

January 1, 2025

Mr. Rick Schroder
Transportation Planning
333 N. Rancho Dr.
Las Vegas, NV 89106

Subject: Summerlin Village 27 Parcels L
Lochsa Engineering Project No. – 241139.00

Dear Mr. Schroder,

Lochsa Engineering is currently assisting RCI Engineering in securing permits for a 387 single family residential subdivision located on the northwest corner of Park Drift Trail and Lake Mead Boulevard / Twilight Run Drive within the City of Las Vegas, Nevada.

A condition of permitting is to prepare a pedestrian circulation plan. In addition, the proposed project shall be gated. Therefore, a queueing analysis has also been prepared for the site.

In order to prepare a queueing analysis, trip generation rates were calculated. Trip generation information was obtained from the ITE publication entitled "Trip Generation- 11th Edition". The independent variable was the number of dwelling units. The results are as follows:

TRIP GENERATION ITE CODE 210 SINGLE FAMILY DETACHED HOUSING 387 DWELLING UNITS	
AM PEAK HOUR	
$\ln(T) = 0.91 \ln(X) + 0.12$ $\ln(T) = 0.91 \ln(387) + 0.12$ $T = 255.2$ or 256 Trips	
<u>26% Entering</u> 67 Trips	<u>74% Exiting</u> 189 Trips
PM PEAK HOUR	
$\ln(T) = 0.94 \ln(X) + 0.27$ $\ln(T) = 0.94 \ln(387) + 0.27$ $T = 354.6$ or 355 Trips	
<u>63% Entering</u> 224 Trips	<u>37% Exiting</u> 131 Trips
AVERAGE DAILY TRIPS $\ln(T) = 0.92 \ln(X) + 2.68$ $\ln(T) = 0.92 \ln(387) + 2.38$ $T = 2596.1$ or 2597 Trips	

Referring to the attached site plan, the site will have two driveways off of Park Draft Trail. The southern driveway will be for residents only while the northern driveway will be for visitors and residents. In discussion with the developer of the project, residences shall be provided "clickers" for the gates. Only visitors to the subdivision shall utilize the call box at the gate. The analysis assumed that thirty percent of the entering vehicles shall be visitors. This equates to 68 vehicles ($0.30 * 224 = 67.2$). Based upon a thirty second service time the required storage distance is 100 feet. Referring to the enclosed site plan, the provided storage distance is 250 feet.

Referring to the enclosed site plan, residents will have access to the public right of way via the two proposed driveways on Park Drift Trail and a pedestrian access to Park Drift Trail at the terminus of Laurel Garden Avenue between two common units. Amenities in the surrounding area that may attract residences include the following attractions:

Future Retail on the northeast corner of Lake Mead Boulevard and Park Drift Trail
Future Retail on the northeast corner of Lake Mead Boulevard and Sunset Run Drive

Pedestrian who wish to access the future retail center located on the northeast corner of Park Drift Trail and Lake Mead Boulevard will the exit the project onto the west side of Park Trail Drive and travel south along the west side of roadway until arriving at Lake Mead Boulevard. Pedestrians will cross the north leg of the intersection arriving at the retail center. In discussions with the project's civil engineer, the master developer will be responsible for all off-site improvements including sidewalks, ADA ramps and cross walks.

Pedestrians who wish to access the future retail building that will be located on the northeast corner of Lake Mead Boulevard and Sunset Run Drive will follow the same path but proceed east along the northside of Lake Mead Boulevard until arriving at Sunset Run Drive. Pedestrians will cross the north leg of the intersection arriving at the future retail establishment.

If you have any questions or further comments, please contact our office at your convenience.

Sincerely,



Ted T. Egerton, P.E.
LOCHSA ENGINEERING

Attachments



Traffic Impact Analysis Scoping Checklist

Department of Public Works – Transportation Division

Date: December 3, 2024
To: Ted Egerton, Lochsa
Project Name: Summerlin Village 27 Parcel L
Description: 387 Single Family Dwelling Units
Project Location: NWC Lake Mead Boulevard & Park Drift Trail

Required Study/ Analysis:

- | | |
|--|---|
| ☐ Master Traffic Study | ☒ Update Master Traffic Study to TIA76085 |
| ☐ Traffic Study | ☐ Update Traffic Study to |
| ☐ Addendum to | ☐ Conceptual/Courtesy |
| ☐ Pedestrian Connectivity Study | ☐ |

Intersections	LOS	Crash History	Left / Right Turn Lane Storage Analysis
N/A			
Remarks: - Provide driveway queuing analyses; also confirm that sight visibility is adequate. - Note that Parcel K, Summerlin Village 27 on the NEC of Lake Mead & Park Drift is planned to accommodate retail uses. - Note that direct pedestrian access from this parcel to Twilight Run Drive and associated trails is not permitted.			

☒	Identify all sidewalk and sidewalk ramp PROWAG deficiencies adjacent to the project boundary.
☐	Include a section addressing Standard Drawings #201.1, 234.1, #234.2 and #234.4 and to determine additional right-of-way requirements for exclusive right turn lanes, dual left turn lanes and bus turnouts adjacent to this site, if any.
☒	Recommend measures to improve safety for pedestrians, such as but not limited to access to transit, pedestrian accesses, crosswalks, pedestrian activated flashers and temporary sidewalks. (VZAP 2.2.4 & 2.2.5)
☒	Assess the project for walkability, bikeability, access to transit and micromobility. (VZAP 2.2.5)
☒	Include scaled site plan that dimension adjacent driveways, medians, and driveway throat depths.
☒	TIAs may be submitted either electronically or in hard copy. For hard copies, submit 1 hard copy, 1 PDF copy and completed TIA submittal form to 495 S. Main Street, 1st Floor. Include this form with submittal, either electronic or hard copy. Electronic submittals may be emailed to me if they are not larger than 10GB and can meet NAC 625.610 for sealing electronic submittals. Contact me if email is not feasible.
☐	

Please contact Rick Schroder, Rschröder@lasvegasnevada.gov if you have any questions.

QUEUING ANALYSIS

SUMMERLIN VILLAGE 27 PARCEL L

SERVICE TIME= **0.5** MINUTES/VEHICLE

ARRIVAL RATE= **68** VEHICLES/HOUR

NO. OF LANES= **1** LANES

$Q = (60 \text{ min/hr}) / (\text{service rate}) = \mathbf{120.00}$ SERVICES/VEHICLE

$\rho = (\text{arrival rate}) / ((\text{no. of lanes}) \times (Q)) = \mathbf{0.5667}$

$Q_m(\text{from table 8-11}) = \mathbf{0.5667}$

* The acceptable probability of the queue, M, being longer than the storage is 5%.

$P(X > M) = 0.05$

$M = [(\ln P(X > M) - \ln Q_m) / \ln \rho] - 1 = \mathbf{3.27}$ VEHICLES

AVERAGE LENGTH PER VEHICLE = 25 FEET

CALCULATED STORAGE LENGTH = (M) X (25 ft/veh) = **82 FEET / LANE**

REQUIRED STORAGE LENGTH = 100 FEET / LANE

<i>p</i>	NUMBER OF LANES						
	1	2	3	4	6	8	10
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.1000	0.1000	0.0182	0.0037	0.0008	0.0000	0.0000	0.0000
0.2000	0.2000	0.0666	0.0247	0.0096	0.0015	0.0002	0.0000
0.3000	0.3000	0.1385	0.0700	0.0370	0.0111	0.0036	0.0011
0.4000	0.4000	0.2286	0.1411	0.0907	0.0400	0.0185	0.0088
0.5000	0.5000	0.3333	0.2366	0.1739	0.0991	0.0591	0.0360
0.6000	0.6000	0.4501	0.3548	0.2870	0.1965	0.1395	0.1013
0.7000	0.7000	0.5766	0.4923	0.4286	0.3359	0.2706	0.2218
0.8000	0.8000	0.7111	0.6472	0.5964	0.5178	0.4576	0.4093
0.9000	0.9000	0.8525	0.8172	0.7878	0.7401	0.7014	0.6687
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000