# HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS ROAD EVALUATION REPORT

PART A: Pa	art A may be completed by the appli	cant			
Applicant Nam	ne: Rocci Costa	APN: 516-211-025			
Planning & B	uilding Department Case/File No.:	PLN-12176-CUP			
Road Name:	Warren Creek Road	(complete a separate form for each road)			
From Road (C	Cross street): West End Road	RECEIVE			
To Road (Cro	ss street): Subject Parcel	Mumbolit County			
Length of roa	d segment: 1.8	miles Date Inspected: 12/31/2019			
Road is maint		County and Private			
Check one of	(State, Forest the following:	Service, National Park, State Park, BLM, Private, Tribal, etc)			
Box 1	The entire road segment is developed to Category 4 road standards (20 feet wide) or better. If checked, then the road is adequate for the proposed use without further review by the applicant.				
Box 2		bed to the equivalent of a road category 4 standard. If checked, oposed use without further review by the applicant.			
	width, but has pinch points which is one-lane bridges, trees, large rock visibility where a driver can see on	ndard is defined as a roadway that is generally 20 feet in narrow the road. Pinch points include, but are not limited to, outcroppings, culverts, etc. Pinch points must provide accoming vehicles through the pinch point which allows the in a 20 foot wide section of the road for the other vehicle to			
Box 3	may or may not be able to accomm	eloped to the equivalent of road category 4 or better. The road sodate the proposed use and further evaluation is necessary. I Engineer licensed by the State of California.			
		d have been made by me after personally inspecting and d limits of the road being evaluated in PART A is attached.			
Signature		Date			
Robin Collins,	PE				
Name Printed					

Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.

PART B: Only complete Part B if Box 3 is checked in Part A. Part B is to be completed by a Civil Engineer licensed by the State of California. Complete a separate form for each road.

Road Nar	ne:	Warren Creek Road	Date Inspected:	12/31/2019	_ APN: <u>516-211-025</u>		
From Road:		West End Road	(Post Mile 3.1	)	Planning & Building Department Case/File No.:		
To Road: Warren C		Warren Creek Road	(Post Mile 1.8	)	PLN-12176-CUP		
1. What is the Average Daily Traffic (ADT) of the road (including other known cannabis projects)?							
		r of other known cannabis projects inc			1 3,		
(C	ontact	the Planning & Building Department for in	formation on other nea	arby projects.)	1		
Al	DT: (	Date(s) mea	asured: 1/2/2020				
M	ethod	used to measure ADT: 🛮 Counters	Estimated usin	g ITE Trip Gene	ration Book		
Is		DT of the road less than 400?   Yes					
	If Y	ES, then the road is considered very low vo	lume and shall compl	y with the design s	tandards outlined in the		
	Ver	erican Association of State Highway and Tr y Low-Volume Local Roads (ADT <400). Co	ansponation Officials omplete sections 2 and	(AASH1O) Guiae 13 below.	lines for Geometric Design of		
		O, then the road shall be reviewed per the a					
	sect	SHTO A Policy on Geometric Design of Higion 3 below.			_		
		site specific safety problems with the					
A. A		O Guidelines for Geometric Design on the Court of Court o	j very Low-volume	e Local Roads (A	DT ≤400) for guidance.)		
Λ			ached sheet for Pos	st Mile (PM) loc	ations		
В				, , ,			
_	<ul> <li>B. Physical evidence of curve problems such as skid marks, scarred trees, or scarred utility poles</li> <li>Check one: ✓ No. ☐ Yes, see attached sheet for PM locations.</li> </ul>						
C	C. Substantial edge rutting or encroachment.						
			ached sheet for PM	I locations.			
D	. Hi	istory of complaints from residents or	law enforcement.				
	CI	neck one: No. Yes ( check	k if written documentati	on is attached)			
E	. M	easured or known speed substantially	higher than the des	ign speed of the	road (20+ MPH higher)		
	Cl	neck one: No. Yes.					
F.		eed for turn-outs.					
			ached sheet for PM	l locations.			
3. Co		ions/Recommendations per AASHTO					
		The roadway can accommodate the cu	mulative increased	traffic from this	project and all known		
Cai		s projects identified above.	mulativa ingrasad	troffic from this	project and all known		
car		The roadway can accommodate the custon projects identified above, if the recort					
Nei	Neighborhood Traffic Management Plan is also required and is attached.)						
	The roadway cannot accommodate increased traffic from the proposed use. It is not possible to						
address increased traffic.							
A map showing the location and limits of the road being evaluated in PART B is attached. The statements in PART B are true and correct and have been made by							
		ally evaluating the road.		## (F	No. 66605		
1/	1	1/		<b>(</b> *	No. 66605   NE.		
,// V	1	//( /	1/20/	XX.			
	/	X	11,20		OF CAUTOENIA		
Signature of	of Civ	il Engineer	Date		CALIFORNIA		

Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707,445,7205.



#### **GREEN ROAD CONSULTING**

1650 Central Avenue, Suite C, McKinleyville, CA 95519 Office: (707)630-5041

TO: Elizabeth Moreno, Planner, Humboldt County Planning and Building Department

FROM: Robin Collins PE, Green Road Consulting

DATE: 1/10/2020

RE: COSTA APN 516-211-025, APPS#PLN-12176-CUP

ROAD EVALUATION, REVISED; TRAFFIC MANAGEMENT PLAN

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## I. Introduction

The Humboldt County Commercial Medical Marijuana Land Use Ordinance 2559 (CMMLUO) requires that the entire road segment leading to the property containing a commercial cannabis operation be developed to Category 4 road standards or better. A category 4 equivalent road is generally defined as being 20-feet in width, but may contain pinch points which narrow the road such as one-lane bridges, trees, large rock outcroppings, culverts, etc. but must provide visibility where a driver can see oncoming vehicles through the pinch point which allows oncoming vehicles to stop and wait in a 20-foot wide section for other vehicles to pass. If the road does not meet category 4 standards or equivalent, further evaluation by a licensed engineer is required. If the Average Daily Traffic (ADT) of a road segment is less than 400 vehicles, then the road is classified as a "very low-volume road" and shall comply with design standards outlined in the American Association of State Highway and Transportation Officials (AASHTO) *Guidelines for Geometric Design of Very Low-Volume Local Roads*. If the ADT of a road segment is greater than 400 vehicles, the road segment shall be reviewed per applicable policies for the design of local roads and streets presented in the AASHTO publication *A Policy on Geometric Design of Highways and Streets*.

Two cannabis-related projects are proposed off of Warren Creek Road, in central Humboldt County near the community of Blue Lake. Warren Creek Road is accessed off of West End Road, which has been classified as a Category 4 roadway up to its junction with Warren Creek Road (see attached category 4 road standards list for Humboldt County cannabis projects prepared by Kimley-Horn).

Warren Creek Road is a local, dead end roadway. A proposed 10,000 square foot cannabis cultivation operation is proposed on APN 516-211-025, located 1.8 miles down Warren Creek Road. A second project, a 5,000 square foot commercial cannabis nursery is proposed on APN 516-241-024 approximately 0.8 miles down Warren Creek Road. Warren Creek services residential homes and commercial businesses. Therefore, Warren Creek Road already carries commercial traffic, including a timber products company, a mobile mechanic, and a large, multi-acre farm, possibly among others. During inspection of the roadway and anecdotally from interviews with the applicant, large commercial vehicles such as logging trucks, delivery vehicles, and tank trucks as well as large municipal vehicles such as public works vehicles servicing Mad River Pump Station 4 and firetrucks/emergency vehicles frequently travel on Warren Creek Road. Regardless of existing commercial traffic, concerns were raised from residents on Warren Creek that the road cannot support commercial traffic due to issues of width and surface conditions.

The proposed cannabis cultivation operation anticipates a maximum of 4 seasonal employees, at least one of which will live on site (therefore not adding commercial traffic through commuting). Aside from initial traffic increases during the construction phase, commercial traffic associated with the farm at APN 516-211-025 should average 4 vehicle trips per day with up to 8 vehicle trips per day during the harvest periods. This traffic should be composed of small passenger vehicles such as pickup trucks and sedans. Additionally, 2-4 trips can be expected per week for deliveries, some of which may necessitate larger transport vehicles. Commercial traffic associated with this project during the winter months should be nonexistent. Therefore, a daily maximum of 12 vehicle trips can be associated with this project.

Traffic associated with the proposed commercial cannabis nursery must be assumed due to a lack of shared information from that applicant. A 5,000 square foot nursery should require 1-2 seasonal employees, at least one of which will live on site (therefore not adding commercial traffic through commuting). During certain planting seasons, potential customers will need to access the site, contributing an estimated maximum of 10 vehicle trips in a given day during plating season. Additionally, 2-4 trips can be expected per week for deliveries, some of which may necessitate larger transport vehicles. Therefore, a daily maximum of 14 vehicle trips can be associated with this project.

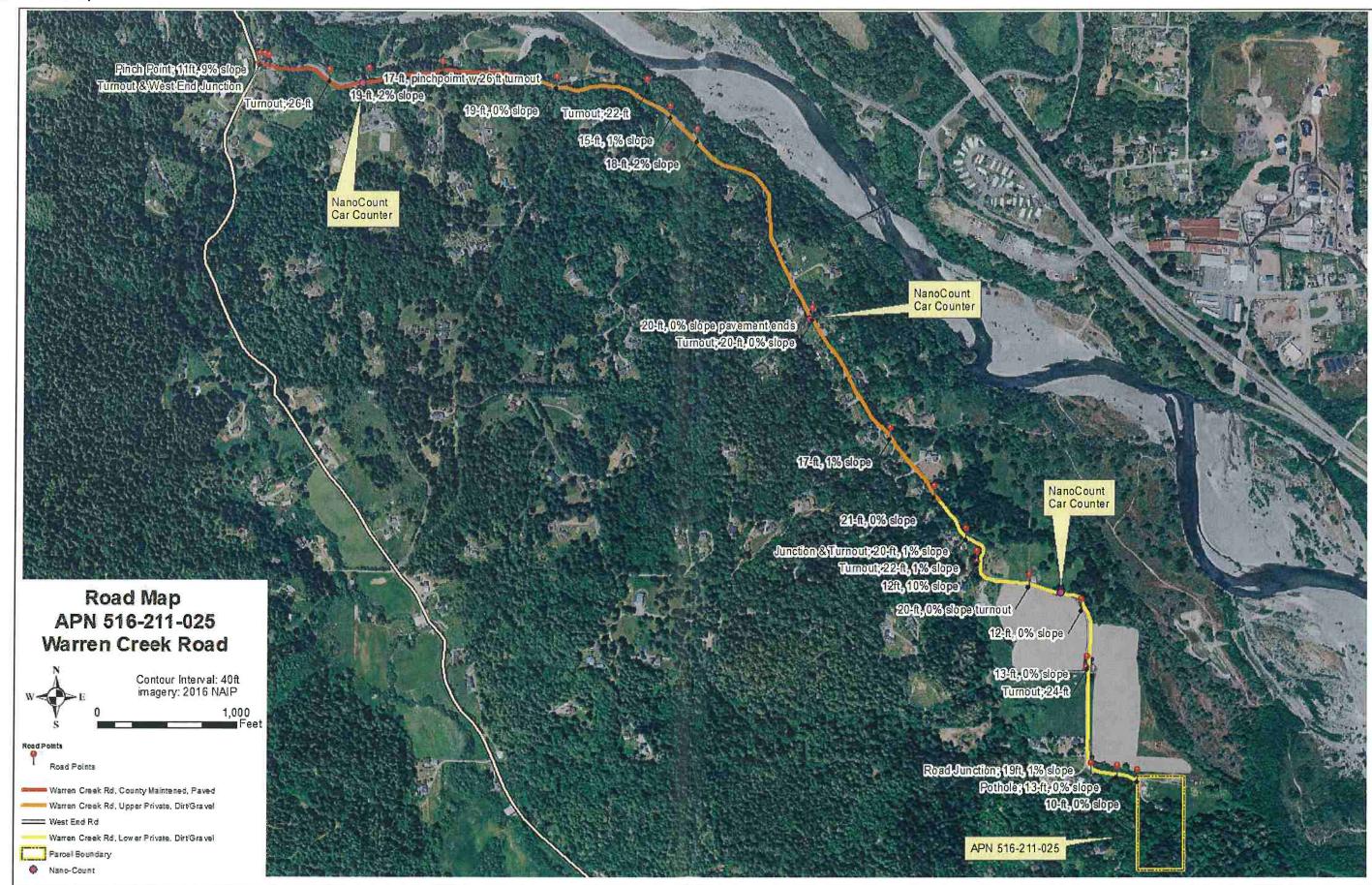
This brings a total traffic increase associated with the two proposed cannabis projects to **26 vehicles per day** (compared to max ADT of 690 vehicles on Warren Creek Road, or a 3% increase) mostly passenger vehicles, without accounting for the overlap of commercial and residential traffic associated with such small family businesses.

## II. Methodology

This road assessment was carried out via a combination of field assessment, utilization of mapping software, and Average Daily Traffic (ADT) car counting studies. The Warren Creek Road system was assessed on three separate occasions in December of 2019 and January of 2020 by a professional environmental scientist and licensed civil engineer. Roads were assessed for functional capacity, protection for water quality and biological resources, and traffic safety. Measurements of road width and slope were taken in the field, as well as photography and data point collection using a handheld GPS unit. Mapping programs including ESRI Arcmap, Google Earth Pro, and Google Maps was used to measure dead-end road length, and to evaluate/organize road data spatially.

The Average Daily Traffic (ADT) was used to determine the functional capacity of the access road, from county maintained West End Road to the parcel entrance. Three 24-hour road studies were conducted at three points along the road (see Road Map below). A NanoCount 1000 totalizing vehicle counter was used to determine the Average Daily Traffic (ADT) on the private access road leading to the parcel. The 24-hour study was initiated at 12 PM on Thursday November 20, 2019 and concluded at 1 PM on Friday November 21, 2019. The NanoCount 1000 uses a single-channel receiver connected to flexible surgical tubing to accurately count the number of vehicles (or axles) by sensing changes in pressure when a vehicle tire runs over the hollow tubing. The Average Daily Traffic (ADT) decreased with distance from West End Road.

Given that the road count for this section occurred around New Years Day, a national holiday, it is likely that visitation to the recreational area was inflated during this study. In fact, it is possible that the entirety of Warren Creek Road does not usually exceed an ADT >400, but a longer road study with more data collection points would be required. This should not be necessary, as the ADT should only be used as a rough indication of road use. The major conclusion of the car-count study is that the majority of Warren Creek Road should be classified as a very low-volume, local road.



# IV. Summary of Road Characteristics

Table 1: Summary of road characteristics through Warren Creek Road from West End Road to site

Distance (mi)	Slope (%)	Width (ft)	Surface Material	Pinch Points and Narrow Section	Turnout for Passing	Notes
0.00			Pavement			Junction with West End Road
0.01	9	11	Pavement	Narrow Section		
0.01		22	Pavement		Turnout	
0.10		26	Pavement		Turnout	
0.16		17	Pavement	Pinch Point		Historical Railroad overpass
0.17		26	Pavement		Turnout	
0.26	2	19	Pavement			
0.36				Pa	rking Lot Entra	nce
0.42	0	19	Pavement			
0.54		22	Pavement		Tu	rnout #9
0.63	2	18	Pavement			
0.93	0	20	Pavement		Turnout	Pavement Ends
1.03	1	17	Dirt/Gravel			
1.10	0	21	Dirt/Gravel			
1.2					Tu	rnout #8
1.22	1	20	Dirt/Gravel			Road Junction
1.25					Tu	rnout #7
1.3						rnout #6
1.34	10	12	Dirt/Gravel	Narrow Section		Steep section
1.35	1	22	Dirt/Gravel		Turnout	1
1.42	0	20	Dirt/Gravel		Turnout	
1.5					Tu	rnout #5
1.51	0	12	Dirt/Gravel	Narrow Section		
1.52					Tu	rnout #4
1.59		24	Dirt/Gravel		Tu	rnout #3
1.60	0	13	Dirt/Gravel	Narrow Section		
1.69						rnout #2
1.7	1	19	Dirt/Gravel			rnout #1
1.73 1.76	0	13	Dirt/Gravel	Narrow Coation	Turnout	Road Junction
1.79	0	10	Dirt/Gravel	Narrow Section		Pothole
1.80	0	10	Dity Graves			Site Entrance

## V. Classification of Road Segments

Table 2: Summary of data collected over the 24-hour road studies.

Section	Segment	Length (miles)	Count (vehicles)
Section 1	West End Road to Rec area parking lot	0.37	690
Section 2	Rec area parking lot to small stream crossing at Mile 1.2	0.65	216
Section 3	Stream crossing at Mile 1.2 to the subject parcel	0.56	26

Section 1 of Warren Creek Road includes the first 0.37 miles from West End Road to the entrance of the community parking lot used for accessing the recreational area/disc golf course. An ADT of 690 was measured near where Warren Creek meets West End Road, while a second ADT measured 216 vehicles during the same 24-hour period at the end of the county-maintained section 0.95 miles down the road. It stands to reason that somewhere between these two points, the road transitions from a "Low-Volume Road" (ADT >400) to a "Very Low-Volume Road" (ADT <400) per AASHTO guidelines. It is likely that this transition point occurs at the junction of a side road with Warren Creek Road (ie. At the entrance of Cedar Hill Lane, the entrance to Burlwood Lane, or the entrance to the Recreation Area parking lot. For reasons discussed above (See section on ADT) the entrance to the recreation area was chosen as the termination of Road Section 1.

The entirety of Section 1 is paved and exceeds 17 to 20 feet in width allowing two-way travel, with the exception of one notable pinch point at mile 0.1 (from West End Road) which measured 11-feet in width, which is typically too narrow for passing travel. The width of the road in this section is limited by the cut-slopes to the north and south, and the only way to widen the road would be through extensive earthworks to pull back these slopes. Due to the proportionality of cost associated with widening this point, and the fact that the county, which maintains this portion of the road, has not performed this work, we suggest that the section not be widened. It should be noted that in 2010 during the review for a subdivision of this entry parcel (Lehman Subdivision; SCH #2009102043), it was requested by the county that this narrow section be brought to category 4 standards. In conclusion, an exception was granted both by CALFIRE and the Planning Commission allowing the road to remain as-is under the condition that a turnout be installed near the bottom. The paved turnout was subsequently installed. Please see the attached document "Subdivision Requirements – in the matter of the application Lehman", attached. It was noted during assessment of the road system that while this feature does not appear to represent significant risk of collisions, it is responsible for the inconveniencing of local traffic, as queuing of vehicles was observed.

We understand that there is a pinch point at this location, but the only reasonable solution appears to be the installation of a warning sign near this location to warn oncoming traffic to pull to the side at one of the wide sections either immediately after the pinch point or before it where Warren Creek Road meets West End Road. In response to this pinch point and the possible deleterious effects it may have

on existing road safety, a Traffic Management Plan (See Appendix B) has been proposed to reduce peak hour traffic associated with the proposed cannabis projects.

Section 2 includes the portion of Warren Creek Road between the recreational area parking lot and the small stream crossing at Mile 1.2. A car count study placed near the middle of this section produced a rough ADT of 216 vehicles, classifying this section as a "Very Low-Volume Road" by AASHTO standards. This section is paved for the first 0.6 miles and is gravel-surfaced for the remaining 0.6 miles, typically exceeding 18-20 foot wide travel width allowing for two way traffic. One minor pinch point measured 15-feet in one section around mile 0.6 (from West End Road). A 22-foot wide turnout section is located just to the West which could be used to alleviate safety risks if a larger truck was to meet oncoming traffic at this point. The turnout should be rocked to preserve stability of the road prism through further use. Safety risks associated with this pinch point will also be alleviated by the proposed Traffic Management Plan (See Appendix B).

The last 0.3 miles of section two is gravel surfaced and is maintained by the Warren Creek Road association. This portion allows for two-way travel. The speed limit is posted at 10 MPH.

Section 3 of Warren Creek Road extends from the small stream crossing at Mile 1.2 to the subject parcel at APN 516-211-025. An ADT was measured at 26 vehicles classifying this section as a "Very Low Volume Road". This section is characterized by narrow sections, particularly two straight stretches that are bounded by fences on both sides. In some places, the road surface is only 12 feet wide with 17 feet from fence to fence. Visibility on these narrow stretched is fair in the winter season, but reportedly can be very poor when tall crops such as corn are grown in the surrounding agricultural fields. Due to the expected extremely low volume of traffic in this section the necessity of one-way traffic in certain portions should not pose a major inconvenience or safety risk with proper signage. Furthermore, multiple points allow areas vehicles to turn out to allow passage of oncoming traffic. In order to upgrade these areas to proper vehicle turnouts, they will need to be resurfaced with rock/gravel, and vegetation should be cleared from them frequently.

If the road is to be widened here, it should be carried out by the road association through shared cost. The road association should determine from the property owners how much area is allocated for a travel easement between parcels to determine if fences can or should be pushed back. This may be the limiting factor in general widening of the road. The vegetation (blackberry bushes) has been removed from 500-feet or so along the edge of this widened section, which would require little less than the application of gravel in order to effectively create a passing lane in this location. The property owner should be consulted.

Once again, to alleviate traffic safety risks in this narrow section, a Traffic Management Plan (See Appendix B) has been proposed to reduce peak hour traffic associated with the proposed cannabis projects.

## VI. History of Motor Vehicle Accidents

A review of accidents on Warren Creek Road over the last four years (2015-2019) by officer Paul Kraft of the California Highway patrol yielded only two results:

- In May 2019 a single driver was involved in an accident on Warren Creek Road where the vehicle drove off of the road and rolled over, with minor damage or injury.
- In June 2017 two vehicles were involved in an unsafe pass where one vehicle sideswiped the other in an attempt to pass in a narrow section. No injuries were recorded. No more detailed information on where the accident took place was provided. This accident is attributable to road conditions, notably the width of the road, though it does not constitute a pattern of crashes. The conditions leading to this accident can be alleviated by additional signage warning motorists of upcoming narrow sections and through community action to inform visitors and neighbors of the importance of precautious and respectful driving habits on Warren Creek Road.

We do not believe that these two incidents over a four-year span constitutes a pattern of road design related accidents.

#### VII. Recommendations

Recommendations for improvements to Warren Creek Road required for approval of the proposed cannabis projects are twofold:

- A. Turnouts are required near narrow sections to allow for the passing of oncoming traffic. This is especially critical in areas of low visibility (such as the seasonally blind turn in the agricultural field). The Warren Creek Road system already has ample areas available for turnouts without the need for earthmoving or major construction. Instead, nine (9) areas were identified as being suitable for the addition of rock/gravel surfacing in order to make them suitable for continued use without erosion of the road surface and banks. These turnout points are shown on the following map and described below.
  - 1. Where the driveway of the subject parcel APN 516-211-025 and the driveway of another residence meet Warren Creek Road. This area is at the end of a long narrow section and should be rocked to keep the driveway from being torn up be vehicle travel. This turnout may not be necessary if turnout 2 is installed.
  - 2. Where vegetation (blackberries) were recently removed along the roadside and a plastic tarp laid out. It is not known if this area is part of the travel easement, or what the property owner may have planned. The recent removal of blackberries does however create the opportunity for a wide passing lane/turnout if gravel is added. If this area is not available for continued vehicle use, turnout 1 should offer appropriate traffic relief.
  - 3. At the driveway/entrance to the large agricultural field halfway down a narrow stretch of Warren Creek Road. This area is placed just after the longest narrow section and with added rock will be suitable for a relatively large truck to pull aside.
  - 4. Along the eastern side of a bend in Warren Creek Road. If thick vegetation is pulled back and the surface rocked, the safety of this potentially low visibility bend can be significantly improved. This point comes just before a long fenced-in narrow strip and is well suited for allowing oncoming traffic to pass.

- 5. A second area on the potentially low visibility bend where vegetation can be removed and rock placed to widen the road surface. In conjunction with turnout 4, this improvement will significantly improve the quality of this road section for driving.
- 6. A narrow strip of grass at the top of the short steep section in Warren Creek Road which only allows one-lane traffic. This point has good visibility of the steep section and will allow oncoming vehicles to pull to the side to allow passage.
- 7. At the junction of Blackberry Lane and Warren Creek Road. Currently neatly turfed, conversion to a gravel-surfaced turnout would allow cars to pull to the side and should not significantly impact the land-owners ability to continue storing materials at this location.
- 8. A well-positioned turnout to allow larger vehicles to wait until a narrow section over a small stream crossing is clear for passage. It should be requested that the land-owner relocate the pieces of machinery from this section for fear of damage, and the turnout should be rocked.
- 9. Further up in Section 2 of Warren Creek Road just West of a pinch point below an old barn structure. Turnouts are in place on both sides of this pinch point, but the muddy nature of the surface has caused rutting and pooling of water. leveling and rocking this point should alleviate traffic issues associated with the pinch point.
- B. The proposed cannabis projects should adhere as much as possible to the proposed Traffic Management Plan in order to minimize peak traffic periods and to keep large vehicles from interfering with peak traffic periods in the mornings, evenings, and on holidays. The applicants should work with the existing road association to communicate scheduled large deliveries to the neighborhood via a newsletter, email alert, or bulletin board. It is encouraged that all other commercial businesses utilizing Warren Creek Road adhere to the Traffic Management Plan as much as possible, and even private residences should attempt to schedule deliveries at off-peak periods.

Other recommendations for best management of the road system and increased traffic safety:

- C. Signage indicating that "Road Narrows" or "One Lane Road Ahead" or similar symbolic signage should be placed at the beginning of Warren Creek Road, on both sides of the pinch point at mile 0.6, and at both ends of Section 3. A sign warning of oncoming traffic should be placed at the potentially blind corner at mile 1.5.
- D. The existing road association should be organized in such a way to properly address the apparent concerns of neighbors about road conditions. This may include regular meetings of land owners, enforcement effort to ensure the prompt payment of association dues, creation of a budget, creation of a schedule for vegetation removal and general road maintenance (pot holes, resurfacing, etc.), and installation of a road association bulletin board where this information and neighborhood concerns may be communicated. The list of concerns compiled by Humboldt County Planning and Building indicates that not all community members are satisfied with the current status of the existing association. It should be noted that at the time of 2 out of 4 visits to Warren Creek Road made for this assessment, community members were seen actively working on the road, first cutting back vegetation in section 3 and then filling potholes in Section 2. It is apparent that the members of this road clearly do care about the safety and convenience of their road system and put in concerted effort to maintain the private section. These recommendations should not be construed as an implication to the contrary.



#### VIII. Conclusion

In conclusion, the anticipated increase in commercial traffic resulting from approval of the two proposed cannabis businesses should not have a major effect on safety or utility of Warren Creek Road. The road is already used for commercial vehicle travel. Furthermore, a pattern of road-design related accidents was not identified. There are however safety concerns associated with the road that should be addressed in order to meet general road safety standards. These include the installation of rocked vehicle turnouts at 8-9 critical locations where wide spaces already exist with good visibility of pinch points. The majority of these turnouts are located along a portion of road that received well under 100 vehicle trips per day. Approval of these two cannabis projects is anticipated to increase traffic by only 3% at a maximum, on delivery days, keeping in mind that both businesses are highly seasonal. It is nevertheless recommended that a traffic management plan be adhered to by all commercial traffic which will reduce the amount of commercial traffic during typical peak travel hours. Further recommendations include increased signage and active communication between commercial business owners and the existing Warren Creek Road Association. This association is responsible for meeting community concerns related to general road maintenance. Maintenance and upkeep of the first half of Warren Creek Road is carried out by Humboldt County Department of Public Works. This section is paved and generally wide enough for two-way traffic. Two notable pinch points are present in this section of the road that would not be permanently addressed without major earthworks. It is recommended that a turnout be rocked near one of these points (Turnout #9) while the other (near the junction with West End Road) has been reviewed in the past by Humboldt Planning and Building and the only conceivable permanent solution would require removal of two historic barn structures as well as significant monetary contributions of the neighborhood and or Humboldt County. Therefore it is recommended that the cannabis applications not be hindered by the condition of Warren Creek Road if the recommended rocking of turnouts and implementation of the Traffic Management Plan are carried out, and as deemed sufficient by the Planning Commission.

# **Appendix A: Road Photos**

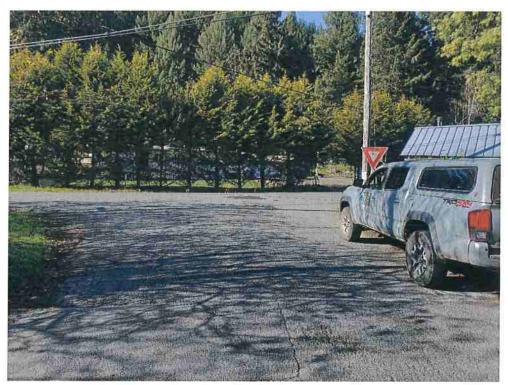


Figure 1: Junction of West End Road and Warren Creek Road

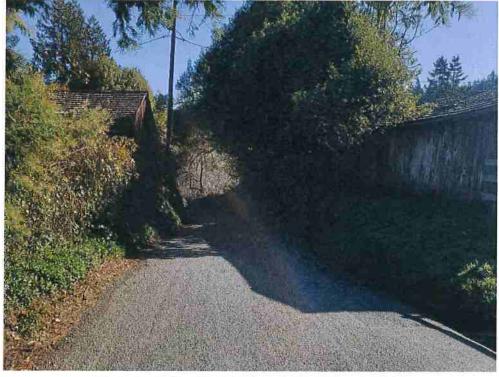


Figure 2: Narrow section at Mile 0.01 just off West End Road

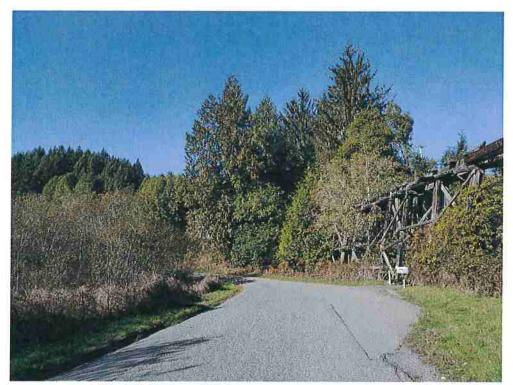


Figure 3: Turnout immediately before pinch point at Mile 0.1

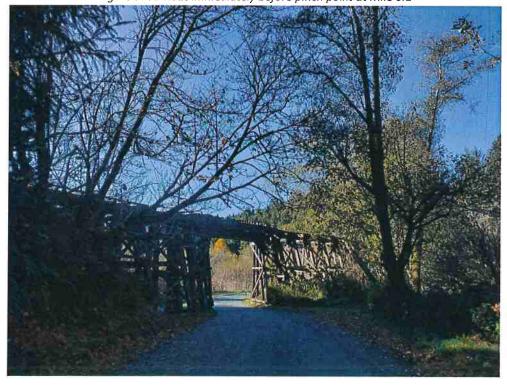


Figure 4: Pinch point under railroad trellis with turnout in foreground. A car count was performed at this location.



Figure 5: Paved road section around Mile 0.2

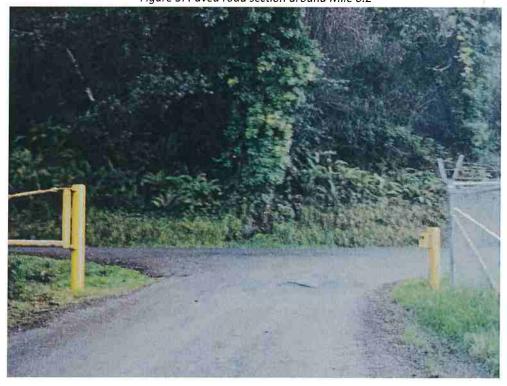


Figure 6: View of Warren Creek from Within the driveway to the recreational area parking lot at mile 0.36

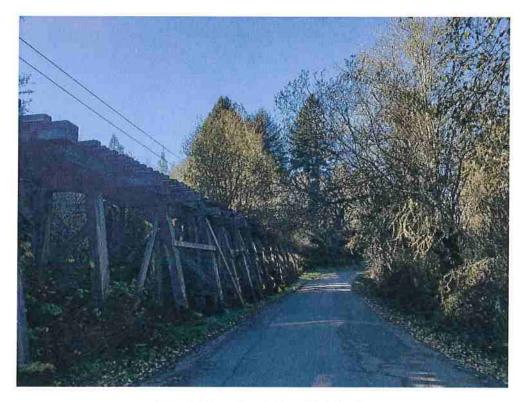


Figure 7: Paved Section around Mile 0.42

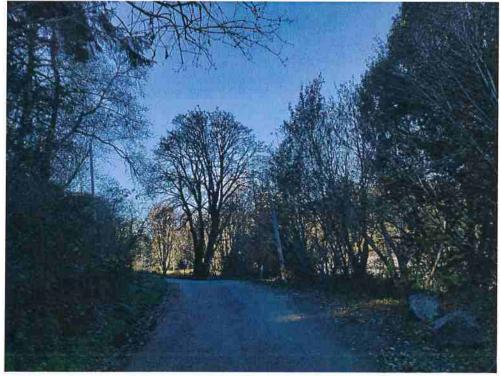


Figure 8: Turnout at Mile 0.54



Figure 9: Turnout # 9, recommended to be levelled and rocked at PM 0.54

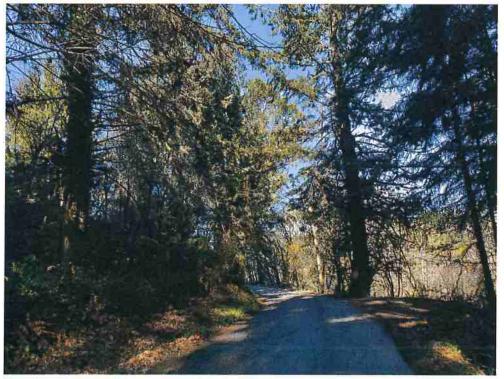


Figure 10: Paved road with turnout at Mile 0.63

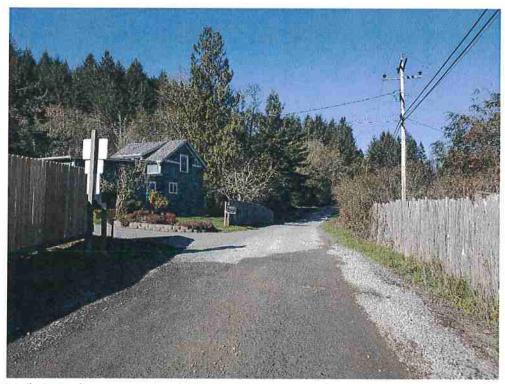


Figure 11: Mile 0.93, where pavement and county maintenance ends. A car count was performed at this location.

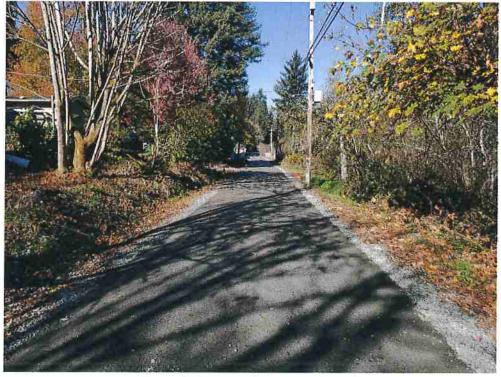


Figure 12: Gravel road surface at Mile 1.03

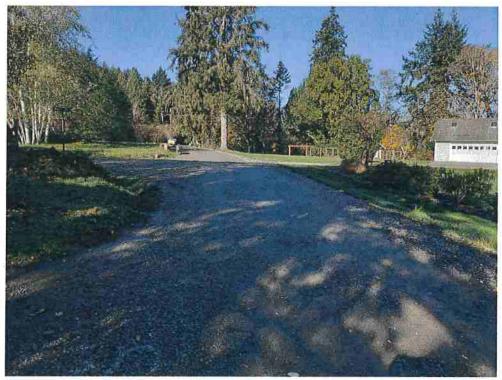


Figure 13: Wide gravel road at Mile 1.1

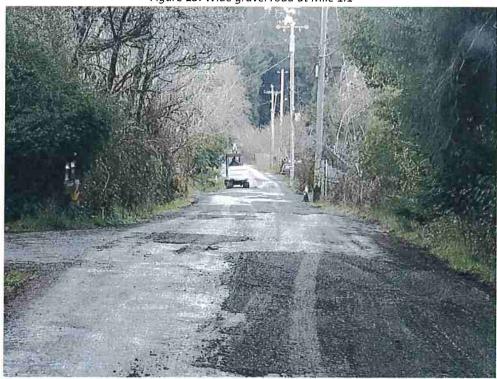


Figure 14: Potholes actively being filled presumably by a community member on January 9<sup>th</sup>, 2020 around mile 1.1.

Nice Work!



Figure 15: Turnout #8 with machinery storage at Mile 1.2



Figure 16: Road Junction with Blackberry Lane at Mile 1.22

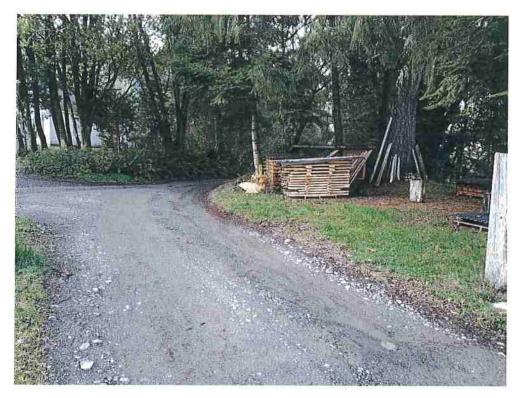


Figure 17: Turnout #7 at Mile 1 25

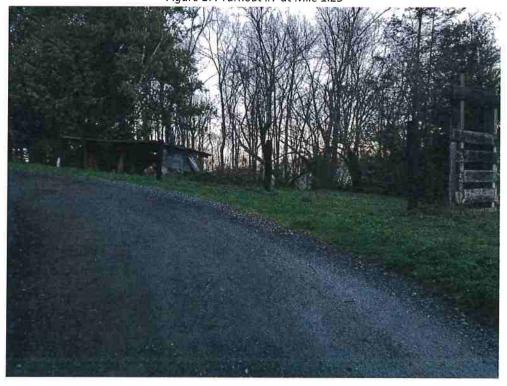


Figure 18: Turnout # 6 at Mile 1.3

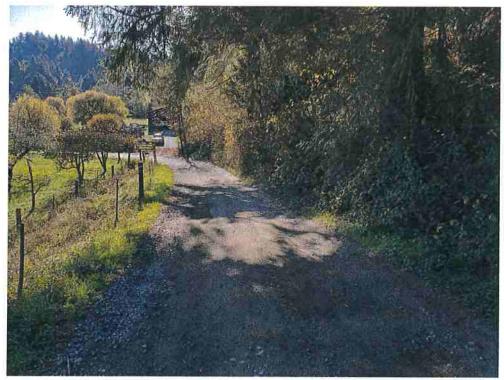


Figure 19: Steep section (one-way traffic) at Mile 1.34

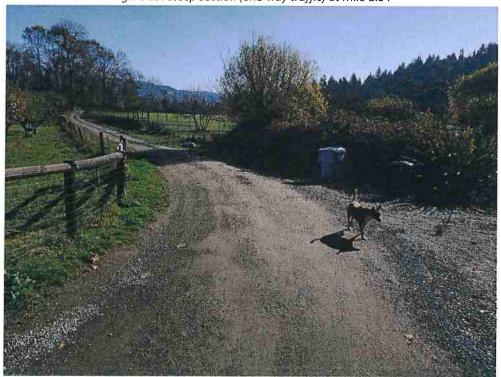


Figure 20: Rocked turnout at bottom of hill at Mile 1.35



Figure 21: Turnout at Mile 1.42



Figure 22: Turnout #5 at Mile 1.5 with arrow indicating where vegetation should be removed



Figure 23: Turnout #4 at Mile 1.52 with arrow indicating where vegetation should be removed

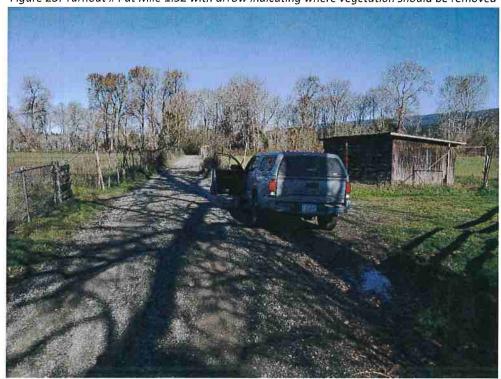


Figure 24: Turnout #3 at Mile 1.59 with good visibility of narrow section ahead



Figure 25: Gravel road at Mile 1.6

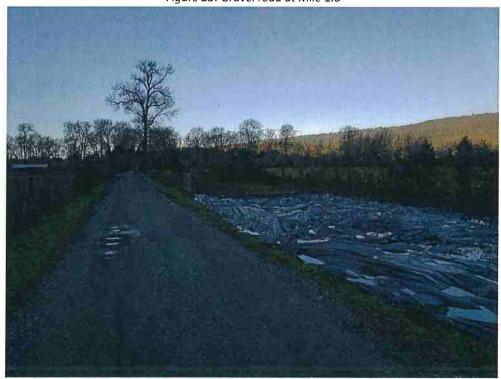


Figure 26: Possible Turnout #2 at mile 1.69

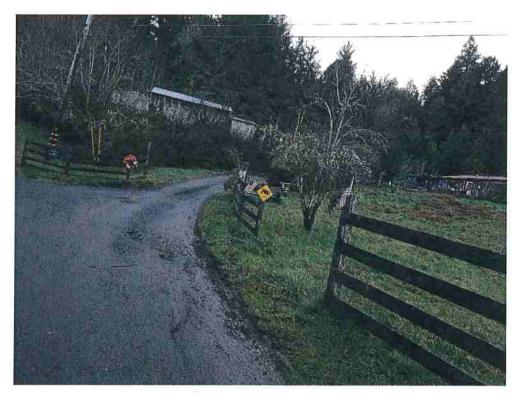


Figure 27: Driveway/turnout #1 at mile 1.7

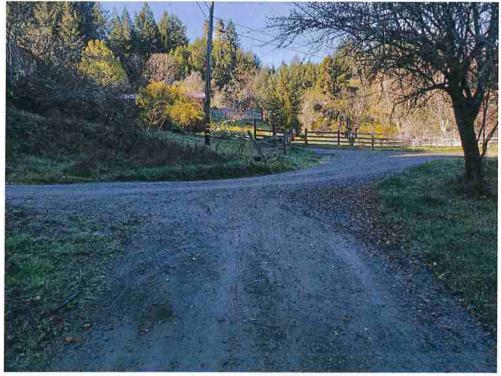


Figure 28: Road junction at Mile 1.73



Figure 29: low section on dirt road at Mile 1.76



Figure 30: Just before Parcel entrance at Mile 1.79

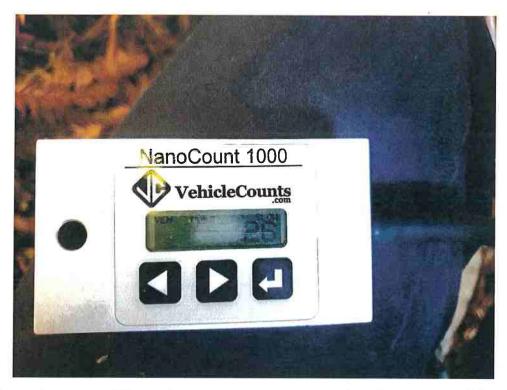


Figure 31: Nanocount 1000 used for 24-hour road study on Warren Creek Road at <124°1'30.689"W 40°53'37.41"N> from 11/20/2019 to 11/21/2019, showing final reading of 26 vehicles

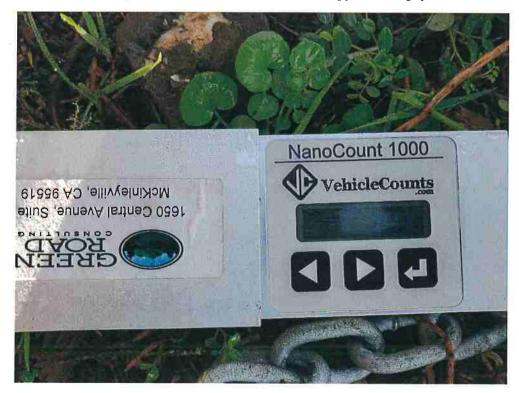


Figure 32: Nanocount 1000 used for 24-hour road study on Warren Creek Road at <124°1'54.695"W,  $40^\circ53'56.232"N>$  from 1/2/2020 to 1/3/2020, showing final reading of 216 vehicles

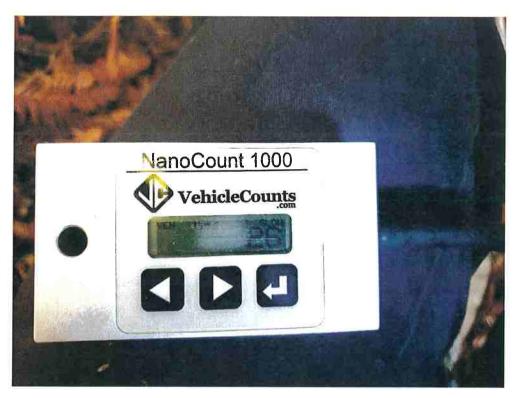


Figure 33: Nanocount 1000 used for 24-hour road study on Warren Creek Road at <124°1'30.689"W 40°53'37.41"N> from 11/20/2019 to 11/21/2019, showing final reading of 26 vehicles

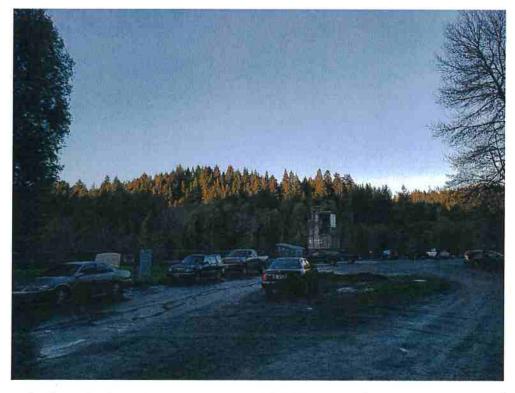


Figure 34: Recreational area Parking Lot on January 9th, 2020 around 5PM with around a dozen visitors



#### Appendix B: Traffic Management Plan

# COSTA APN 516-211-025, APPS#PLN-12176-CUP AVILA APN 516-241-024, APPS#PLN-11680-SP

#### Warren Creek Road

This plan was drafted in conjunction with proposed cannabis-related businesses located off of Warren Creek Road in central Humboldt County. Two cannabis businesses are proposed: a 10,000 square foot cultivation operation on APN 516-211-025 and a 5,000 square foot commercial cannabis nursery on APN 516-241-024. An evaluation of the Warren Creek Road system (a portion of which is maintained by the county and a portion of which is privately maintained) concluded that the road system has not been constructed completely to the standards set forth by AASHTO which recommends 20-foot travel width on roads exceeding 400 vehicles per day. A number of narrow sections/pinch points contribute to unquantified safety risks. In order to reduce the risk of accidents and to reduce general congestion, the proposed cannabis projects should adhere to this traffic management plan incorporating the following stipulations.

We assume that peak hours of travel for a primarily residential neighborhood are in the morning between 7:00 AM and 9:00 AM and in the evening between 4:00 PM and 6:00 PM.

#### Therefore,

- As much as is feasible, deliveries and trips to and from either parcel should take place between 9:00AM and 4:00PM (off-peak hours)
- Deliveries involving vehicles larger that a standard full-sized pickup should be made on Wednesdays (or other such agreed upon weekday) between the hours of 9:00AM and 4:00PM so that neighbors can know when to expect possibly increased commercial traffic
- The commercial cannabis nursery at APN 516-241-024 should open to customers no earlier than 9:00AM on weekdays only
- It is the responsibility of the applicants/land-owners that all visitors to their cannabis businesses (be they employees, customers, delivery personnel, or general visitors) be informed of the need to drive safely and respectfully throughout the entirety of Warren Creek Road. Complaints of unsafe or disrespectful driving by visitors shall be dealt with by the applicant.

This plan should be adhered to as much as possible and necessary deviation from the plan, when unavoidable shall be communicated to the Warren Creek Road Association, and if feasible, posted to a community bulletin board along with a copy of this plan.

January 2020 29



WER: CO.HUMBOLDT.CA.US

## DEPARTMENT OF PUBLIC WORKS

# COUNTY OF HUMBOLDT

MAILING ADDRESS: 1106 SECOND STREET, EUREKA, CA 95501-0579 **AREA CODE 707** 

**PUBLIC WORKS BUILDING** SECOND & L ST., EUREKA ON-LINE

ADMINISTRATION

FACILITY MANAGEMENT

BUSINESS ENGINEERING

FAX 445-7409 NATURAL RESOURCES NATURAL RESOURCES PLANNING 267-9540 445-7652 445-7377

HARRIS & H ST., EUREKA FAX 445-7388 LAND USE

CLARK COMPLEX

445-7205

#### USE DIVISION INTEROFFICE MEMORANDUM LAND

TO:

Elizabeth Moreno, Planner, Planning & Building Department

FROM:

Robert W. Bronkall, Deputy Director

DATE:

01/06/2020

RE:

COSTA, APN 516-211-025, APPS#PLN-12176-CUP

ROAD EVALUATION RESPONSE

The Department is aware of issues that have been raised regarding Warren Creek Road. The issuance can be generalized into two categories: maintenance and functional capacity.

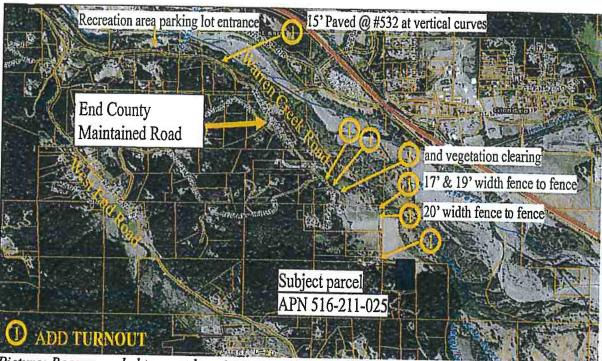
Maintenance: Warren Creek Road is both publicly and privately maintained. The first 0.95 mile of the road is publicly maintained by the County; the balance of the road is privately maintained.

Civil Code Section 845 requires that non-publicly maintained roads be maintained by the easement owners. To facilitate compliance with Civil Code Section 845, the project is required to join an existing Road Maintenance Association or attempt to form one if one does not exist. The Department of Public Works has a handout, which includes a template, to assist neighborhoods in forming Road Maintenance Associations. The handout includes a suggested road maintenance program. However, road maintenance is not a one-size fits all program. For instance, a person with a sports car might want a smooth road while a person with a four-wheel drive pick-up truck doesn't mind pot-hole riddled roads. A road maintenance program is ultimately a balancing act between the level of maintenance that the road users want and how much money the road users are willing to pay for road maintenance. The quality of the maintenance program is dependent on how much the road users are willing to pay: pay more and get better roads; pay less and settle for lower quality roads. It takes a lot of hard work for a neighborhood to come to a consensus on a road maintenance program.

Functional Capacity: Functional capacity is the ability of the road to effectively handle a certain volume of traffic. Warren Creek Road has the functional classification of a Local Road. It is a dead-end road where portions of the road exceed 18 to 20 feet in width and accommodate two-way traffic without the need for turnouts. Other portions of the road are narrow and require turnouts in order to two way traffic to pass each other. For the most part, the narrow portions have inter-visible wide areas, driveways, or turn outs along the road that allow two way traffic to pass. Low volume roads do not necessarily need two separate travel lanes in order to adequately function.

The road also serves a recreation area on Humboldt Bay Municipal Water District and also provides access to the Mad River. The recreation area is located approximately 0.36 miles from the intersection of West End Road. The volume of traffic using the recreational area varies based upon seasonal activities. During a site visit on 12/31/2019 at 11:42 am, 12 vehicles were observed in the parking lot.

The Department evaluated the functional capacity of the road and determined that there are several areas where additional turnouts would improve the functionality of the road by increasing the indivisibility between turnouts. These turnouts are shown on the diagram below. Adding these turnouts will allow traffic to pass without the need for traffic to back up to the nearest turnout, driveway, or wide spot.



Picture: Recommended turnout locations

The Department recommends the following:

- 1. The applicant shall construct the turn-outs identified in this memo prior to commencement of operations.
- 2. That the project restricts the use of vehicles wider than a regular pickup truck to off peak hours, being 9:00 am to 4:00 pm weekdays.

END



#### Exhibit "D"

## Road Evaluation Reports

The Department is working towards identifying which County maintained roads meet (or are equivalent to) Road Category 4 standards for cannabis projects. Two lists are being prepared: the first list with the green heading shows which roads (or portions thereof) meet or are equivalent to Road Category 4 standard (AKA "Approved List"); and the second list with the red heading shows which roads (or portions thereof) that do not meet or are not equivalent to Road Category 4 standards. These lists will be updated as information becomes available. This list will be updated frequently. Make sure you are using the most up to date list.

On occasion there may be more than one road that has the same name; in these instances check the road number to custre that you are referencing the correct road. Until such time as the GIS roads layer has been proofed by the Department, the GIS is not to be used for this task. Use the paper road maps to check road numbers.

If the subject property takes direct access from a road on the "approved list", no further road evaluation needs to be done.

Note: As stated above, County maintained roads with a painted centerline strip are roads considered meeting or exceeding Road Category 4 standards, and are not necessarily listed below.

THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRESS O		OVED LIST"
		oads that meet (or are equivalent to) Idards for Cannabis Projects
Road Name	Road Number	Range meeting (or equivalent to) Road Category 4 standard
Alderpoint Road	F6B165	All
Bair Road	C61.300	All
Bair Road	6L300	All
Baid Hills Road	F4R300	All
Benbow Drive	6B180	Oakcrest Drive to State Hwy 101
Blue Slide Road	F2G100	All [Grizzley Bluff Rd to City limits of Rio Dell]
Brannon Mountain Road	7M100	State Hwy 96 to Creekside Lane
Briceland Thome Road	F5A010	All
Burrell Road	3D030	From Mattole Rod to P.M. 067
Cathey Road	6D050	State Park to P.M. 0.87 [End of County maintained]
Chemise Mountain Road	C4A030	Shelter Cove Road to P.M. 3.0
Dean Creek Road	6B193	State Hwy 101 to P.M. 0.48 [End of County maintained]
Eci Rock Road	7D010	All
Eighth Avenue	4N080	All
Ettersburg- Honeydew Road	F5A010	All
Fickle Hill Road	C5J040	PM 1.55 [end of centerline stripe] to P.M. 8.00
Fieldbrook Road	C41.760	All
Freshwater Road	F6F060	All
Friday Ridge Road	81.100	State Hwy 299 to PM 3.37[End of County maintained] then becomes USFS Road
Greenwood Heights Drive	C4K160	All
Grizzley Bluff Road	F2G100	All [City limits of Femdale to Blue Slide Rd]
Jacoby Creek Road	C4K230	Old Arcata Road to P.M. 2.50
Jacoby Creek Road	4K230	From P.M. 2.5 to P.M. 2.69
Johnson Road	4G060	State Hwy 36 to P.M. 1.69 [End County maintained]
Kneeland Road	F6F060	Freshwater Road to Mountain View Road
Lighthouse Road	1D010	Mattole Road to State Park boundary
Maple Creek Road	5L100	All
Mattole Road	F3D010	All
Manole Road	F3C010	All
McCann Road	60090	Dyerville Loop Road to P.M. 1.0
McCellan Min Road	7F010	State Hwy 36 to P.M. 3.57[End of County maintained]
Mountain View Road	6H010	All
Murray Road	C3M020	All
Old Three Creeks Road	61.250	State Hwy 299 to P.M. 2.8 [End of County maintained]
Panther Gap Road	4D010	Mattole Road to P.M. 1.83[End of County maintained] continues as a non- County maintained road
Patterson Road	C3M130	All
Salmon Creek Road	6C030	Hwy 101 to P.M. 5.39 [Gate]
Shelter Cove Road	C4A010	All

u/spwrkt\_landdes projects/referrals/formst\_cannable standard conditions (5-10-2018) docs

# Exhibit "D"

#### Road Evaluation Reports

	Maintained R	OVED LIST"  oads that meet (or are equivalent to)  dards for Cannabis Projects			
Road Name Range meeting (or equivalent to) Road Number Category 4 standard					
Sprowel Creek Road	C6B095	PM 0.0 to PM 2.11			
Sprowel Creek Road	6B095	PM 2.11 to PM 4.00			
Thomas Road	6C010	Salmon Creek Road to P.M. 4.03 [End of County maintained] continues as a non- County maintained of			
Titlow Hill Road	71/100	Hwy 299 to PAI 4.7[End of County maintained] then becomes USPS Road			
West End Road	5L010	PM 0.0 at Arcata City Limits to Warren Creek Road			
Wilder Ridge Road	C5B010	All			

Road Name	Road Number	Range not meeting (or not equivalent to)  Road Category 4 standard
Bark Shanty Road	9R105	Ali
Benbow Drive	6B1E0	Oakerest Dr to end of County maintained
Brannon Mountain Road	781100	Creekside Lane to PM 5.0 [End of County maintained then becomes USFS Road
Burrell Road	1 3D030	P.M. 067 to P.M. 2.22 [End of County maintained]
Butte Creek Road	6H020	All
Chemise Mountain Road	I C4A030	P.M. 3.0 to P.M. 4.09 [Mendocino County Line]
Essex Lane	C4L780	P.M. 0.2 to P.M. 0.9 [End of County maintained]
Fickle Hill Road	C5J040	P.M. 8.0 to P.M. 11.72
Kings Peak Road	C4A020	P.M. 1.0 to P.M 12.20
McCann Road	1 6D090	P.M.1.0 to P.M.2.6 [End of County maintained]
Mill Street	3G305	Country Club Estates to P.M. 0.49[End]
Old Eel Rock Road	7D025	All
River Bar Road	i 40:010	Hwy 36 to P.M. 1.76 [End of County maintained]
Salmon Creek Road	6C030	P.M. 5.39 to P.M. 5.88[End of County maintained]
Sprawel Creek Road	68095	P.M 4.00 to PM 7.22 [End of County maintained]
Stapp Road	711010	P.M 0.00 to 3.25[End of County maintained]
Warren Creek Road	5L740	P.M 0.0 to PM 0.95 [End of County maintained]
Williams Creek Road	2G045	All

# END #



#### EXHIBIT A

#### DEPARTMENT OF PUBLIC WORKS COUNTY OF HUMBOLDT

MAILING ADDRESS: 1106 SECOND STREET, EUREKA, CA 95501-0579 AREA CODE 707 / FAX 445-7409

ARCATA-EUREKA AIRPORT TERMINAL McKINLEYVILLE 839-5401

PUBLIC WORKS BUILDING SECOND & L ST., EUREKA 445-7491 NATURAL RESOURCES

445-7652

445-7377 **FACILITY MANAGEMENT** 

CLARK COMPLEX HARRIS & H ST., EUREKA

ADMINISTRATION **ENGINEERING** 

PARKS ROADS & EQUIP MAINT.

445-7651

LAND USE 445-7205

TO:

Trevor Estlow, Senior Planner

FROM:

Robert W. Bronkall, Associate Engineer

RE:

SUBDIVISION REQUIREMENTS - IN THE MATTER OF THE

APPLICATION OF LEHMAN, APN 516-261-034, PMS-07-25/SP-07-86,

FOR APPROVAL OF A TENTATIVE MAP, CONSISTING OF 5.15 ACRES

**INTO 2 LOTS** 

DATE:

10/09/2008

12/03/2009 revised by Planning Commission

The following requirements and standards are applicable to this project and must be completed to the specifications and satisfaction of the Department of Public Works (Department) before the subdivision map may be filed with the County Recorder. If there has been a substantial change in the project since the last date shown above, an amended report must be obtained and used in lieu of this report. Prior to commencing the improvements indicated below, please contact the Subdivision Inspector at 445-7205 to schedule a pre-construction conference.

These recommendations are based on the tentative map prepared by unknown June, 2008, and dated as received by the Humboldt County Planning Commission on June 23, 2008.

NOTE: All correspondence (letters, memos, faxes, construction drawings, reports, studies, etc.) with this Department must include the Assessor Parcel Number (APN) shown above.

# READ THE ENTIRE REPORT BEFORE COMMENCING WORK ON THE PROJECT

#### 1.0 MAPPING

1.1 EXPIRATION OF TENTATIVE MAP: Applicant is advised to contact the Community Development Services Department to determine the expiration date of the tentative map and what time extension(s), if any, are applicable to the project. Applicant is responsible for the timely filing of time extension requests to the Community Development Services Department.

Applicant is responsible for completing all of the subdivision requirements prior to expiration of the tentative map. Applicant is advised to promptly address all of the subdivision requirements in order to avoid the tentative map expiring prior to completion of the subdivision requirements. Applicants are encouraged to contact a land development professional for advice on developing a realistic schedule for the processing of the project.

1.2 MAP TYPE: Applicant must cause to be filed a parcel map showing monumentation of all property corners to the satisfaction of this Department in compliance with Section 326-15 of the Humboldt County Code. Subdivision map checking fees shall be paid in full at the time the subdivision map is submitted for checking. County Recorder fees shall be paid prior to submittal of the map to the County Recorder for filing. The subdivision map must be prepared by a Land Surveyor licensed by the State of California -or- by a Civil Engineer registered by the State of California who is authorized to practice land surveying.

All Department charges associated with this project must be paid in full prior to the subdivision map being submitted to the County Recorder for filing.

Applicant shall submit to this Department four (4) full-size copies of the subdivision map as filed by the County Recorder.

Prior to submitting the subdivision map to the County Surveyor for map check, applicant shall submit the subdivision map to the utility providers to provide input on necessary public utility easements. Copies of the responses from the utility providers shall be included with the first submittal of the subdivision map to the County Surveyor.

- 1.3 **DEPOSIT**: Applicant shall be required to place a security deposit with this Department for inspection and administration fees as per Section 326-13, Improvement Review and Inspection Fees, of the Humboldt County Code prior to review of the construction plan, review of the subdivision map, or the construction of improvements, whichever occurs first.
- 1.4 **EASEMENTS**: All easements that encumber or are appurtenant to the subdivision shall be shown graphically on the subdivision map. Those easements that do not have a metes and bounds description shall be noted on the subdivision map and shown as to their approximate location.
- 1.5 **FURTHER SUBDIVISION**: At least some of the parcels may be further divided; therefore, applicant shall conform to Humboldt County Code Section 323-6(a)(5), Statements to Accompany a Tentative Subdivision Map.
- 1.6 **DEDICATIONS**: The following shall be dedicated on the subdivision map, or other document as approved by this Department:
  - (a) WEST END ROAD (5L010): Applicant shall cause to be irrevocably dedicated on the subdivision map to the County of Humboldt an easement for public road purposes over West End Road located within the proposed subdivision, in a manner approved by this Department. The width of the easement shall be 20 feet from the centerline of the County road. Applicant is only responsible to cause to be dedicated lands that are included within the boundary of the proposed subdivision.

(b) WARREN CREEK ROAD (5L740): Applicant shall cause to be irrevocably dedicated on the subdivision map to the County of Humboldt an easement for public road purposes over Warren Creek Road located within the proposed subdivision, in a manner approved by this Department. The width of the easement shall be 20 feet from the centerline of the County road. Applicant is only responsible to cause to be dedicated lands that are included within the boundary of the proposed subdivision.

The right of way through the cut slope area may vary from being centered on the road to minimize impact to existing uses.

- (c) SLOPES: When cut and fill slopes adjacent to West End Road or Warren Creek Road are proposed (or currently exist), applicant shall cause to be dedicated to the County of Humboldt a slope maintenance easement to a point 10 feet beyond the toe of fill slopes or top of cut slopes in a manner approved by this Department. Applicant is only responsible to cause to be dedicated lands that are included within the boundary of the proposed subdivision.
- (d) PUE: Applicant shall cause to be dedicated to the County of Humboldt on the subdivision map a 10 foot wide public utility easement (PUE) adjacent to the right of way for the access roads, or as otherwise approved by this Department. Additional PUEs shall be dedicated in a manner, width, and location approved by this Department. The applicant is only responsible to cause to be dedicated lands that are included within the boundary of the proposed subdivision.
- (e) **DRAINAGE EASEMENT**: Applicant shall dedicate a 30 foot wide drainage easement for County maintenance of the existing drainage pipe in the northeast corner of the subdivision. The limits of the easement shall be located 30 feet downstream of the outlet and 30 feet upstream of the inlet of the existing culvert. The easement shall be centered over the pipe and its prolongation. Applicant is only responsible to cause to be dedicated lands that are included within the boundary of the proposed subdivision.

# 2.0 IMPROVEMENTS

2.1 **CONSTRUCTION PLANS:** Construction plans shall be submitted for any required road, drainage, landscaping, and pedestrian improvements. Construction plans must be prepared by a Civil Engineer registered by the State of California. Construction plans shall be on a sheet size of 22" x 34", unless approved otherwise by this Department. Construction of the improvements shall not commence until authorized by this Department. This Department will require the submittal of 1 full size (22" x 34") set and 1 reduced (11" x 17") set of the approved construction plans prior to start of work.

The construction plans shall show the location of all proposed new utilities and any existing utilities within 10 feet of the improvements. The plans shall be signed as approved by the local fire response agency and public utility companies having any facilities within the subdivision prior to construction authorization by this Department.

Construction plans shall be tied into elevation datum approved by this Department.

Unless otherwise waived by this Department, record drawing ("As-Built") plans shall be submitted for any road, drainage, landscaping, and pedestrian improvements that are constructed as part of this project. Record drawing plans must be prepared by a Civil Engineer registered by the State of California. Once approved by this Department, one (1) set of "wet stamped" record drawings on 22" x 34" mylar sheets shall be filed with this Department.

- 2.2 CONSTRUCTION PERIOD: Construction of improvements for this project will not be allowed to occur between October 15 and April 15 without permission of this Department.
- 2.3 ACCESS ROADS: The access road(s) serving the subdivision shall be constructed to the satisfaction of this Department as follows:
  - (a) WARREN CREEK ROAD: Along the frontage of the subject property, Warren Creek Road shall be improved to Road Category 4 standards consisting of an 18 foot wide paved road with 2 foot wide bladed shoulders on each side. The shoulder shall not have a cross slope greater than 5%.

Existing structures (sheds, barns, etc.) shall be removed from the right of way. [Removed by the Planning Commission on 12/03/2009]

(b) WEST END ROAD: Along the frontage of the subject property, West End Road shall be improved to include a 5 foot wide bladed shoulder. The shoulder shall not have a cross slope greater than 5%.

Water meter boxes shall be adjusted to grade. In the event that the water meter boxes cannot be adjusted to grade without adjusting the meter/pipes, then the shoulder can be warped to conform to the elevation of the water meter boxes. [revised by the Planning Commission on 12/03/2009]

- (c) Nothing is intended to prevent the applicant from constructing the improvements to a greater standard.
- (d) Nothing is intended to prevent this Department from approving alternate typical sections, structural sections, drainage systems, and road geometrics based upon sound engineering principals as contained in, but not limited to, the Humboldt County Roadway Design Manual, Caltrans Highway Design Manual, Caltrans Local Programs Manual, Caltrans Traffic Manual, California Manual on Uniform Traffic Control Devices (MUTCD), and AASHTO's A Policy of Geometric Design of Highways and Streets (AKA "The Green Book"). Engineering must not be in conflict with Humboldt County Code or County adopted guidelines and policies.
- 2.4 **DRIVEWAYS**: Any new accesses from the County road will require encroachment permits from this Department. The location of existing and proposed driveway aprons (access openings) shall be shown on the construction plans. The proposed accesses will be evaluated after application is received.

Existing and proposed driveways shall intersect the road at a 90° angle, unless otherwise approved by this Department.

All access openings shall conform to Humboldt County Code Section 341 regarding visibility. Any existing accesses that do not conform shall be paved with asphalt concrete for the width of the driveway and a distance of 50 feet from the edge of the County road prior to filing of the map. The width of the driveway shall be as approved by this Department.

- 2.5 STRUCTURAL SECTION: The access road(s) shall be constructed to a structural section recommended in the soils report and as approved by this Department.
  - (a) For paved road surfaces, the structural section shall include a minimum of 0.2 foot of Caltrans Type B asphalt concrete (AC) over 0.67 foot of Caltrans Class 2 aggregate base. If required by this Department, the structural sections of all roads shall be determined by Caltrans R-Value method using a Traffic Index (T.I.) approved by this Department. Based upon soil conditions, this Department may also require a geotextile fabric to be placed on top of the sub grade.

When widening asphalt concrete (AC) roads, the widened road shall be paved with AC. A sawcut is typically required to ensure a uniform joint between the existing and new pavements. The location of the sawcut shall be approved by this Department based upon the condition of the existing road surface.

- (b) Access roads and driveways may include decorative accent treatments such as, but not limited to, stamped concrete or decorative brick pavers. Decorative accent treatments must provide appropriate traction for pedestrians, bicycles, and vehicles. Decorative access treatments are not permitted within the public right of way, unless approved in writing by this Department.
- (c) For unpaved road surfaces, the structural section shall include a minimum of 0.5 foot of Caltrans Class 2 aggregate base. Paved surfaces are required for grades in excess of 16%.
- 2.6 UNKNOWN IMPROVEMENTS: Other on-site and/or off-site improvements may be required which cannot be determined from tentative map and/or preliminary improvement plans at this time. These improvements will be determined after a review of more complete improvement plans and profiles have been submitted to this Department.
- 2.7 UTILITIES: The proposed improvements may require the undergrounding or relocation of existing facilities at the expense of the applicant. Undergrounding of existing facilities, relocation of existing facilities, or construction of new facilities shall be completed prior to constructing the structural section for the roadway.

If any utilities are required to be installed as a condition of tentative map approval by the Community Development Services Department - Planning Division, the utility work shall be completed prior to constructing the structural section for the road. All laterals shall be extended onto each lot and marked in a manner that they will be easily located at the time of individual hookups. A letter of completion of all work from each involved utility company shall be submitted prior to constructing the roadway structural section. Any utilities that need to be relocated shall be done solely at the subdivider's expense.

Applicant shall remove any abandoned utilities (natural gas, electrical, cable tv, etc.) within the public right of way fronting the subdivision or within the subdivision as directed by this Department.

- 2.8 **PERMITS**: An encroachment permit is required to be obtained prior to construction from this Department for all work within the right of way of a County maintained road.
- 2.9 MAILBOXES. When clustered mailboxes (neighborhood box units) are required by the Post Office, applicant shall obtain approval for the location of the mailbox unit from the Post Master. The pad for the mailbox unit shall be constructed as part of the subdivision and shall be encompassed by a sidewalk easement or other easement, as approved by this Department.
- 2.10 **GATES:** Gates across private access roads and driveways are not permitted without review and approval by the Department. Gates are not permitted on County right of way for public roads without authorization of the Board of Supervisors. Gates must not create a traffic hazard and must provide an appropriate turnaround in front of the gate. Existing gates shall be evaluated for conformance.

# 3.0 DRAINAGE

- 3.1 **DRAINAGE ISSUES**: Applicant shall be responsible to correct any involved drainage problems associated with the subdivision to the satisfaction of this Department.
- 3.2 **DRAINAGE REPORT:** Applicant must submit a complete hydraulic report and drainage plan regarding the subdivision for review and approval by this Department. This may require the construction of drainage facilities on-site and/or off-site in a manner and location approved by this Department.
- 4.0 GRADING <NONE>
- 5.0 MAINTENANCE <NONE>
- 6.0 DEVELOPMENT PLAN <NONE>
- 7.0 LANDSCAPING <NONE> // END //

# MEMO HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS LAND USE DIVISION

TO:

Trevor Estlow, Senior Planner

FROM:

Robert W. Bronkall, Associate Engineer

DATE:

10/09/08

RE:

LEHMAN, APN 516-261-034, PMS-07-25/SP-07-86

The Department of Public Works does not support the subdivision of parcels which use County or private roads to access their parcels until the road is improved to the County's minimum standards.

The subject property is located on Warren Creek Road immediately off of West End Road, approximately 1.9 miles from Giuntoli Lane and approximately 4.1 miles to Hatchery Road. Both Giuntoli Lane and Hatchery Road are roads that are constructed to minimum standards that can handle the anticipated traffic. Both Warren Creek Road and most of West End Road are not built to minimum standards. The project is located within the State Responsibility Area and is subject to County Fire Safe Regulations (FSR).

- West End Road, from Giuntoli Lane to Warren Creek Road, is narrow but has a centerline strip except for one 300 feet stretch.
- West End Road, from Warren Creek Road to Hatchery Road, averages 16 feet in width. Along most of its length there is no shoulder. In numerous locations drainage ditches and hillside slopes limit the ability of vehicles to pull over to allow vehicles to pass each other.
- Warren Creek Road, within the subject property, is as narrow as 14 feet.

Both West End Road and Warren Creek Road should be developed to a minimum of a Category 4 road standard.

The project has been conditioned to fully improve the road frontage of the subject property. This is consistent with Departmental policy to have subdividers improve their road frontages. The applicant believes that this requirement is too burdensome for a 2 lot subdivision that is effectively creating 1 new parcel. To address FSR issues involving the narrow nature of Warren Creek Road, the applicant requested and received an approved exception request from Cal Fire. In the exception request, as mitigation for not fully improving the road, the applicant has proposed constructing a turnout at the bottom of the hill. The turnout has recently been constructed.

The project also requires dedication of a 40 foot wide easement to the County for public road purposes. This will require removal or relocation of an existing shed. The applicant may wish to modify the alignment of Warren Creek Road to minimize the impact to the existing structures on Parcel 1. Further, this Department can support shifting the right of way on the hillside portion of the road to minimize the impact to the existing structures on Parcel 1. This will need to be consistent with this Department's requirement 2.3(d).

If the applicant does not agree with this Department's requirement, the applicant should provide testimony to the Planning Commission to request and justify an exception to this Department's recommendation.

Prior to the project being presented to the Planning Commission, the tentative map should be revised to comply with Humboldt County Code Sections 323-5(b)(3), 323-5(b)(5), 323-5(b)(6), and 323-5(b)(11).

// END //

From:
Sent:
To:
Subject:
Attachments:

Sent from my T-Mobile 4G LTE Device Get <u>Outlook for Android</u>

From: Moreno, Elizabeth <EMoreno@co.humboldt.ca.us>

Sent: Monday, December 30, 2019 3:25:57 PM

To: Dante Hamm <dante@greenroadconsulting.com>; Laura Costa <minervacirca2013@gmail.com>

Subject: FW: More Questions and Feedback

Hi Dante and Rocci,

I have a few concerns and questions regrading the Road Evaluation for Mr. Costa. One is Why was the ADT was placed where it was placed? We need the ADT to begin at the beginning of Warrant Creek Road and if you are proposing you are proposing a Traffic Management Plan, please submit it as soon as possible.

Attached is a summary of comments from neighbors that we need to be address. Rocci, please respond as soon as possible as I need to have these concerns address to move forward.

In addition, I am still waiting for PW to get back to me with final comments.

Best,



Elizabeth Moreno
Planner II
Cannabis Services Division
Planning and Building Department
707.445.7245

Concern:	How applicant will address the concern:	How Staff will address it in the Staff Report:	Contact the neighbor with the resolution
Gravel road. The neighbors contribute money to keep the road graveled.     Narrow Road.     Smell of cannabis will affect the neighborhood.		Staff will visit and take photos.	resolution
1. Applicant does not contribute to the maintained of the entire road. 2. The RE did not capture the ADT only capture 7 neighbors, the count should have occurred at the intersection of Warren Creek Rd and West End. 3. The report recommends fixing one pot hole, while there are many more.			
<ol> <li>The RE does not accurately evaluate the remediations.</li> <li>Why did the engineer decided to count traffic at the that location?</li> <li>The report does not complete as it does not state that the road is a one-way road.</li> </ol>	•		
<ol> <li>Concerns moving the existing road to the edge of property line, how will it be improved?</li> <li>Effectiveness of emergency turnouts etc.</li> <li>Increased generator use, noise pollution and fuel delivery and storage.</li> <li>Water for irrigation?</li> <li>Impacts to the Mad River Water Shed.</li> </ol>		.e.y	
The Road is narrow to support commercial uses.			*

2.	No ADU unit allowed unless Warrant Creek rd. was updated.		
1.	The Road is narrow to		
	support commercial uses.		
2.	No ADU unit allowed unless Warrant Creek rd. was		
	updated.		
	upuateu.		
1.	The Road is narrow to		
	support commercial uses.		
2.	Increased traffic will impact		
	residents walking and bke		
	riders		
1.	Pollution concerns from		
٦	pesticides		
2.	Will PGE be able to provide		
,	power? Maintenance of the Road		
	Fire/ emergency access, will		
4.	it be impacted?		
1.	Increased traffic?		
2.	Road is narrow can't	FC	
	support commercial use.		
3.	Maintenance concerns.		
	Public safety.		
	Increased traffic		
2.	Road is narrow can't		
121	support commercial use.		
3.	Maintenance concerns.		