4.8	ksf	12/18/2018	General Urban/Suburban			1.46	7	86%	1.25	6	14%	0.21	1	14.58	70	54%	7.92	38	46%	6.67	32
Santa Rosa	4.8	ksf	12/19/2018	General Urban/Suburban			0.83	4	100%	0.83	4	0%	0.00	0	15.00	72	56%	8.33	40	44%	6.67	32
AVERAGE							1.15		93%	1.04		7%	0.10		14.79		55%	8.13		45%	6.67	
Dispensary 4	1.508	ksf	8/6/2019	General Urban/Suburban											43.10	65	51%	21.88	33	49%	21.22	32
Sebastopol	1.508	ksf	8/15/2019	General Urban/Suburban											39.12	59	49%	19.23	29	51%	19.89	30
AVERAGE															41.11		50%	20.56		50%	20.56	
Dispensary 5	5.79	ksf	8/7/2019	General Urban/Suburban											24.18	140	51%	12.44	72	49%	11.74	68
Cotati	5.79	ksf	8/12/2019	General Urban/Suburban											26.94	156	49%	13.13	76	51%	13.82	80
AVERAGE															25.56		50%	12.78		50%	12.78	
Dispensary 6	3.454	ksf	9/30/2020	General Urban/Suburban	75.85	262	0.87	3	67%	0.58	2	33%	0.29	1	6.95	24	58%	4.05	14	42%	2.90	10
Santa Rosa	3.454	ksf	10/1/2020	General Urban/Suburban	87.43	302	0.58	2	50%	0.29	1	50%	0.29	1	7.53	26	54%	4.05	14	46%	3.47	12
	3.454	ksf	10/2/2020	General Urban/Suburban	92.07	318	3.18	11	55%	1.74	6	45%	1.45	5	6.66	23	48%	3.18	11	52%	3.47	12
AVERAGE					85.12		1.54		57%	0.87		43%	0.68		7.04		53%	3.76		47%	3.28	
Dispensary 7	2.5	ksf	9/30/2020	General Urban/Suburban	21.60	54	0.00	0	0%	0.00	0	0%	0.00	0	2.80	7	71%	2.00	5	29%	0.80	2
Napa	2.5	ksf	10/1/2020	General Urban/Suburban	22.40	56	0.00	0	0%	0.00	0	0%	0.00	0	2.00	5	60%	1.20	3	40%	0.80	2
	2.5	ksf	10/2/2020	General Urban/Suburban	19.20	48	0.00	0	0%	0.00	0	0%	0.00	0	5.20	13	46%	2.40	6	54%	2.80	7
AVERAGE					21.07		0.00		0.00	0.00		0.00	0.00		3.33		59%	1.87		41%	1.47	
ITE RATES (LU#882) - 252.70							10.44		56%	5.85		44%	4.59		21.83		50%	10.92		50%	10.92	
AVERAGE LOCAL RATES - 85.12							1.59		82%	1.33		18%	0.25		21.27		53%	10.84		47%	10.43	

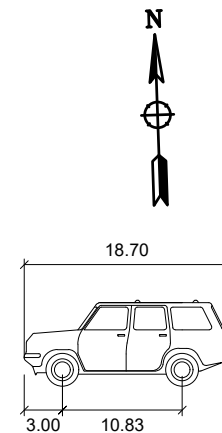
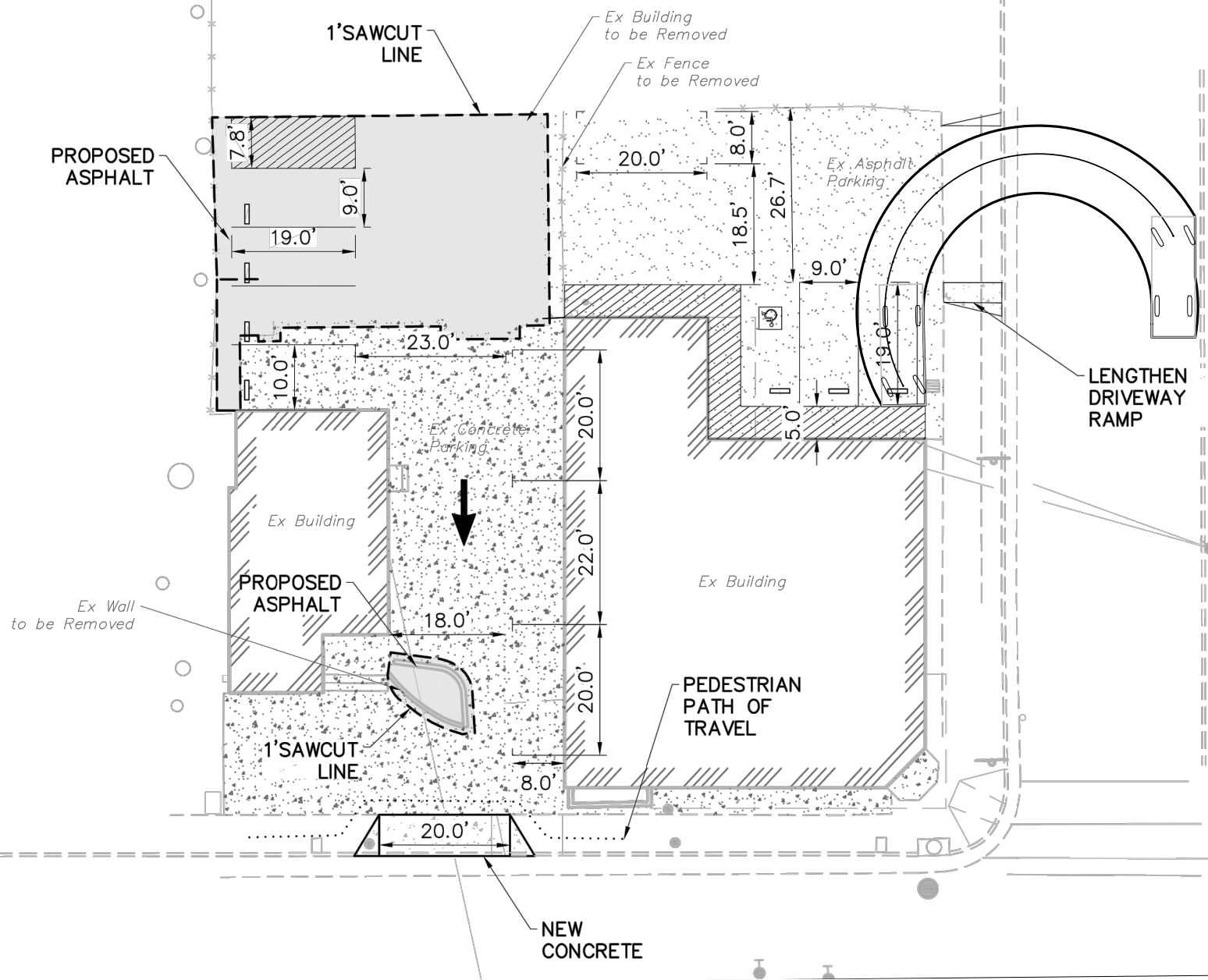


**GREEN PEN DISPENSARY**

353 College Avenue

**AutoTurn Exhibit**

Shuttle Van



2015-Suburban

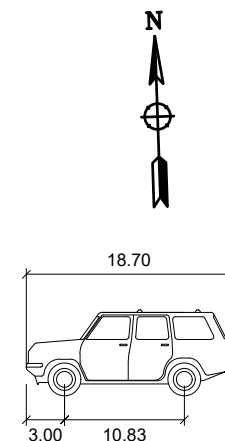
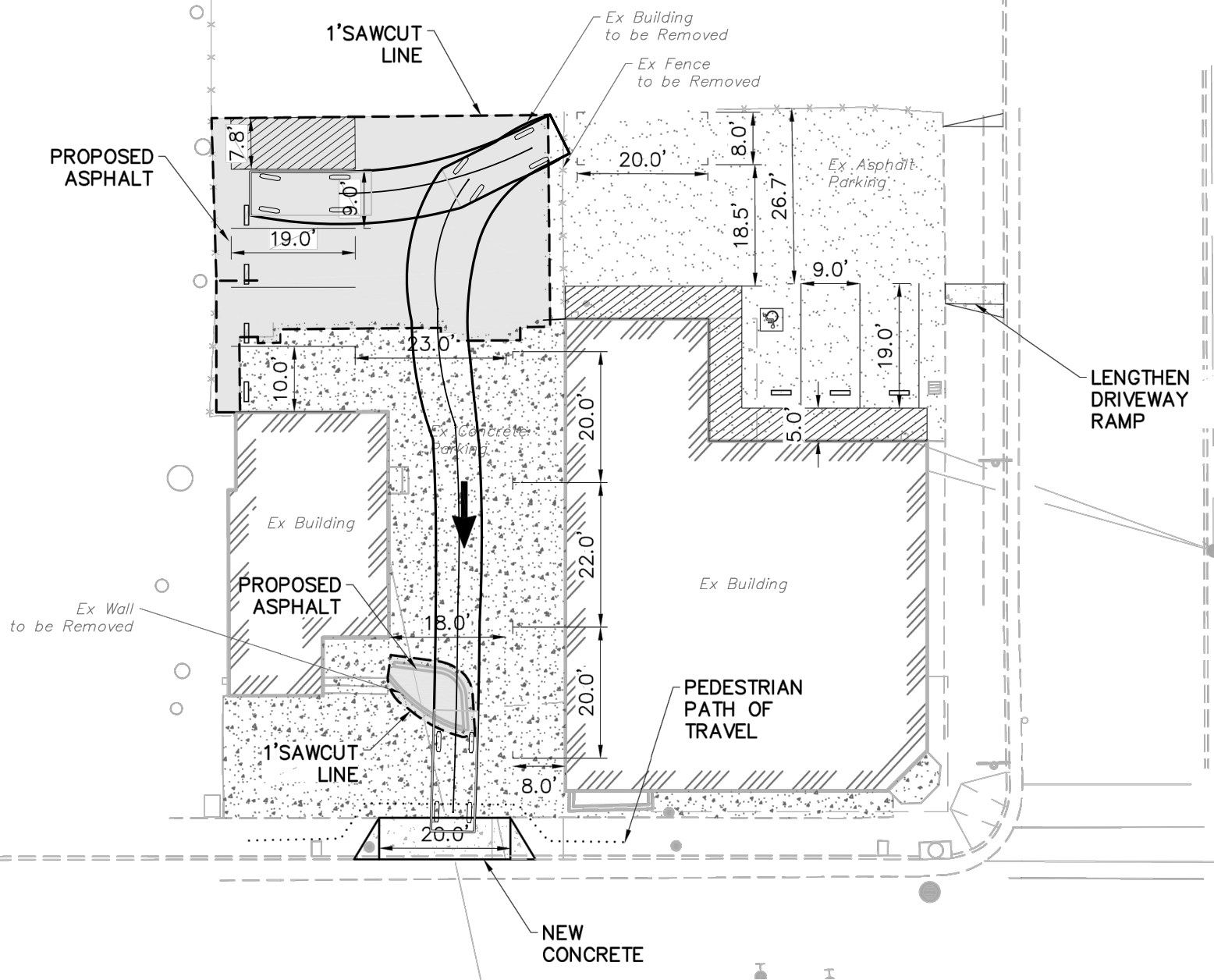
	feet
Width	: 6.71
Track	: 5.72
Lock to Lock Time	: 3.4
Steering Angle	: 34.6

## GREEN PEN DISPENSARY

353 College Avenue

## AutoTurn Exhibit

Standard Passenger Vehicle



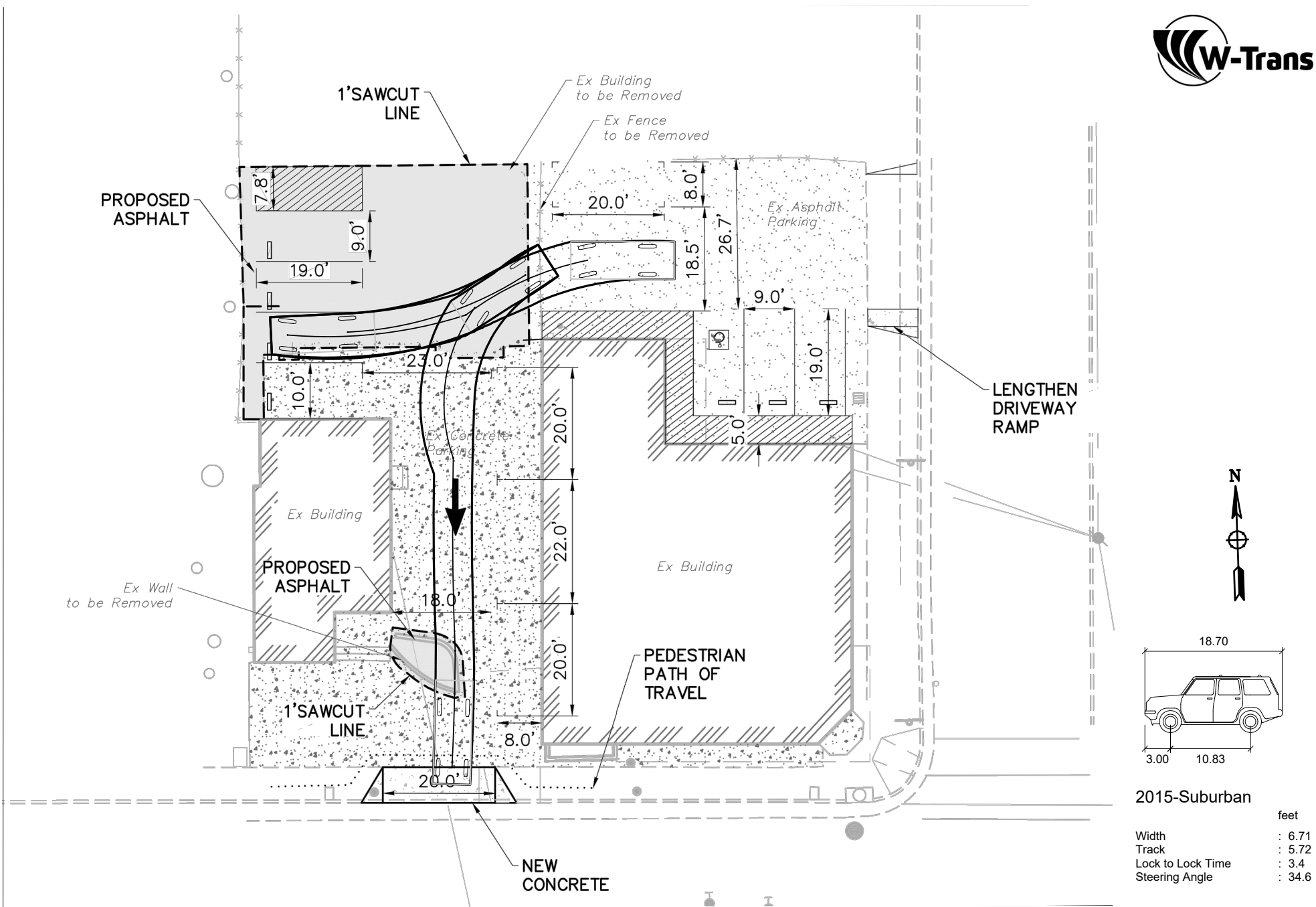
2015-Suburban	
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Lock to Lock Time	: 3.4
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## GREEN PEN DISPENSARY

353 College Avenue

## AutoTurn Exhibit

Standard Passenger Vehicle



**GREEN PEN DISPENSARY**

353 College Avenue

**AutoTurn Exhibit**

Standard Passenger Vehicle



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Arterial Level of Service: EB College Ave

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Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morgan St	6	13.0	25.7	0.1	18
Glenn St	3	4.0	13.6	0.1	25
HAWK	12	1.4	6.3	0.0	26
Mendocino Ave	9	20.7	31.8	0.1	14
Total		39.1	77.5	0.4	18

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Arterial Level of Service: WB College Ave

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Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Mendocino Ave	9	30.2	40.8	0.1	10
HAWK	12	5.3	17.8	0.1	25
Glenn St	3	2.0	6.5	0.0	25
Morgan St	6	16.1	25.3	0.1	13
Total		53.6	90.3	0.4	15

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Arterial Level of Service: EB College Ave

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Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Morgan St	6	13.6	26.3	0.1	18
Glenn St	3	5.0	14.7	0.1	23
HAWK	12	2.4	7.3	0.0	23
Mendocino Ave	9	23.8	35.0	0.1	12
Total		44.7	83.3	0.4	17

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Arterial Level of Service: WB College Ave

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Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Mendocino Ave	9	30.3	40.8	0.1	10
HAWK	12	6.4	18.6	0.1	23
Glenn St	3	2.1	6.6	0.0	25
Morgan St	6	16.5	25.5	0.1	13
Total		55.4	91.5	0.4	15