



LOS Engineering, Inc.
Traffic and Transportation

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February 20, 2015

Mr. Nick Ortiz
County of San Diego, Dept. of Public Works
5510 Overland Avenue
San Diego, CA 92123

Subject: Trip Generation Analysis for Public Storage Project at 1164 Couchatta Lane (14-062)

Dear Mr. Ortiz:

LOS Engineering, Inc. is pleased to present this trip generation analysis to determine if a Traffic Impact Study (TIS) is required for a proposed Public Storage project located at 1164 Couchatta Lane within the Spring Valley Community Plan area of San Diego County.

PROJECT DESCRIPTION

The proposed Public Storage facility is planned with 896 storage units/vaults within a building of 124,560 SF on 1.42 acres to be located behind an existing Public Storage facility located at 1247 Sweetwater Road as shown in **Figure 1** (site plan included in **Attachment A**). As shown in Figure 1, project access will be from Sweetwater Rd using existing driveways.

Figure 1: Project Location



Source: Maps Google 2015.

PROJECT TRIP GENERATION

The project traffic generation was calculated using SANDAG trip rates from the *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. SANDAG provides rates for storage facilities by acre, vault, and square feet. The individual and average trip generation for the planned project is shown in **Table 1**.

Table 1: Project Trip Generation

Proposed Land Use	Rate	Size & Units	ADT	%	Split	AM			PM		
						IN	OUT	%	Split	IN	OUT
Storage	30 /Acre	1.42 Acres	43	6%	0.5 0.5	1	1	9%	0.5 0.5	2	2
Storage	0.2 /Vault	896 Vaults	179	6%	0.5 0.5	5	5	9%	0.5 0.5	8	8
Storage	2 /KSF	124,560 SF	249	6%	0.5 0.5	7	7	9%	0.5 0.5	11	11
Average			157			5	5			7	7

Source: SANDAG *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

SF - Square Feet; KSF - 1,000 SF; ADT-Average Daily Traffic; Split-percent inbound and outbound.

TRAFFIC IMPACT STUDY CRITERIA

The criteria for the need to prepare a Traffic Impact Study are documented in the County of San Diego *Report Format & Content Requirements* dated August 24, 2011. A copy of the County criteria is shown below in **Exhibit 1**.

Exhibit 1: County Traffic Impact Study Criteria

Table 1 - County Criteria for the Need to Prepare a Traffic Impact Study (TIS)

PROJECT GENERATED TRAFFIC*	ISSUE SPECIFIC TIS	FOCUSED TIS	FULL TIS NEEDED	CONGESTION MANAGEMENT ANALYSIS NEEDED
Less than 200 Average Daily Trips OR Less than 20 Peak Hour Trips	No*	No*	No	No
200-500 Average Daily Trips OR 20-50 Peak Hour Trips	Yes	No	No	No
500 Average Daily Trips OR 50 Peak Hour Trips	No	Yes	No	No
1,000 Average Daily Trips OR 100 Peak Hour Trips	No	No	Yes	No
2,400 Average Daily Trips OR 200 Peak Hour Trips	No	No	Yes	Yes

* Other situations could result in a request for an Issue Specific or Focused Traffic Impact Study. These include, but are not limited to, those issues addressed in this report.

NOTE: Analysis of cumulative traffic impacts may require a Traffic Impact Study, even when project generated traffic volumes alone do not. See Attachment C.

As shown in Exhibit 1, a Traffic Impact Study is not required because the project is calculated to generate an average of less than 200 daily trips and less than 20 peak hour trips.

The County of San Diego *Report Format & Content Requirements* dated August 24, 2011 also notes on the bottom of page 2:

“When a proposed project generates less than 200 average daily trips (ADT), in most cases (given the distribution of traffic onto County Circulation Element road and the traffic impact criteria identified in Table 1), the proposed project will not result in direct traffic impacts.”

Based on the aforementioned, the project would not result in any direct traffic impacts based on the County’s Traffic Guidelines significance (CEQA) criteria.

SWEETWATER ROAD ADT AND LOS

Sweetwater Road from Lemon Grove City limits to Jamacha Boulevard is classified as a *4.1B Major Road with intermittent turn lanes* on the County Mobility Element Network map (a copy of the County Mobility Element map is included in **Attachment B**).

The street segment was analyzed based on the functional classification of the roadway using the County of San Diego *Average Daily Vehicle Trips* capacity table as shown in **Table 2**.

Table 2: Street Segment Daily Capacity and LOS

Proposed GPU Road Classification		LOS A	LOS B	LOS C	LOS D	LOS E
Major Road w/raised median	4.1A	<14,800	<24,700	<29,600	<33,400	<37,000
Major Rd w/intermittent turn lanes	4.1B	<13,700	<22,800	<27,400	<30,800	<34,200

Source: County of San Diego Public Road Standards, March, 2012.

The Average Daily Traffic (ADT) volume for Sweetwater Road in the vicinity of the project driveways was obtained from SANDAG. SANDAG shows an ADT of 15,600 under year 2008 and year 2020 conditions as shown in **Attachment C**. The Level of Service (LOS) for this segment of Sweetwater without and with the project is at LOS B as shown in **Table 3**.

Table 3: Street Segment LOS

Segment	Classification (as built)	Existing				Project Daily Volume	Existing + Project					
		Daily Volume	LOS E Capacity	V/C	LOS		Daily Volume	Daily Volume	LOS E Capacity	V/C	LOS	Change in V/C
Sweetwater Road												
Adjacent to Project Dwys	Major Road	15,600	34,200	0.456	B	157	15,757	34,200	0.461	B	0.005	No

Notes: Classification (as built): 4U+TWLTL = 4 lane undivided roadway with two way left turn lane. NP: No Parking, P: Parking. Daily volume is a 24 hour volume. LOS: Level of Service. V/C: Volume to Capacity ratio. Sig? = Significant Impact (y or n).

TIF PROGRAM

A Traffic Impact Fee (TIF) program was created by the County to mitigate any potential local and regional cumulative traffic impacts. As part of the application process, the applicant will participate in the TIF program to mitigate any potential cumulative traffic impacts.

PROJECT REFINEMENTS

In the event that the project size is refined after completion of this analysis, a sensitivity trip generation is provided below in **Table 4** to show that an increase to say 925 vaults or 135,000 square feet would not result in a significant change to the trip generation nor change the findings of this analysis.

Table 4: Project Trip Generation Sensitivity Comparison

Proposed Land Use	Rate	Size & Units	ADT	%	Split	AM		PM			
						IN	OUT	%	Split	IN	OUT
Storage	30 /Acre	1.42 Acres	43	6%	0.5 0.5	1	1	9%	0.5 0.5	2	2
Storage	0.2 /Vault	925 Vaults	185	6%	0.5 0.5	6	6	9%	0.5 0.5	8	8
Storage	2 /KSF	135,000 SF	270	6%	0.5 0.5	8	8	9%	0.5 0.5	12	12
Average			166			5	5			7	7

Source: SANDAG *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

SF - Square Feet; KSF - 1,000 SF; ADT-Average Daily Traffic; Split-percent inbound and outbound.

CONCLUSION

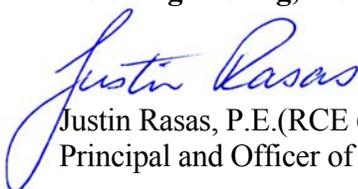
The purpose of this analysis was to determine if a Traffic Impact Study is required for a proposed Public Storage project located at 1164 Coughatta Lane within the Spring Valley Community Plan area of San Diego County. The project is calculated to generate an average of 157 ADT, with 10 AM trips (5 inbound and 5 outbound) and 14 PM trips (7 inbound and 7 outbound). The project trip generation is less than that required for TIS of 200 ADT and 25 peak hour trips; therefore, a TIS is not recommended according to the County guidelines.

The County of San Diego *Report Format & Content Requirements* dated August 24, 2011 also notes that when a proposed project generates less than 200 average daily trips, in most cases, the proposed project will not result in direct traffic impacts. Therefore, the project would not result in any direct traffic impacts based on the County’s Traffic Guidelines significance (CEQA) criteria and as additionally supported by LOS B conditions on Sweetwater Road.

As part of the application process, the applicant will participate in the TIF program to mitigate any potential cumulative traffic impacts.

If other uses are to be proposed in the future, then the applicant should revise the trip generation analysis to determine if a TIS would be required. Please call me at 619-890-1253 if you have any questions.

Sincerely,
LOS Engineering, Inc.



Justin Rasas, P.E.(RCE 60690), PTOE
 Principal and Officer of LOS Engineering, Inc.

Attachments

ATTACHMENT A

SITE PLAN



PROJECT INFORMATION

Project Address (New) 1164 Coughatta Lane, Spring Valley, CA 91977
 APN 578-172-1800 (southern)
 APN 578-172-1700 (northern)
 Site Area: 1.42 Acres
 Project Address (Existing) 1247 Sweetwater Rd., Spring Valley, CA 91977
 APN 578-172-3900
 Site Area: 2.48 Acres
 Zone: C36 - General Commercial
 CUP Required: Yes- Major Mod to existing CUP
 Building Setbacks:
 Street 50'- not applicable to new site (interior site)
 Sides 5'
 Rear 15'
 Building Height 35'
 Maximum Site Coverage: none
 Occupancy: S-1 Mini Warehouse
 Construction Type: II-B Proposed 3 story building fully sprinkler

BUILDING AREA CALCULATIONS

Existing Buildings:	Total (3) stories	112,733 s.f.
	Total Existing units	827
Proposed New Building:	Total (3) stories	124,560 s.f.
	Total new units	896

PARKING ANALYSIS

Parking required per code: .015 parking spaces per storage unit

(E) Units	827 x .015 = 12.41 sp
(N) Units	896 x .015 = 13.44 sp
Total required	25.85 sp
Total provided	73.00 sp



CONCEPTUAL SITE PLAN
 PUBLIC STORAGE - 1247 SWEETWATER ROAD, SPRING VALLEY, CA



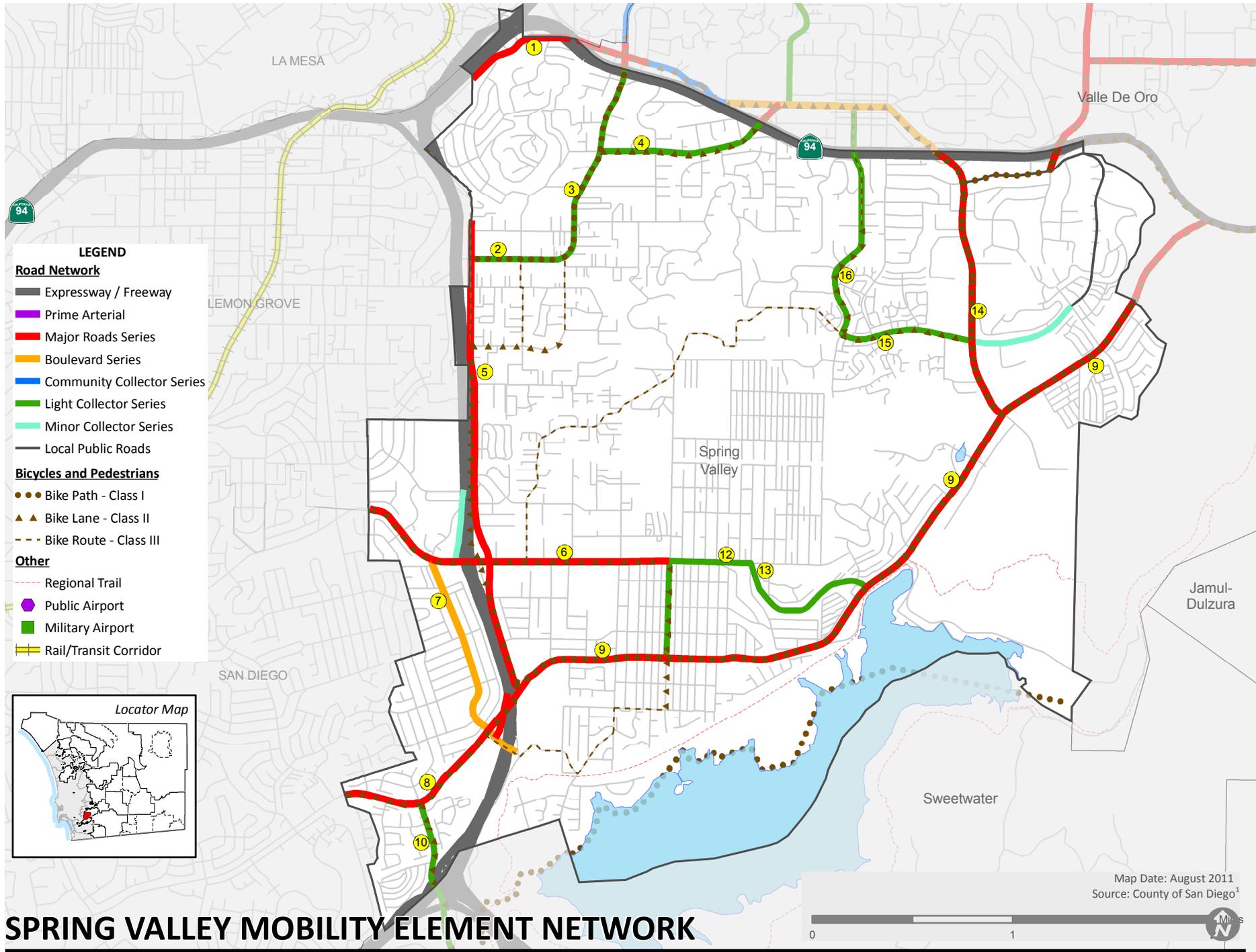
DATE: 02.10.15

SHEET 2

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ATTACHMENT B

SAN DIEGO MOBILITY ELEMENT NETWORK FOR SPRING VALLEY



SPRING VALLEY MOBILITY ELEMENT NETWORK

Mobility Element Network—Spring Valley Community Planning Area Matrix			
ID ^a	Road Segment	Designation/Improvement #.#X = [# of lanes].[roadway classification][improvement]	Special Circumstances
1	Broadway/Campo Road (SA 1010) <u>Segment:</u> Lemon Grove city limits to SR- 94 (Valle de Oro)	4.1A Major Road Raised Median	None
2	Troy Street (SA 950.2) <u>Segment:</u> Sweetwater Road to Bancroft Drive	2.2D Light Collector Improvement Options [Continuous Turn Lane]	None
3	Bancroft Drive (SA 950.2) <u>Segment:</u> Troy Street to SR-94	2.2D Light Collector Improvement Options [Continuous Turn Lane]	Accepted at LOS E <u>Segment:</u> Troy Street to State Route 94 eastbound ramp
4	Kenwood Drive (SC 2122) <u>Segment:</u> Bancroft Drive to the SR-94 interchange ramps	2.2D Light Collector Improvement Options [Intermittent Turn Lanes]	None Shoulder as Parking Lane Separate Bike Lane required—Bancroft Drive to Helix Street
5	Sweetwater Road (SF 1269) <u>Segment:</u> Lemon Grove city limits to Jamacha Boulevard	4.1B Major Road Intermittent Turn Lanes	None
6	Jamacha Road (SA 990) <u>Segment:</u> San Diego city limits to Grand Avenue	4.1B Major Road Intermittent Turn Lanes	Accepted at LOS E/F <u>Segment:</u> SR-125 southbound ramp to Sweetwater Road
7	Elketon Boulevard (SC 2190) <u>Segment:</u> Jamacha Road to Quarry Road	4.2B Boulevard Intermittent Turn Lanes—Jamacha Road to Paradise Valley Road 2.2E Community Collector Paradise Valley Road to Quarry Road	Shoulder as Parking Lane Separate Bike Lane required—Jamacha Road to Paradise Valley Road
8	Paradise Valley Road (SA 1050) <u>Segment:</u> San Diego city limits to Sweetwater Road	4.1B Major Road Intermittent Turn Lanes	Accepted at LOS F <u>Segment:</u> Elkelton Boulevard to Sweetwater Road
9	Jamacha Boulevard (SF1397) <u>Segment:</u> Sweetwater Road to Valle de Oro CPA boundary	4.1A Major Road Raised Median	None

ATTACHMENT C

SANDAG VOLUMES

Forecasted Volumes

[TFIC Home](#)

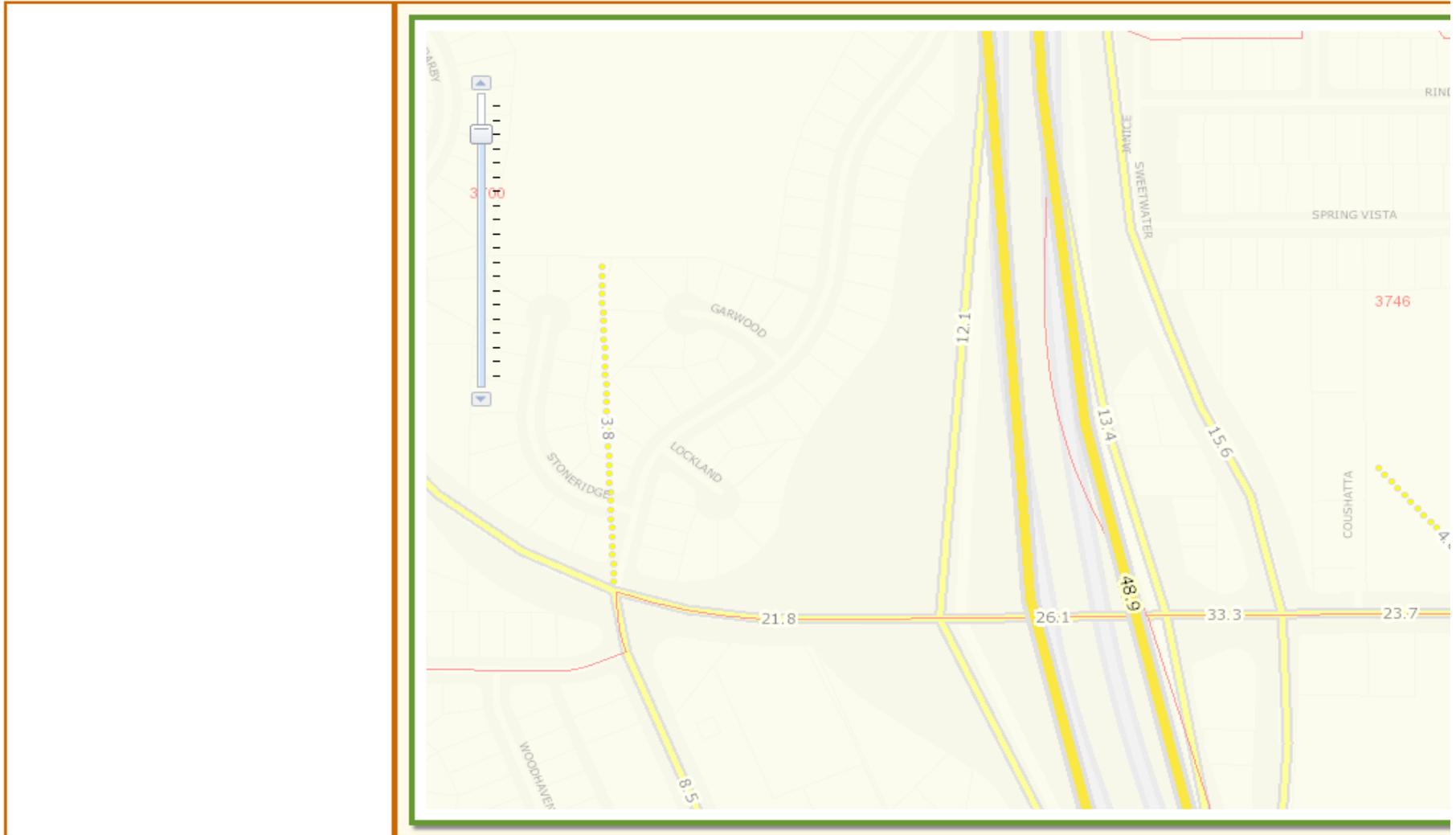
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