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**DRAFT**

***MISSION HERITAGE TRAIL CORRIDOR –  
PEDESTRIAN AND BICYCLE FLOW ANALYSIS***

Associated Transportation Engineers (ATE) has prepared the following pedestrian and bicycle flow analysis for the Mission Heritage Trail Corridor located along Los Olivos Street and Mission Canyon Road in the City of Santa Barbara. The analysis reviews the results of the pedestrian and bicycle studies that were completed at the request of the Mission Heritage Trail Association and is based on traffic engineering industry standards.

**INTRODUCTION**

The Mission Heritage Trail Corridor extends along East Los Olivos Street and Mission Canyon Road between the East Los Olivos Street/Laguna Street intersection on the south and the Mission Canyon Road/Las Encinas Road intersection on the north. The Corridor connects students to local schools in surrounding neighborhoods, provides access to the Santa Barbara Mission, the Santa Barbara Museum of Natural History (SBMNH), Rocky Nook Park; and serves as a major roadway connection between the City of Santa Barbara and State Route (SR) 192-Foothill Road.

Per the August 2013 Santa Barbara South Coast Visitor Profile Study, 6.1 million visitors travel to the Santa Barbara South Coast area each year. The study data (attached) show that some of the most popular attractions for tourists include the Historic Mission Santa Barbara, attracting 31.5% of visitors and the Museum of Natural History, attracting 3.2% of visitors. Attractions along the Mission Heritage Trail Corridor, include the following:

- Historic Mission Santa Barbara
- Mission Historical Park
- Rocky Nook Park
- Santa Barbara Museum of Natural History
- Santa Barbara Women's Club

These local attractions are all within walking distance (less than half a mile) through the Corridor. Large volumes of vehicular, pedestrian and bicycle traffic are generated within the Corridor during some of the popular annual events held at the Mission and at the SBMNH, including:

- I Madonnari Festival
- Old Spanish Days Opening Ceremony
- SBMNH Tribal Arts Event
- SBMNH Wine & Food Festival

#### **EXISTING PEDESTRIAN & BICYCLE FACILITIES**

The existing pedestrian and bicycle facilities at the key intersections within the Mission Heritage Trail Corridor are discussed below.

**East Los Olivos Street/Laguna Street** features a 4-way crosswalk at the intersection, which connects pedestrians from the Mission to the Mission Historical Park, Roosevelt Elementary School and the surrounding neighborhood. The crosswalk connects with a paved walkway along the west edge of East Los Olivos Street and extends north approximately one-tenth of a mile, ending at the driveway to the Mount Calvary Monastery. A Class II bike lane begins at the intersection and continues north on East Los Olivos Street approximately a quarter mile.

**East Los Olivos Street/Alameda Padre Serra** features a sidewalk for pedestrians along the eastern side of the roadway. There are no crosswalks provided for crossing the intersection. A crosswalk is provided just south of the Mission Canyon Road/Alameda Padre Serra intersection that links pedestrians from the north tower of the Mission to the Alameda Padre Serra sidewalk. Unpaved walkways are provided on each side of Mission Canyon Road just north of Alameda Padre Serra.

**Mission Canyon Road/Mountain Drive** is located just south of Rocky Nook Park and provides access to the Historic Stone Bridge located northeast of the intersection. The bridge serves as the primary pedestrian/bicycle connection between Rocky Nook Park and the Mission. A paved crossing is provided on the east side of the Historic Stone Bridge.

**Mission Canyon Road/Rocky Nook Park** features an unpaved pathway just northeast of the intersection. The Historic Stone Bridge is accessible from the southeast corner of the intersection. There is no painted crosswalk for pedestrians crossing the park's driveway.

**Mission Canyon Road/Puesta Del Sol** provides a crosswalk on the north leg of the intersection. The crosswalk provides pedestrian access to the SBMNH.

**Mission Canyon Road/Las Encinas Road** provides crosswalks on the north and south leg of the intersection.

## **PEDESTRIAN AND BICYCLE STUDY RESULTS**

Weekday and weekend pedestrian and bicycle surveys were counted at the study-area intersections in May and June of 2016. The weekday count was conducted between the hours of 7 A.M. to 7 P.M. The weekend count was conducted between the hours of 7 A.M. to 8 P.M. Pedestrian and bicycle volumes were also counted during the weekend of the I Madonnari Festival to capture pedestrian and bicycle volumes during a major event. The event count was conducted on the Saturday of the event between the hours of 9 A.M. and 7 P.M.

Table 1 and Figures 1-9 present the daily pedestrian volumes for weekdays, weekends, and event days. The data presented in Table 1 show that the Mission Heritage Trail Corridor experiences a significant level of pedestrian traffic during both weekdays and weekends. The volumes show a high of over 800 pedestrians crossing the intersection of East Los Olivos Street and Laguna Street adjacent to the Mission, over 400 pedestrians at the intersection of East Los Olivos Street and APS, over 200 pedestrians at the intersection of Mission Canyon Road and Mountain Drive, including 20 to 30 pedestrians that cross the bridge on the west side of the road with no sidewalk, over 300 at the intersection of Mission Canyon Road and Puesta Del Sol, and over 100 at the Mission Canyon Road/Las Encinas Road intersections.

During the peak of the I Madonari event, flows increase to over 10,000 pedestrians adjacent to the Mission and 1,000 to 2,000 pedestrians traversing the Mission Heritage Trail Corridor.

These volumes indicate that the area is well utilized by pedestrians during both normal and peak event days and that additional pedestrian facilities within the Corridor are warranted based on the policies and goals contained in the City of Santa Barbara's Pedestrian Master Plan<sup>1</sup>, the Complete Streets: Best Policy and Implementation Practices publication<sup>2</sup>, and the A Policy on Geometric Design of Streets Highways and Streets manual published by AASHTO.<sup>3</sup>

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<sup>1</sup> City of Santa Barbara Pedestrian Master Plan, Alta Planning and Design, July 2006.

<sup>2</sup> Complete Streets: Best Policy and Implementation Practices, American Planning Association, March 2010.

<sup>3</sup> A Policy on Geometric Design of Highways and Streets, 6<sup>th</sup> Edition, American Association of State Highway and Transportation Officials, April 2008.

**Table 1**  
**Existing Pedestrian Volumes**

Intersection	Crossings	Pedestrian Volume		
		Weekdays	Weekends	Events
Laguna Street/East Los Olivos Street	North Leg	400	407	4,079
	South Leg	124	158	2,359
	East Leg	115	116	395
	West Leg	<u>151</u>	<u>141</u>	<u>3,274</u>
	<b>Total</b>	<b>790</b>	<b>822</b>	<b>10,107</b>
East Los Olivos Street/ Mount Calvary Monastery Driveway	North	9	6	0
	South	1	0	0
	East Leg	168	160	645
	West Leg	<u>88</u>	<u>81</u>	<u>576</u>
	<b>Total</b>	<b>258</b>	<b>257</b>	<b>1,221</b>
Alameda Padre Serra/ East Los Olivos Street (A)	North	176	145	42
	South	1	13	922
	East Leg	169	181	894
	West Leg	<u>6</u>	<u>14</u>	<u>50</u>
	<b>Total</b>	<b>352</b>	<b>353</b>	<b>1,908</b>
Alameda Padre Serra/ East Los Olivos Street (B)	North	9	9	37
	South	6	1	18
	East Leg	5	13	15
	West Leg	<u>43</u>	<u>24</u>	<u>496</u>
	<b>Total</b>	<b>63</b>	<b>47</b>	<b>566</b>
Mountain Drive/ Mission Canyon Road	North Leg	9	7	28
	South Leg	7	4	18
	East Leg	182	163	1,011
	West Leg	<u>27</u>	<u>17</u>	<u>173</u>
	<b>Total</b>	<b>225</b>	<b>191</b>	<b>1,230</b>
Rocky Nook Park/ Mission Canyon Road	North Leg	4	1	2
	South Leg	1	3	15
	East Leg	153	136	615
	West Leg	<u>18</u>	<u>17</u>	<u>131</u>
	<b>Total</b>	<b>176</b>	<b>157</b>	<b>763</b>
Puesta Del Sol/ Mission Canyon Road	North Leg	176	64	368
	South Leg	24	31	68
	East Leg	144	105	480
	West Leg	<u>34</u>	<u>13</u>	<u>37</u>
	<b>Total</b>	<b>328</b>	<b>213</b>	<b>953</b>
Las Encinas Road/ Mission Canyon Road	North Leg	15	19	99
	South Leg	20	22	52
	East Leg	40	33	109
	West Leg	<u>23</u>	<u>39</u>	<u>45</u>
	<b>Total</b>	<b>98</b>	<b>113</b>	<b>305</b>

Table 2 and Figures 10-18 present the daily bicycle volumes for weekdays, weekends, and event days. The data presented in Table 2 show that the Mission Heritage Trail Corridor experiences a significant level of bicycle traffic during both weekdays and weekends. The volumes show a high of over 190 bicycles traveling through the intersection of East Los Olivos Street and Laguna Street adjacent to the Mission, over 180 bicycles at the intersection of Los Olivos Street and APS, over 170 bicycles at the intersection of Mission Canyon Road and Mountain Drive, including over 100 bicycles that cross the bridge, over 100 bicycles at the intersection of Mission Canyon Road and Puesta Del Sol, and over 80 at the Mission Canyon Road/Las Encinas Road intersection.

During the peak of the I Madonari event, flows increase to over 300 bicycles adjacent to the Mission and 100 to 260 bicycles traversing the Mission Heritage Trail Corridor.

These volumes indicate that the area is well utilized by bicycles during both normal and peak event days and that additional bicycle facilities within the Corridor are warranted based on the goals and policies contained in the City of Santa Barbara Bicycle Master Plan<sup>4</sup>, the Complete Streets: Best Policy and Implementation Practices publication, and the A Policy on Geometric Design of Highways and Streets manual published by AASHTO.

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<sup>4</sup> City of Santa Barbara Bicycle Master Plan, City of Santa Barbara, August 2016.

**Table 2  
Existing Bicycle Volumes**

Intersection	Crossing	Bicycle Volume		
		Weekdays	Weekends	Events
Laguna Street/East Los Olivos Street	Northbound	31	9	51
	Southbound	71	84	105
	Eastbound	29	10	88
	Westbound	<u>63</u>	<u>36</u>	<u>71</u>
	<b>Total</b>	<b>194</b>	<b>139</b>	<b>315</b>
East Los Olivos Street/ Mount Calvary Monastery Driveway	Northbound	86	51	121
	Southbound	72	90	126
	Eastbound	1	0	0
	Westbound	<u>0</u>	<u>0</u>	<u>0</u>
	<b>Total</b>	<b>159</b>	<b>141</b>	<b>247</b>
Alameda Padre Serra/ East Los Olivos Street (A)	Northbound	8	6	24
	Southbound	14	13	16
	Eastbound	5	6	14
	Westbound	<u>0</u>	<u>0</u>	<u>0</u>
	<b>Total</b>	<b>27</b>	<b>25</b>	<b>54</b>
Alameda Padre Serra/ East Los Olivos Street (B)	Northbound	78	46	96
	Southbound	73	89	113
	Eastbound	1	0	8
	Westbound	<u>11</u>	<u>9</u>	<u>0</u>
	<b>Total</b>	<b>163</b>	<b>144</b>	<b>227</b>
Mountain Drive/Mission Canyon Road	Northbound	91	57	111
	Southbound	54	59	102
	Eastbound	0	0	0
	Westbound	<u>34</u>	<u>44</u>	<u>53</u>
	<b>Total</b>	<b>179</b>	<b>160</b>	<b>266</b>
Rocky Nook Park/ Mission Canyon Road	Northbound	58	48	102
	Southbound	56	58	95
	Eastbound	0	0	0
	Westbound	<u>5</u>	<u>3</u>	<u>14</u>
	<b>Total</b>	<b>119</b>	<b>109</b>	<b>211</b>
Puesta Del Sol/Mission Canyon Road	Northbound	56	44	86
	Southbound	32	33	37
	Eastbound	25	30	60
	Westbound	<u>0</u>	<u>1</u>	<u>4</u>
	<b>Total</b>	<b>113</b>	<b>108</b>	<b>187</b>
Las Encinas Road/ Mission Canyon Road	Northbound	48	41	75
	Southbound	31	40	37
	Eastbound	3	3	10
	Westbound	<u>1</u>	<u>0</u>	<u>0</u>
	<b>Total</b>	<b>79</b>	<b>84</b>	<b>122</b>

### Existing Roadway Operations

Existing "Average Daily Traffic" (ADT) volumes for vehicles on Mission Canyon Road south of Puesta del Sol are shown in Table 3.

**Table 3**  
**Existing Roadway Operations**

<b>Roadway Segment</b>	<b>Roadway Classification</b>	<b>Geometry</b>	<b>Existing Volume</b>
Mission Canyon Road South of Puesta Del Sol	Secondary 1	2 Lanes	9,260 ADT

The data presented in Table 3 show that Mission Canyon Road currently carries 9,260 trips per day. These volumes increase to over 10,000 trips per day south of the Mountain Drive intersection. These existing traffic volumes indicate that the Mission Heritage Trail Corridor is a heavily travelled vehicular arterial and further support the finding that additional pedestrian and bicycle improvements are warranted in the Corridor based on the policies contained in the City of Santa Barbara Circulation Element<sup>5</sup>, Pedestrian Master Plan, Bicycle Master Plan, and the A Policy on Geometric Design for Highways and Streets manual published by AASHTO.

This concludes our presentation of the pedestrian and bicycle analysis developed for Mission Heritage Trail Association.

Associated Transportation Engineers

Scott A. Schell, AICP, PTP  
Principal Transportation Planner

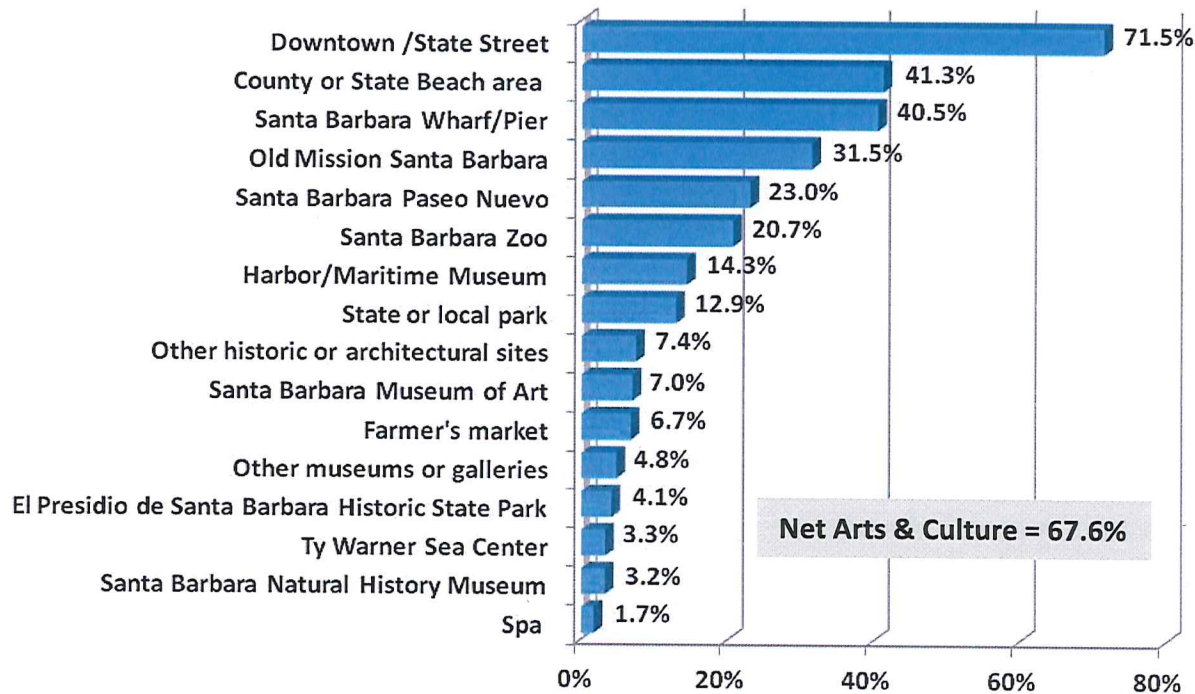
SAS/DLD/EKM

Attachments

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<sup>5</sup> City of Santa Barbara Circulation Element, City of Santa Barbara General Plan, December 2011.

## Attractions Visited



## HOTEL SEGMENT

### Attractions Visited

#### *Net Arts & Culture*

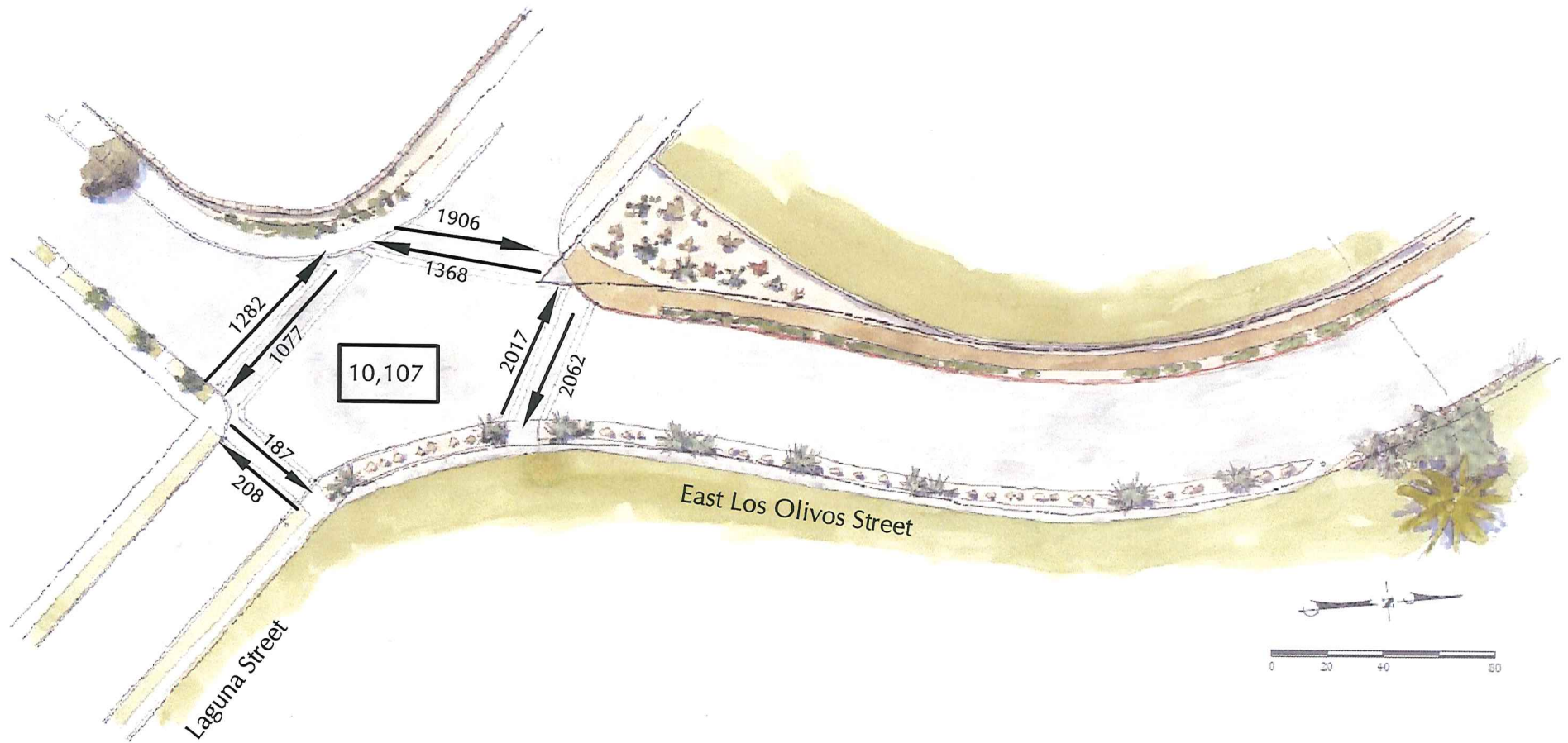
**Carpinteria 46.8%**

**Goleta 46.6%**

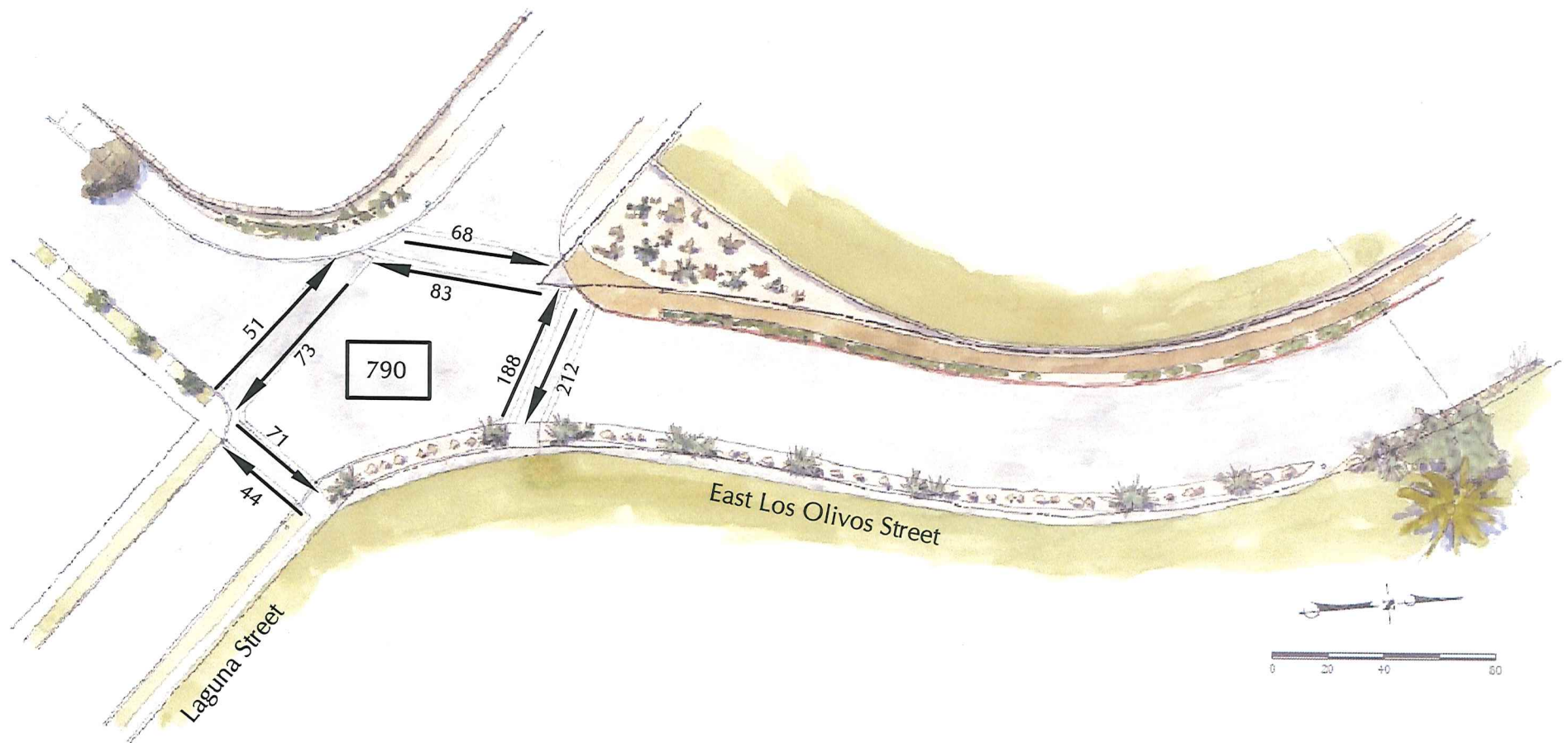
**Santa Barbara 54.7%**

Q: Please look at this list of attractions. As we read down this list together, please tell me which you visited or will visit while in the Santa Barbara South Coast area. (Select all that apply)

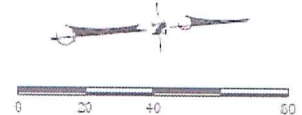
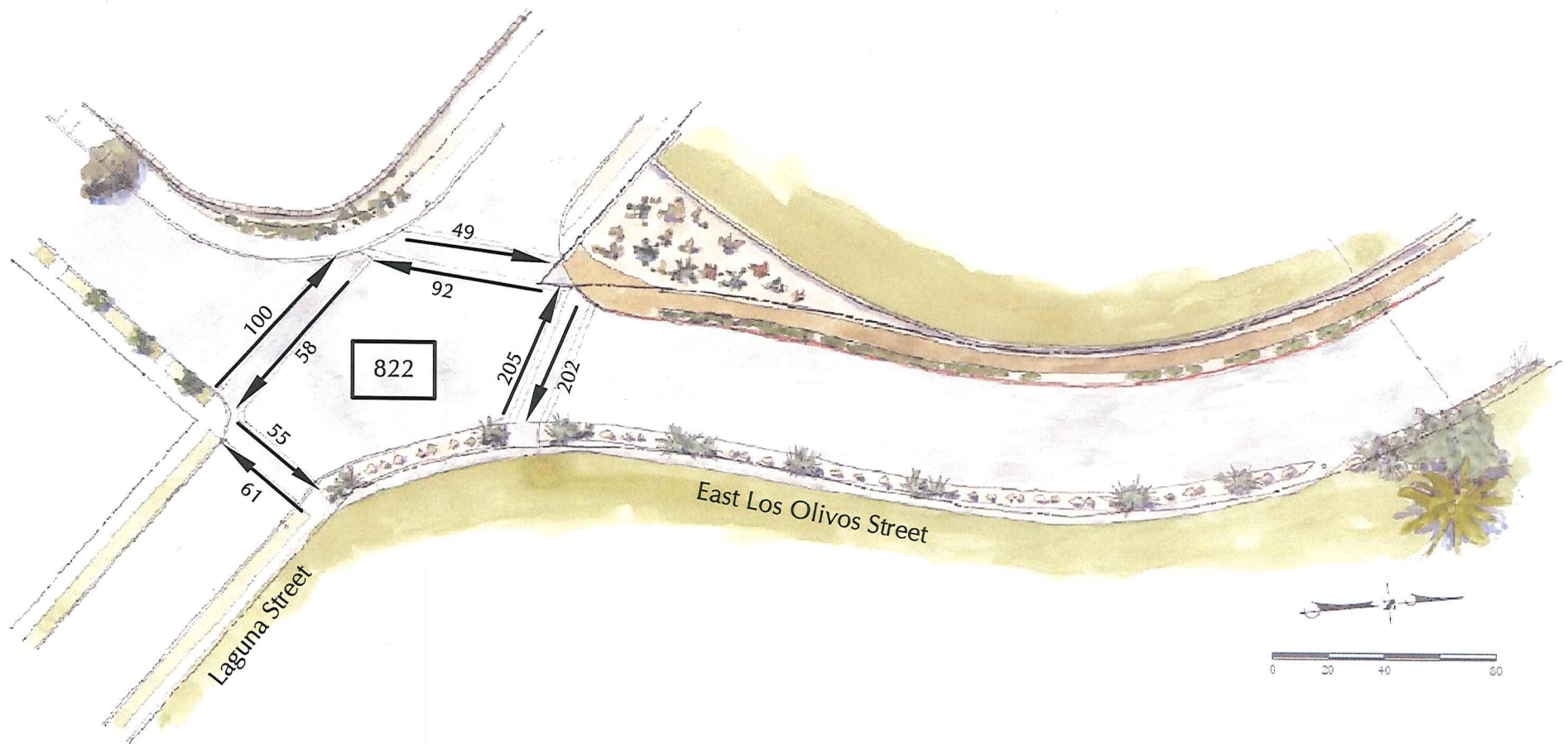




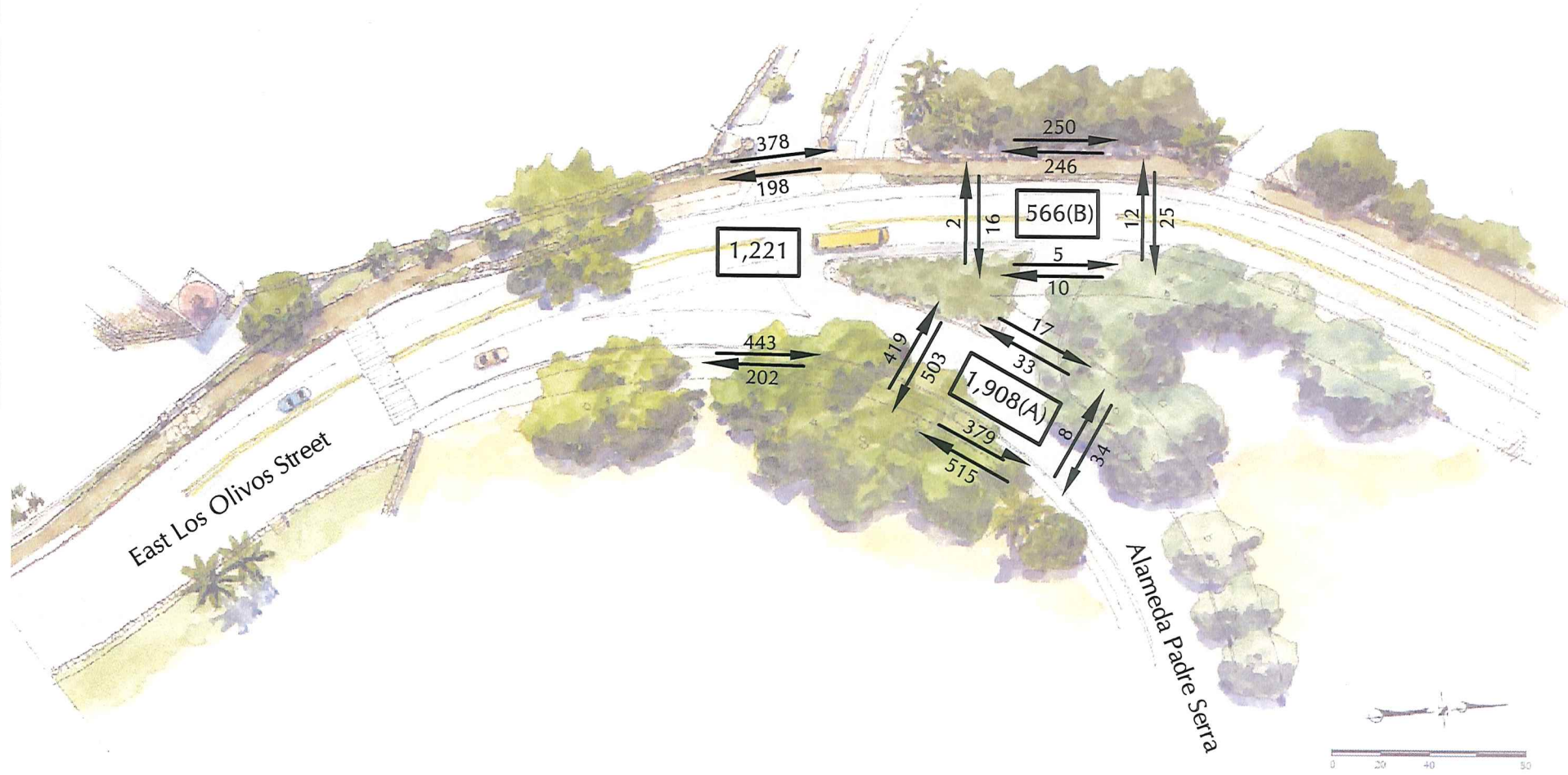
LEGEND  
 XXXX - Daily Volume  
 XXXX - Total Intersection Volume



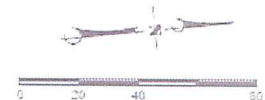
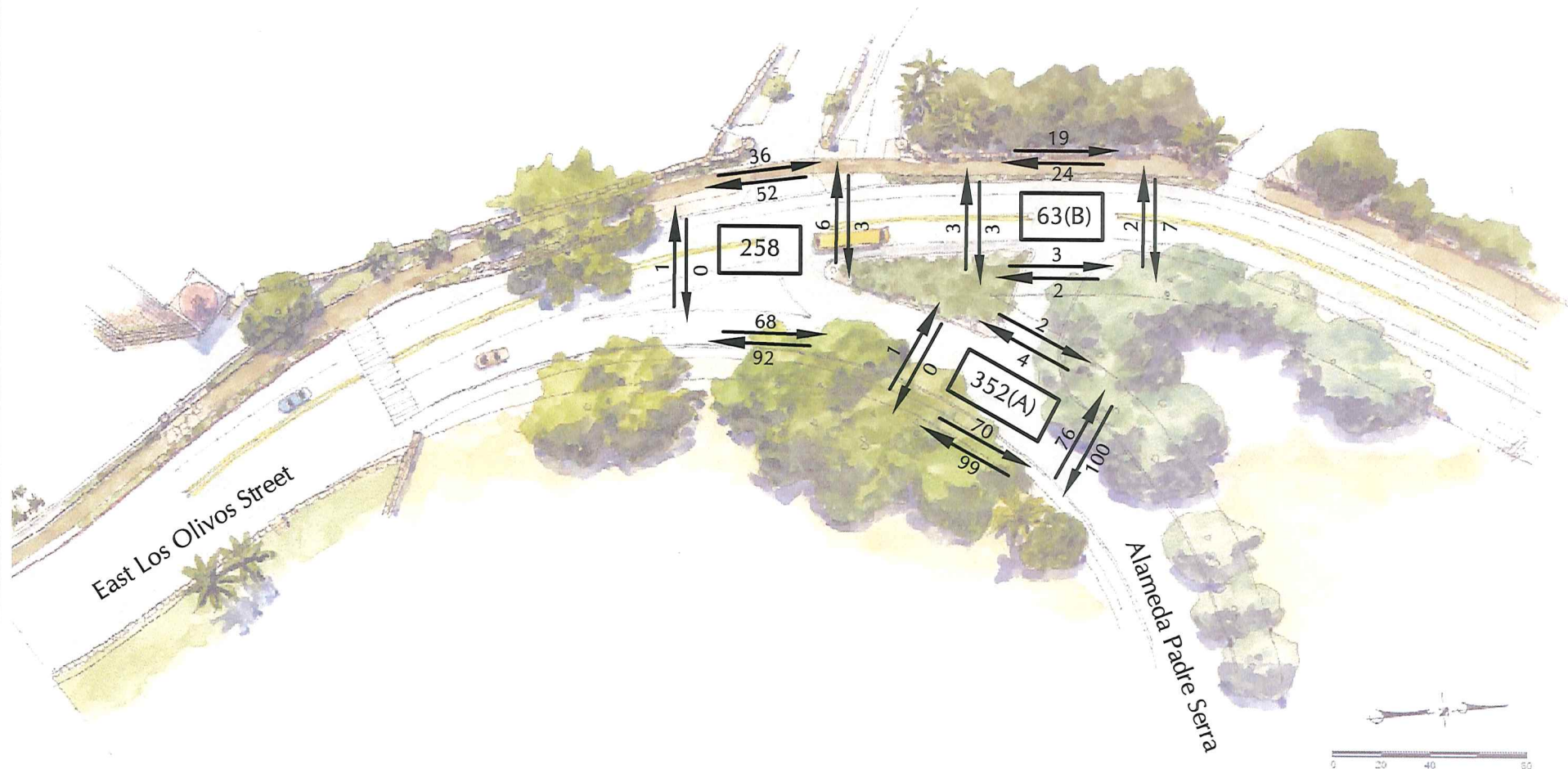
**LEGEND**  
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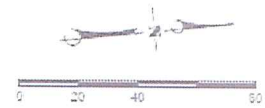
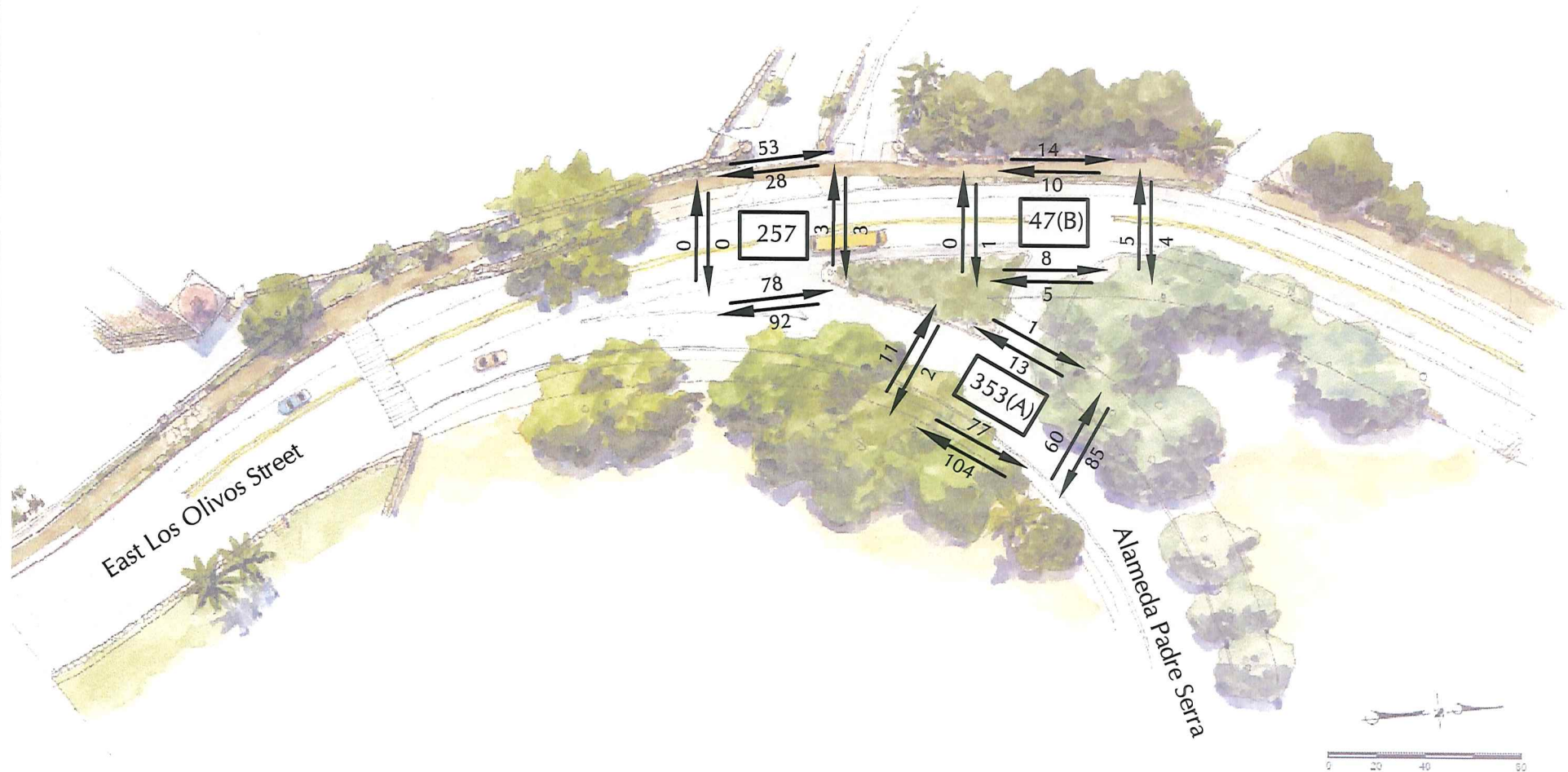
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**LEGEND**  
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**LEGEND**  
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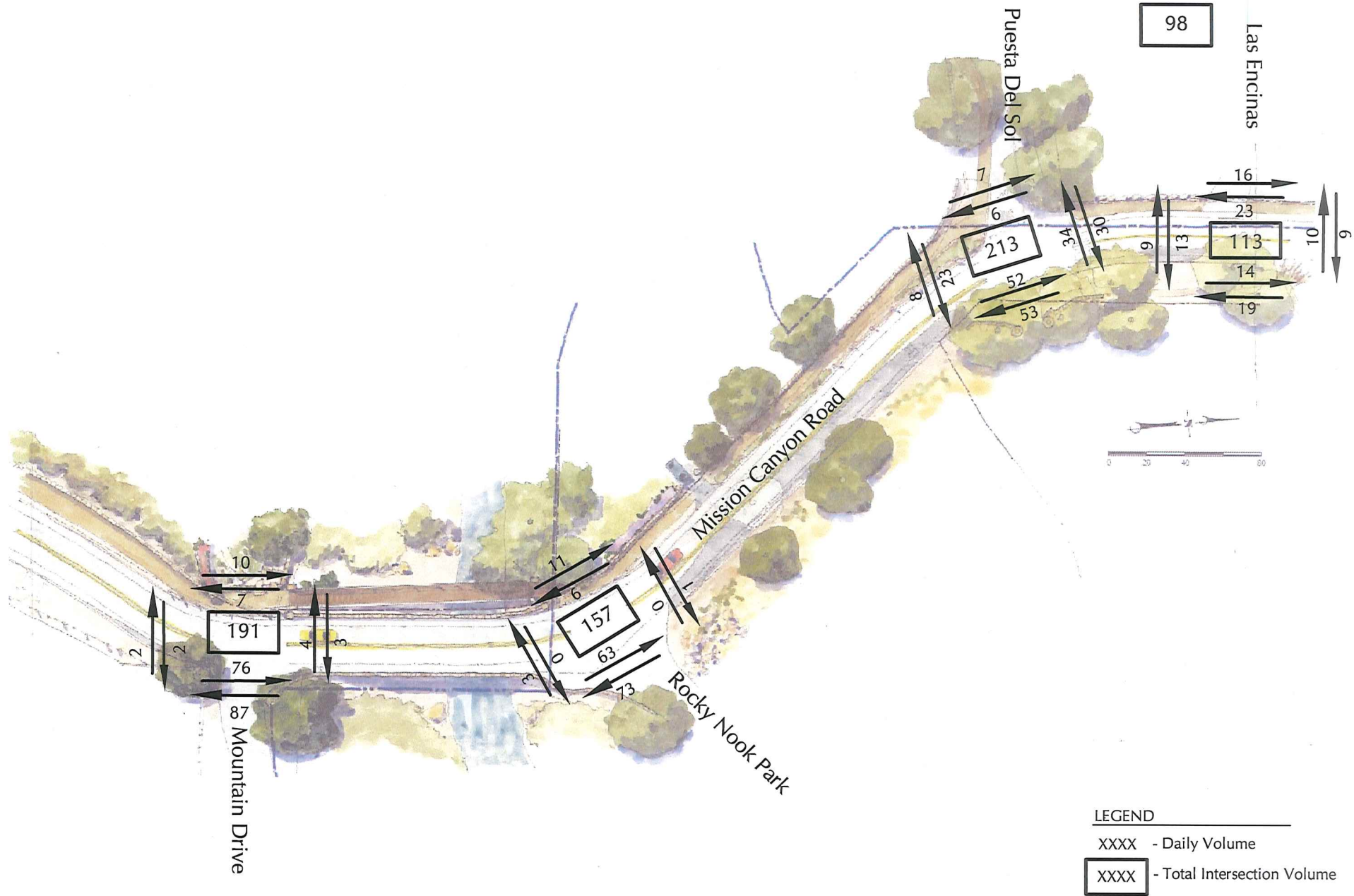


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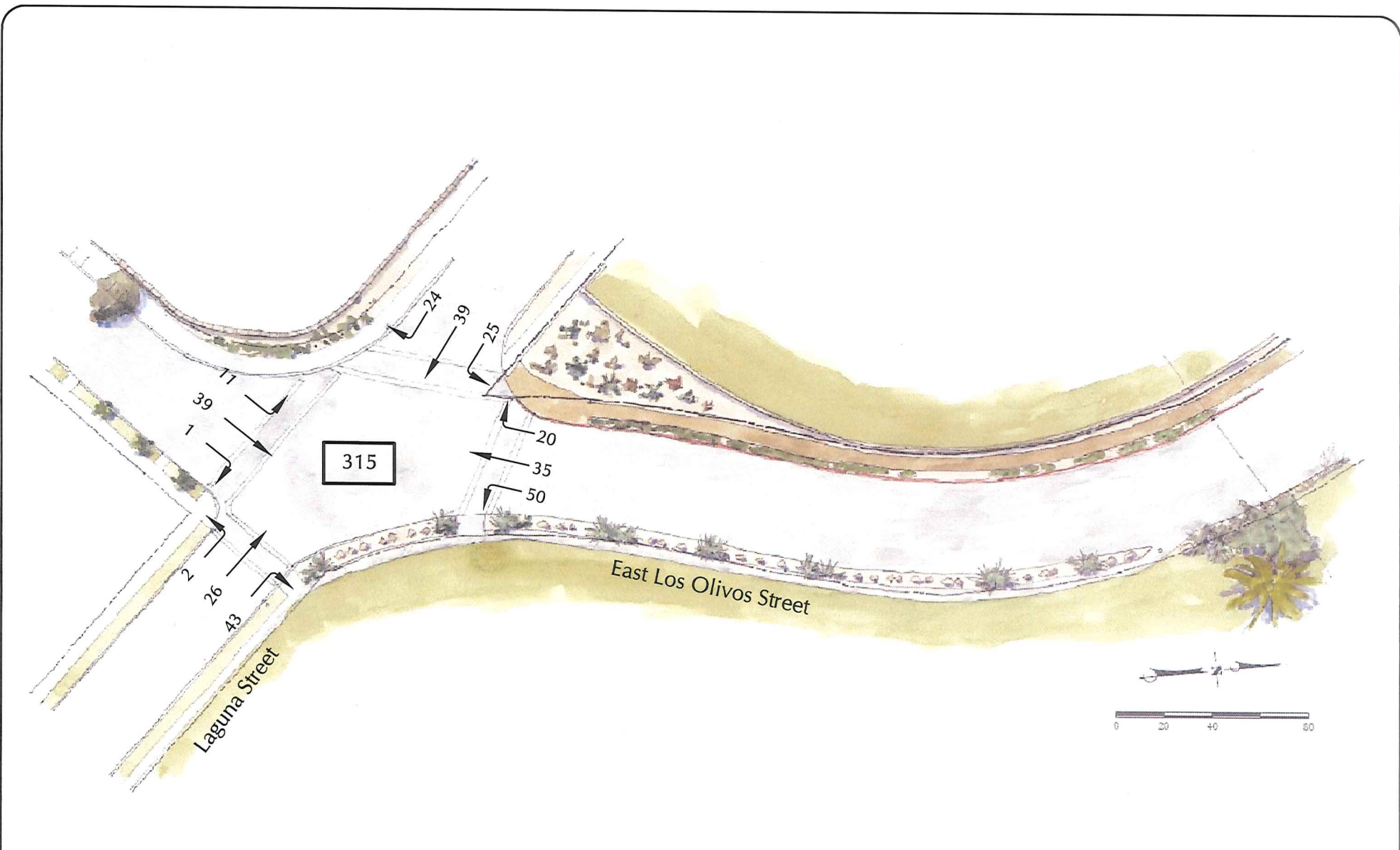




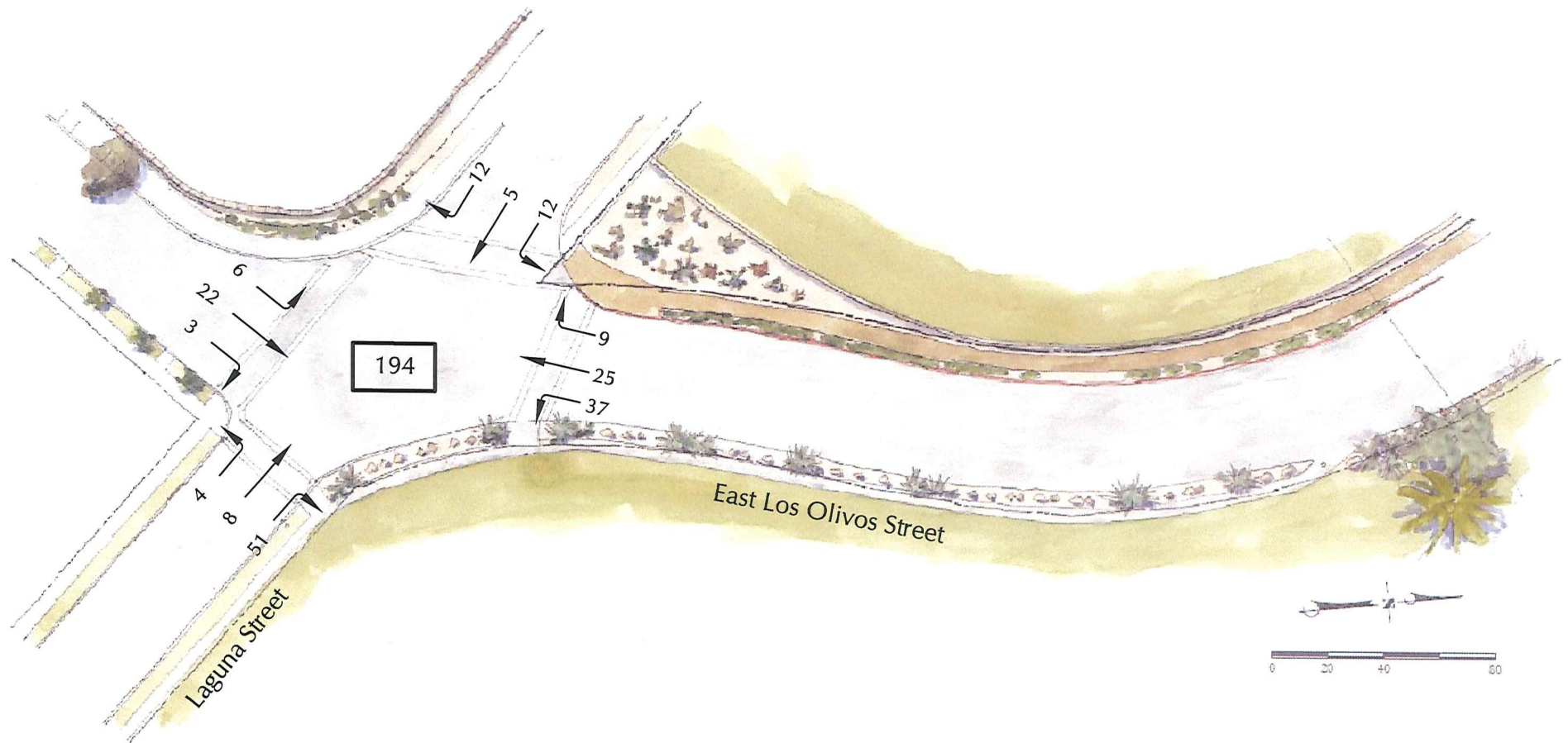




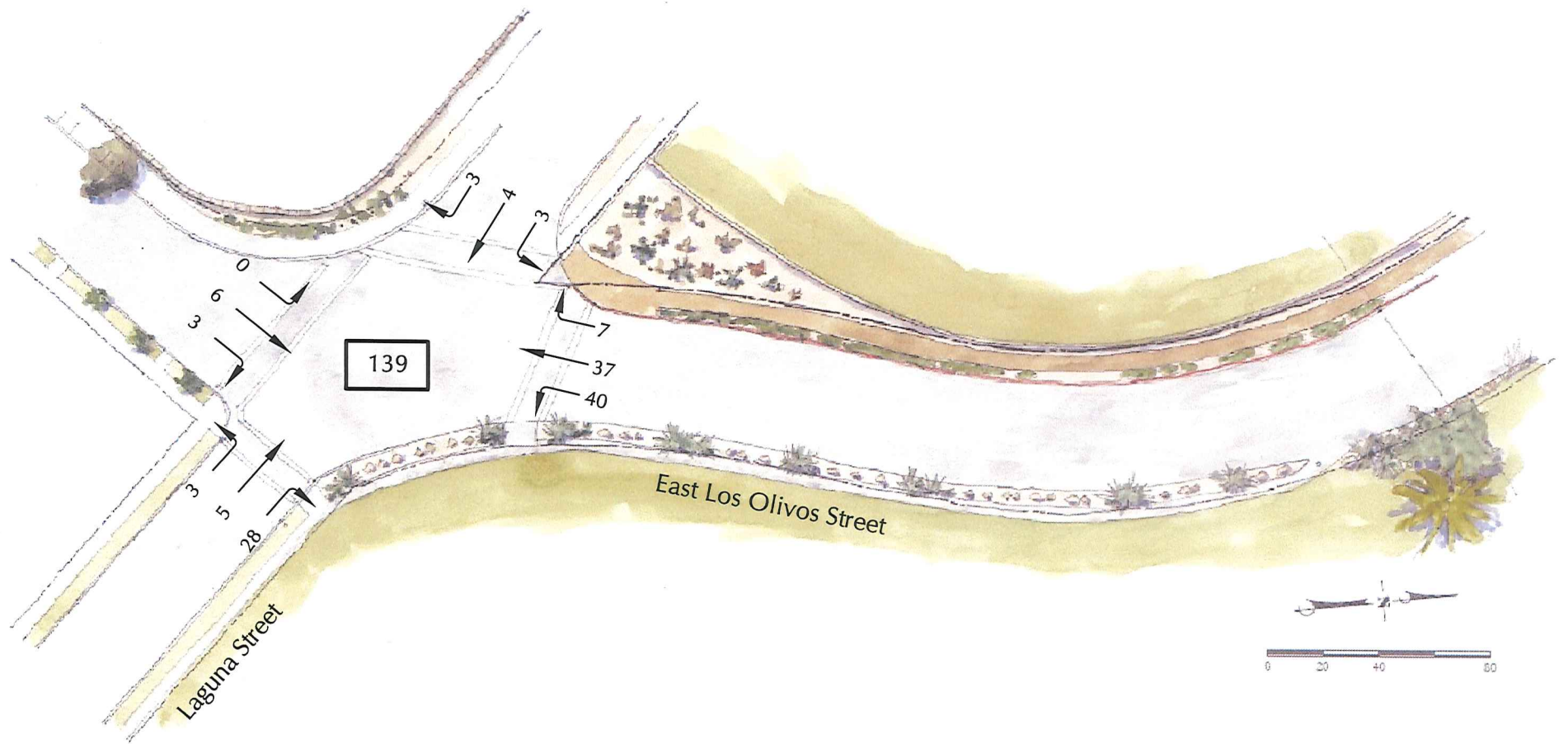
Mission Canyon Road/Rocky Nook Park Intersection - Pedestrian Volume Saturday (6/11)



**LEGEND**  
 XXXX - Daily Volume  
 XXXX - Total Intersection Volume



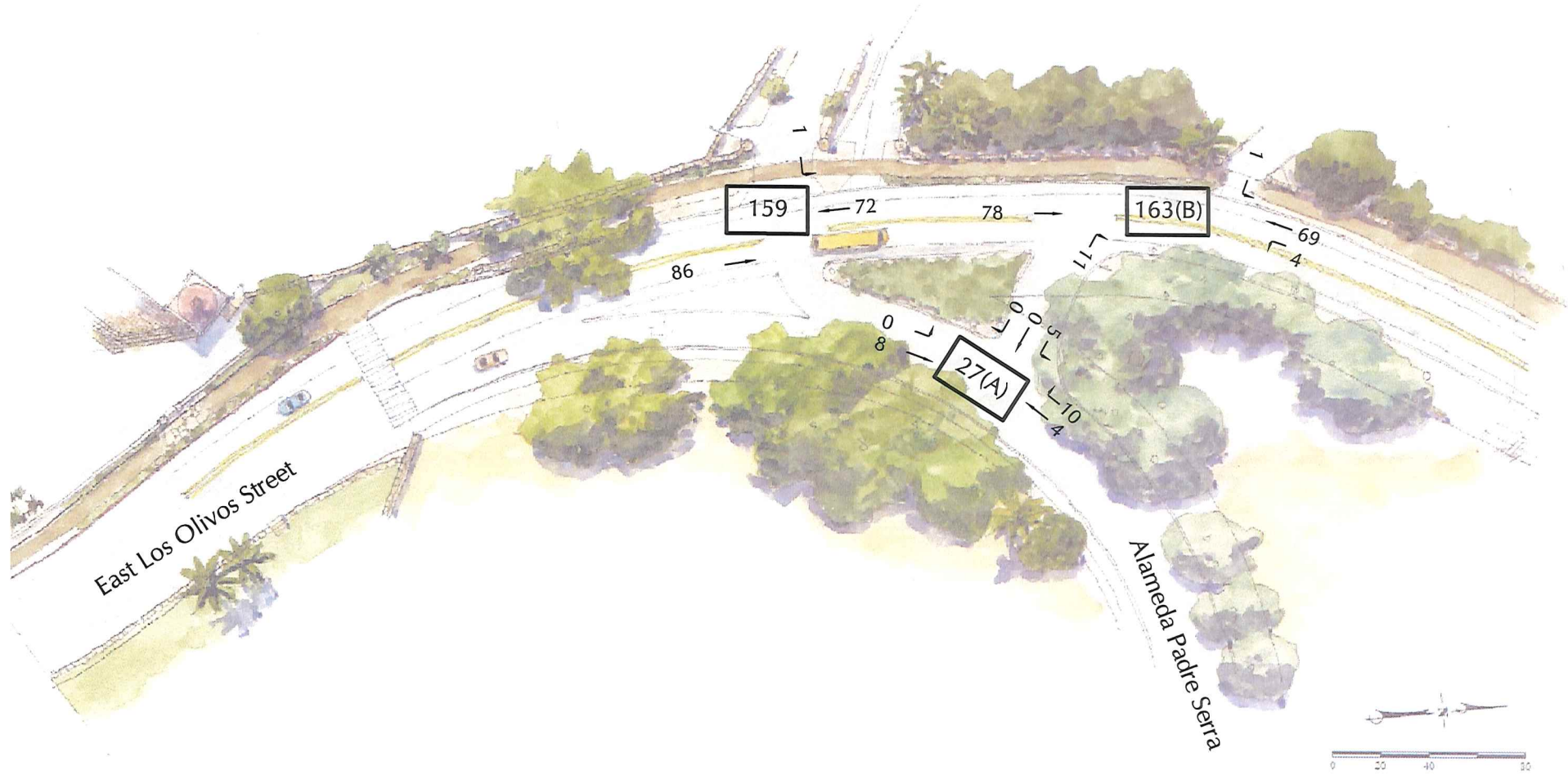
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 XXXX - Total Intersection Volume



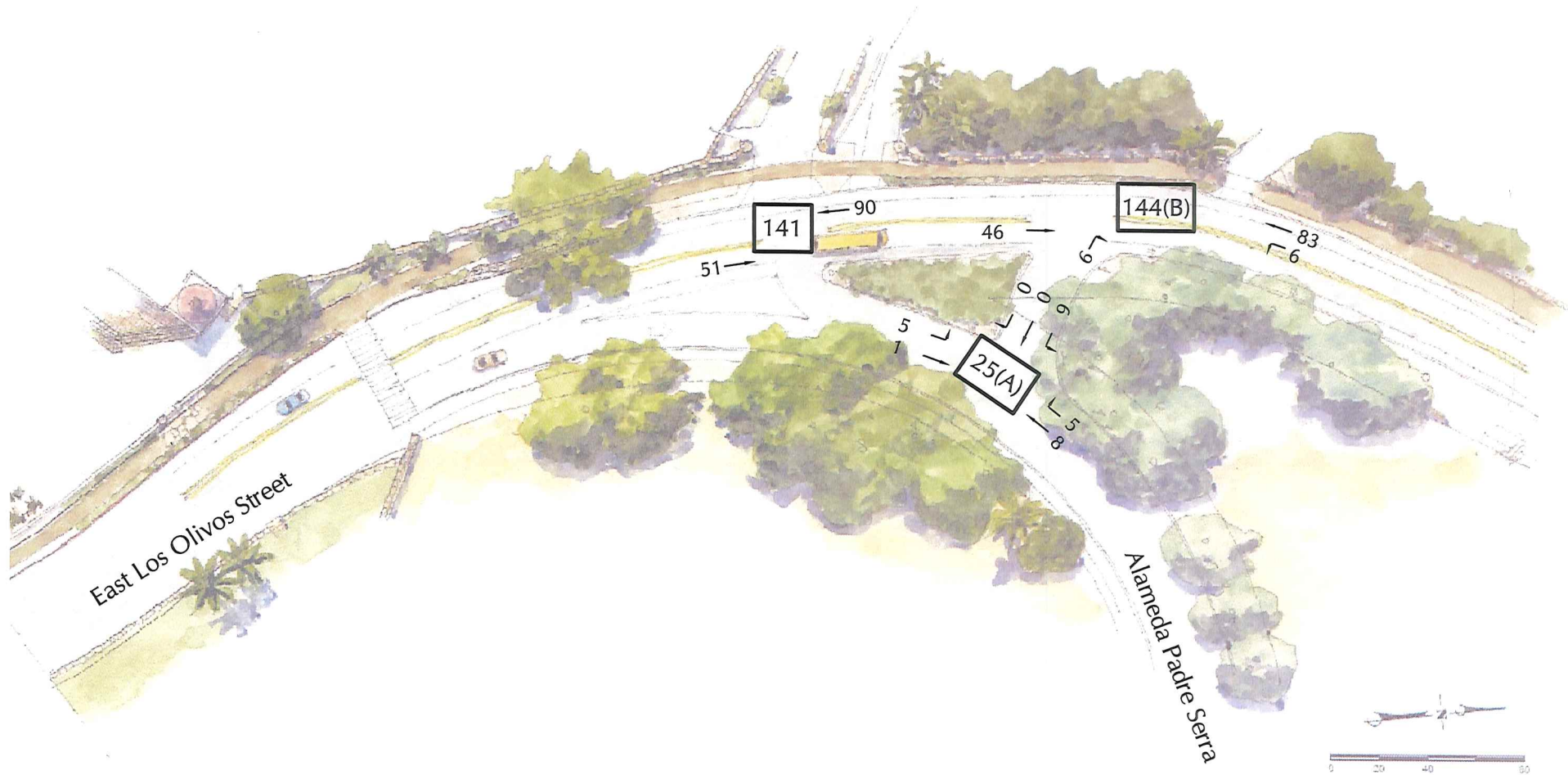
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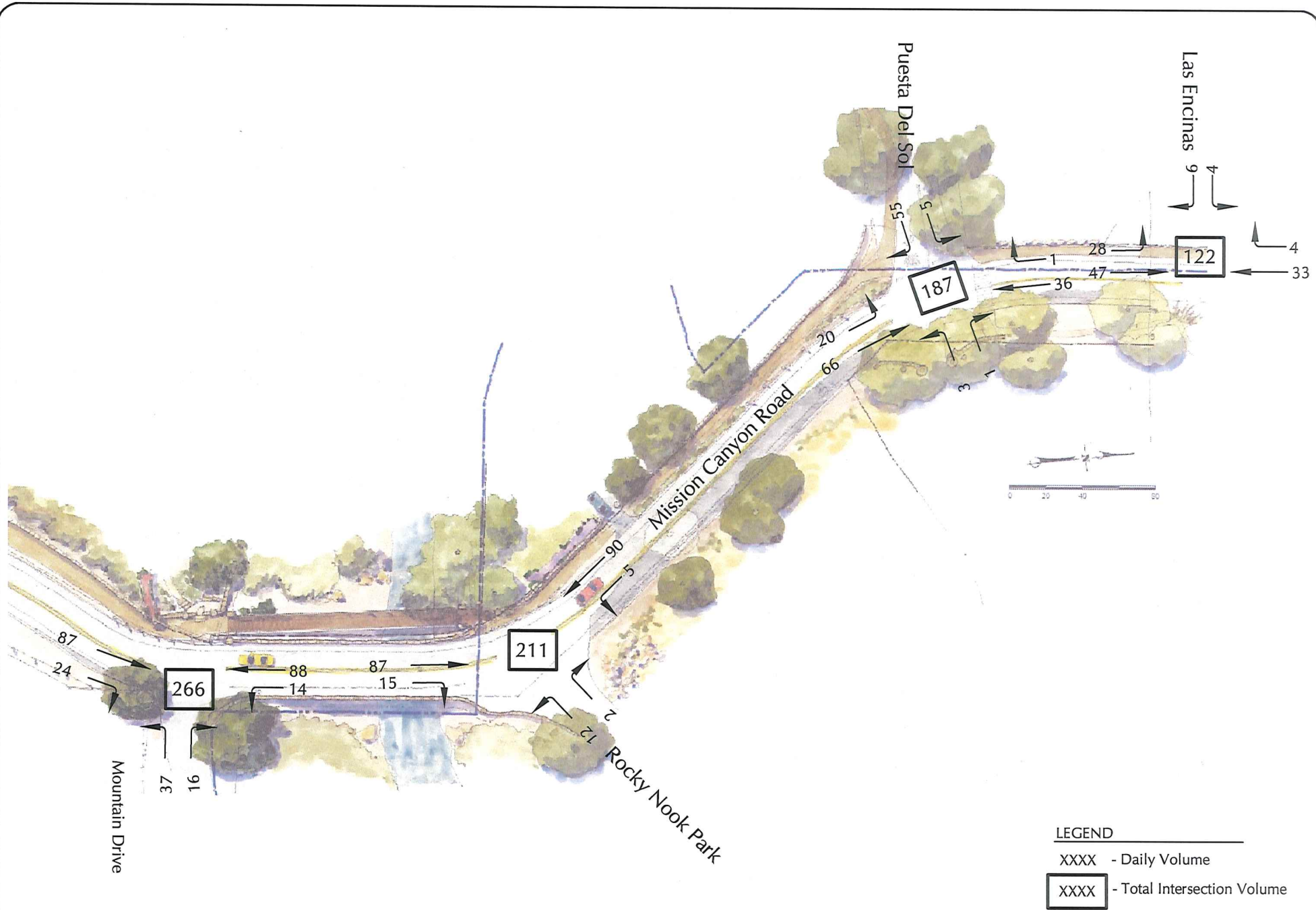
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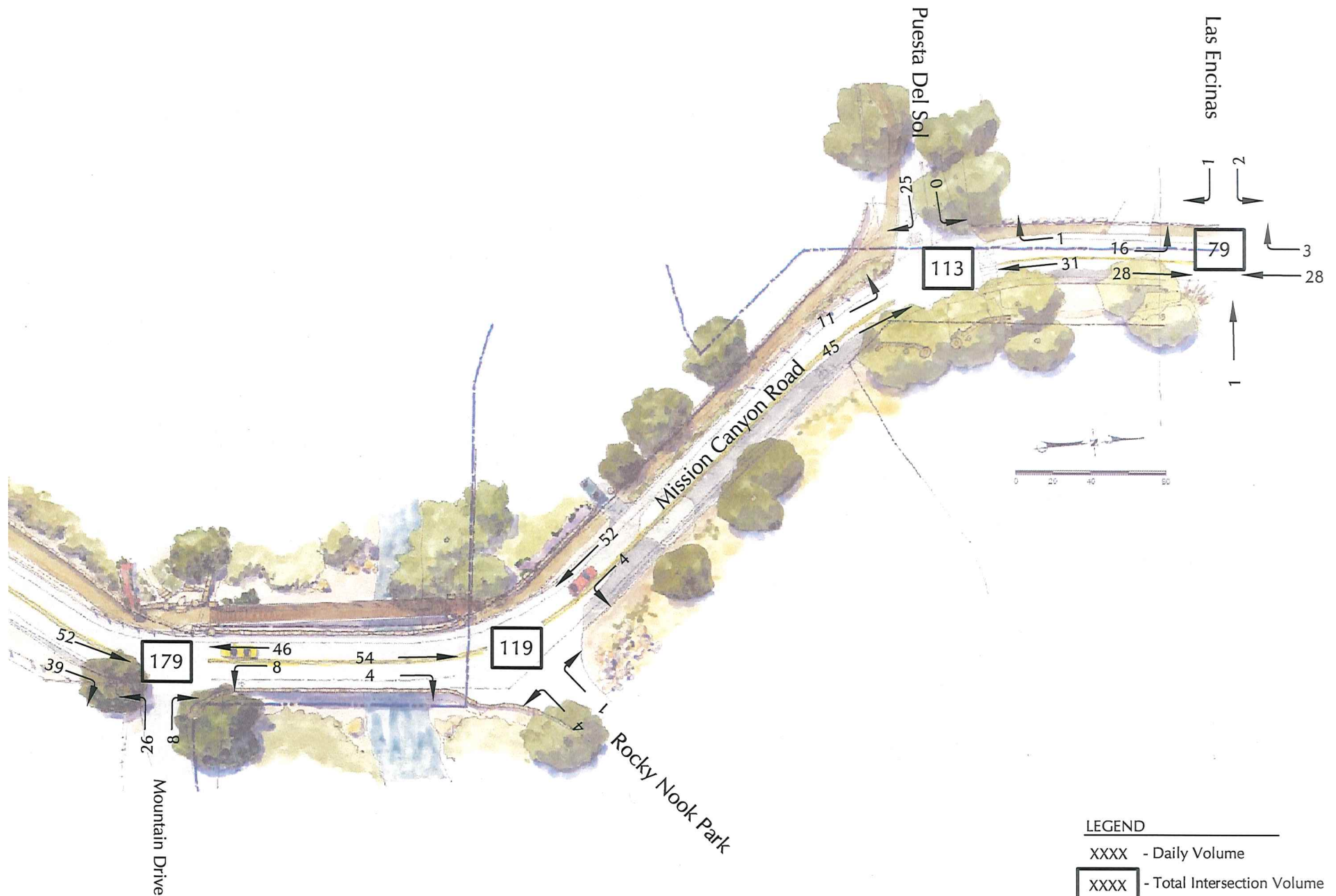
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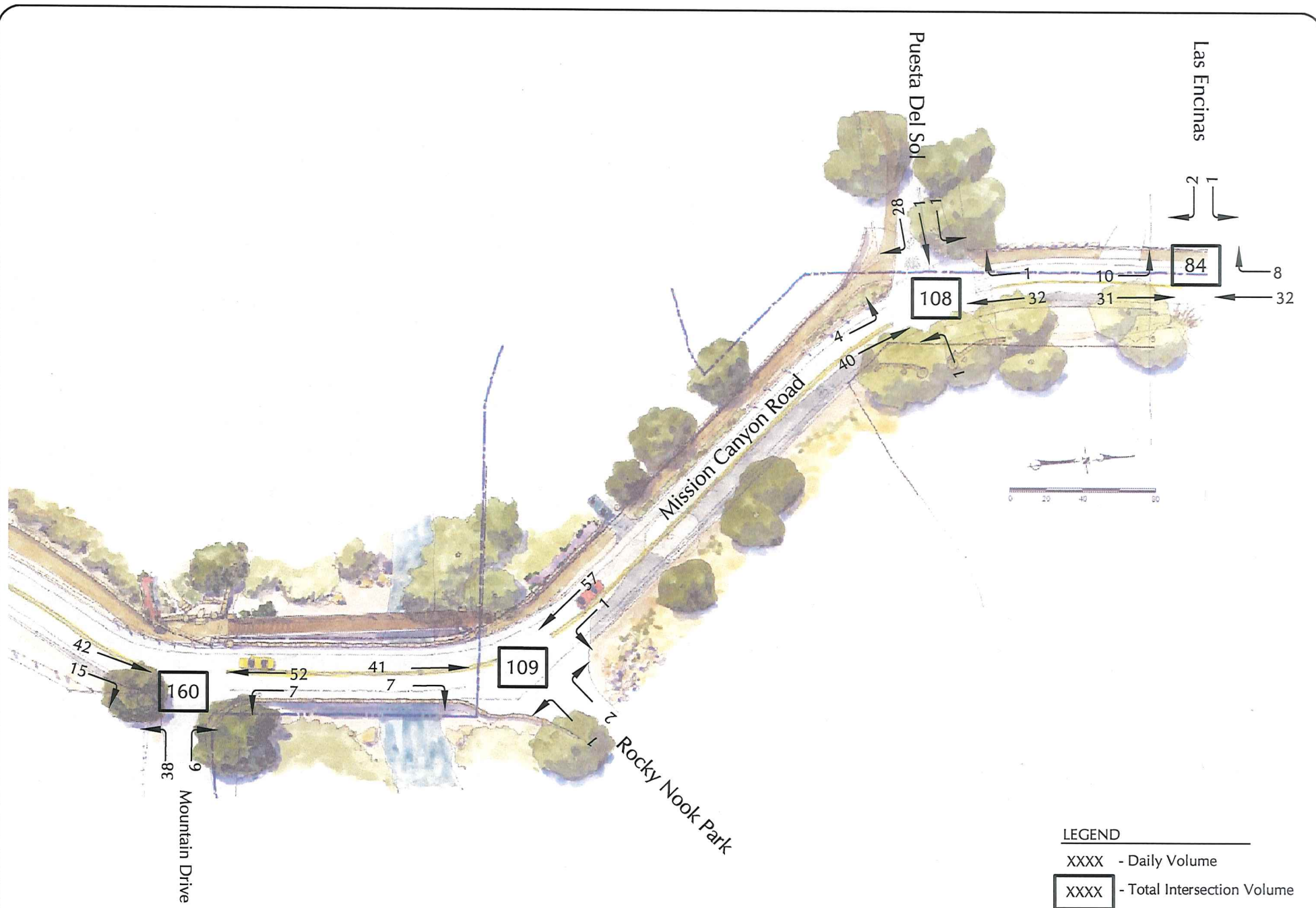


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