



## MEMORANDUM

Date: July 20, 2022

To: Robert H. Newdoll, Briar Rose Estates, LLC  
Mark Vasquez, Norman & Vasquez Associates

From: Michelle Matson and Joe Fernandez, CCTC

**Subject: Hill Street Terraces – Updated Transportation Analysis**

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This memorandum summarizes the transportation analysis for the Hill Street Terraces located in the community of Nipomo in unincorporated San Luis Obispo County. The project proposes 24 multi-family residential units. The project would generate 157 net new vehicle trips per weekday, including ten AM peak hour trips and 11 PM peak hour trips. The site plan is shown in **Figure 1**.

This analysis was updated to include evaluation of stop sign controls at the request of County staff.

### **TRANSPORTATION ANALYSIS SUMMARY**

The South County Road Improvement Fee (RIF) includes interchange and other improvements in the Nipomo area. The project will pay their fair share for the improvements by payment of the RIF Area 1 fee based on the number of PM peak hour trips.

The project will construct frontage improvements on Hill Street and Blume Street adjacent to the project. Consistent with other portions of Blume Street, Class II bike lanes are recommended as proposed. In general, the proposed improvements comply with County Standards; however, a detached sidewalk setback is required per County Standard Drawing A-5b and five-foot detached sidewalks are required per County Standard Drawing C-4. We recommend that no parking areas be installed on Blume Street and Hill Street for sight distance consistent with California Manual on Uniform Traffic Control Devices (CAMUTCD) guidance. The frontage improvement and no parking recommendations are also shown on **Figure 1**.

No changes are recommended to the existing two-way stop control configurations at the Blume Street/Hill Street, Blume Street/Kelly Court, and Blume Street/Grande Avenue intersections. The August 2020 version of the County's Traffic Regulation Codes (TRC) does not include the existing stop signs on Hill Street at Blume Street, or the easterly stop sign on Kelly Court at Blume Street. We recommend County staff update the TRC to include the existing stop signs and bikeways when installed. We also recommend that County staff update the Bikeways Plan to include the existing and proposed bikeways on Blume Street.

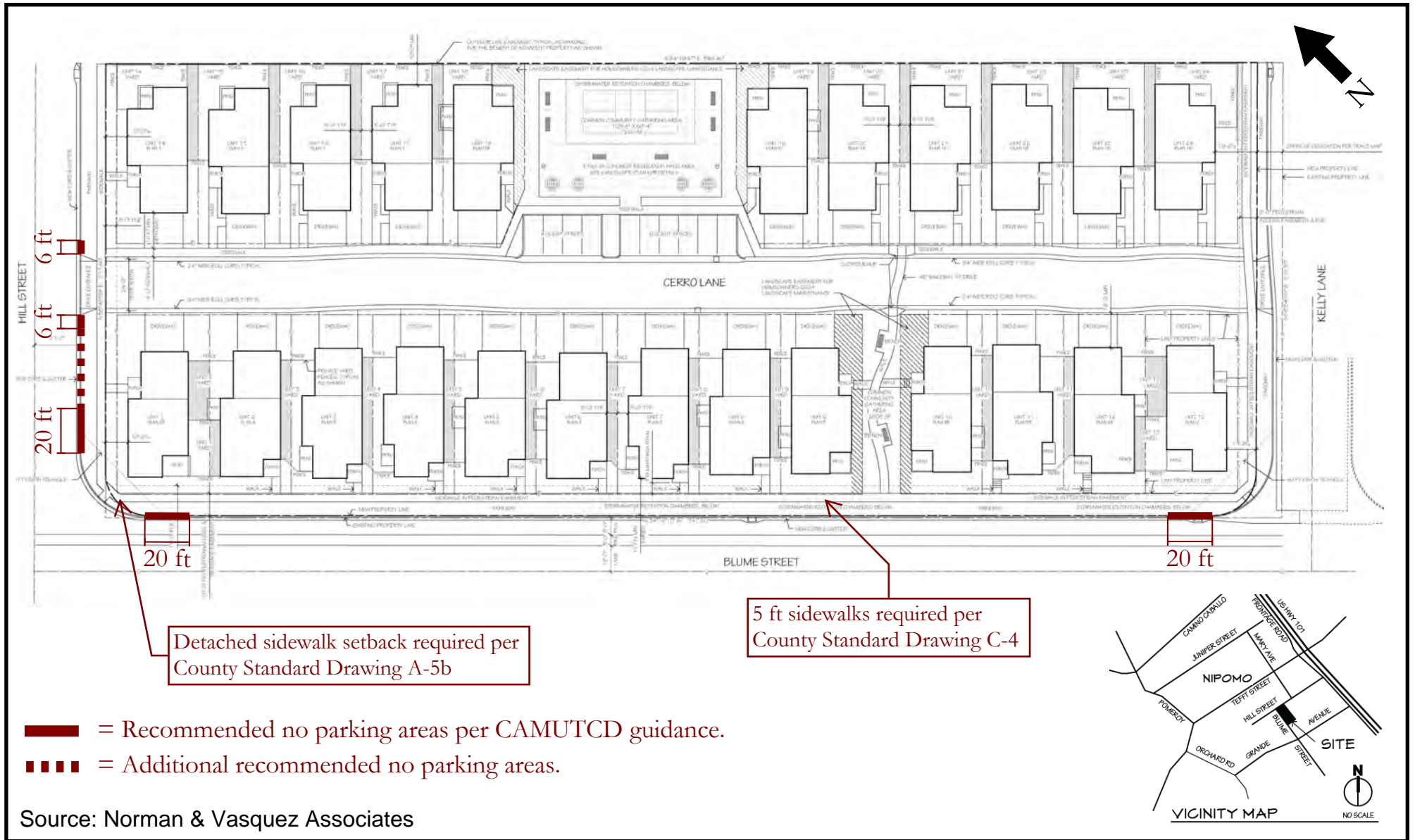
### **CEQA ANALYSIS**

In 2021, the County released draft guidelines and a sketch planning tool for evaluating transportation impacts using vehicle miles traveled (VMT) consistent with recently mandated changes to the California Environmental Quality Act (CEQA) and state Office of Planning and Research (OPR) guidance. The County's SB743 Sketch VMT Tool was used to evaluate VMT as shown in **Attachment A** and **Table 1** below.

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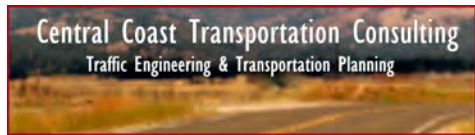
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# Figure 1 - Site Plan



■ = Recommended no parking areas per CAMUTCD guidance.  
■■■■ = Additional recommended no parking areas.

Source: Norman & Vasquez Associates



August 2021

Hill Street Terraces

**Table 1: VMT Tool Summary**

VMT Tool Summary	
VMT Per Capita	
<i>Threshold</i>	27.2
Current	36.8
<b>w/Project</b>	<b>36.8</b>

Source: County of SLO Quick Response Tool (Version 6.6).

The parcel exceeds the VMT per capita thresholds with and without the project; however, the project does not increase the VMT per capita.

The County guidelines also describe screening criteria for projects consistent with the General Plan presumed to have a less-than-significant impact based on project type, intensity, or location. Projects located within an area identified as having below-threshold VMT are presumed to have a less-than-significant impact. The existing adjacent neighborhoods in Nipomo west and south of the proposed project are mapped as having a below-threshold VMT as shown in **Exhibit 1** below. However, the project is not included in these areas.

**Exhibit 1: Nipomo VMT Residential Screening Areas**

The project is located within a Residential Multi Family (RMF) land use category. Adjacent RMF land uses on the west side of South Frontage Road south of Grande Avenue are included in the residential screening area. The project and the adjacent uses were all also part of the same census tract and residential data collected would not likely be further segregated. In addition, the project is closer to key goods and services, within walking distance to multiple restaurants, a major grocery store, and other destinations.

The SLOCOG Travel Demand Model was reviewed to determine if the proposed project would have similar characteristics to the adjacent pre-screened areas. **Exhibit 12** shows that the project zone, #1143, produces residential VMT per capita of 17.25. This is below the residential VMT per capita of the adjacent pre-screened zones, which show values of 19.89 and 18.17 residential VMT per capita. Therefore, it is reasonable to conclude that the proposed project would produce VMT levels similar to the adjacent pre-screened areas which would result in a less-than-significant impact to VMT.

**Exhibit 2: SLOCOG Model Residential VMT per Capita**

### EXISTING SETTING

The existing roadways in the vicinity of the project include:

- *Blume Street* is a two-lane local roadway with no posted speed limit and intermittent pedestrian facilities. Blume Street is uncontrolled at Hill Street and Kelly Lane and stop controlled at Grande Avenue.
- *Hill Street* is a two-lane local roadway with no posted speed limit and intermittent pedestrian facilities. Hill Street is stop controlled at Blume Street and Mary Avenue.
- *Kelly Court* is a two-lane local roadway west of Blume Street with no posted speed and continuous pedestrian facilities. Kelly Lane east of Blume Street is not currently a County maintained road.

No bicycle facilities are currently proposed on Hill Street, Blume Street, or Kelly Lane in the *County Bikeways Plan*.

### TRIP GENERATION

The project will construct 24 multi-family residential units and there are currently two single family residential units on the parcel that will be removed when the project is constructed. The Institute of Transportation Engineers (ITE) *Trip Generation Manual* 10th Edition was used to estimate project trip generation as shown in **Table 2**.

**Table 2: Project Trip Generation**

Project Trip Generation								
Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total
Residential <sup>1</sup>	24 DU	176	2	9	11	8	5	13
Existing Residential <sup>2</sup>	(2) DU	-19	0	-1	-1	-1	-1	-2
<b>Net New Vehicle Trips</b>		<b>157</b>	<b>2</b>	<b>8</b>	<b>10</b>	<b>7</b>	<b>4</b>	<b>11</b>
1. ITE Land Use Code #220, Multifamily Housing (Low-Rise). Average rates used. 3. ITE Land Use Code #210, Single-Family Detached Housing. Average rates used. Source: ITE Trip Generation Manual, 10th Ed. and Trip Generation Handbook, 3rd Ed., 2017; CCTC, 2021.								

The project would generate 157 net new vehicle trips per weekday, including ten AM peak hour trips and 11 PM peak hour trips. Project trips would primarily use Blume Street and Hill Street.

### **SITE ACCESS & CIRCULATION**

CCTC reviewed the site plan shown on **Figure 1**. The project will construct Cerro Lane (a private road) from Hill Street to Kelly Lane, as well as frontage improvements on Hill Street, Blume Street, and Kelly Lane.

The following sections summarize the collision analysis, roadway operations, intersections operations, sight distance, and frontage improvement recommendations.

#### ***Collision Analysis***

Traffic collision data was obtained from the Statewide Integrated Traffic Records System (SWITRS) for Hill Street, Blume Street, and Kelly Court in the project vicinity. The following summarizes the collision history between 2016 and 2020:

- Blume Street: Two collisions occurred on Blume Street between Grande Avenue and Hill Street. A rear end collision occurred north of Grande Avenue due to unsafe starting or backing and a sideswipe collision occurred south of Hill Street due to improper passing.
- Hill Street: Two collisions occurred on Hill Street between Blume Street and Mary Avenue. A rear end collision occurred east of Blume Street due to unsafe speed and a broadside collision occurred west of Mary Avenue due to an auto right-of-way violation.
- Kelly Court: Two collisions with parked vehicles occurred on Kelly Court west of Blume Street. They both occurred at different locations, one was due to unsafe speed, and one was due to improper turning.

All collisions were property damage only. There are no observed collision patterns, and no improvements are recommended.

### *Roadway Operations*

Consistent with County Circulation Studies, the average daily traffic (ADT) would need to exceed 4,000 on a local road for unacceptable LOS E operations. The historic ADT on Hill Street is shown in **Table 3**.

**Table 3: Hill Street Average Daily Traffic (ADT) Volumes**

<b>Hill Street Average Daily Traffic (ADT) Volumes</b>		
<b>Roadway Segment</b>	<b>Date</b>	<b>ADT</b>
Hill St (West of Mary Avenue)	7/2019	2,639
Hill St (West of Mary Avenue)	4/2016	2,781
Hill St (West of Mary Avenue)	6/2010	2,451
Source: San Luis Obispo County, 2021.		

The annual growth rate between the various counts ranged from approximately negative two percent to positive two percent with the annual growth rate between 2010 and 2019 of approximately one percent. Assuming a one percent growth rate between 2019 and 2041 (20-year forecast from 2021), the ADT on Hill Street would equal approximately 3,300 and operate acceptably.

No roadway volume data was available on Blume Street and the ADT would be expected to be lower than Hill Street. Based on the available roadway volumes, the Hill Street/Blume Street intersection would not currently meet CAMUTCD all-way stop warrants.

The future ADT on Kelly Lane is anticipated to be less than 500.

### *Intersection Operations*

Turning movement counts were collected at intersections on Blume Street from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM on Thursday, September 2, 2021. The hourly approach volumes are shown in **Table 4**. The turning movement count are included as **Attachment B**.

**Table 4: Hourly Vehicle Approach Volumes**

<b>Hourly Vehicle Approach Volumes</b>						
<b>Time</b>	<b>Blume Street</b>			<b>Cross Street</b>		<b>Total</b>
	<b>Southbound</b>	<b>Northbound</b>	<b>Total</b>	<b>Westbound</b>	<b>Eastbound</b>	
<i>Blume Street and Hill Street</i>						
7:00 AM	1	165	<b>166</b>	60	81	<b>141</b>
8:00 AM	0	72	<b>72</b>	48	32	<b>80</b>
4:00 PM	0	67	<b>67</b>	142	33	<b>175</b>
5:00 PM	0	57	<b>57</b>	139	29	<b>168</b>
<i>Blume Street and Kelly Court</i>						
7:00 AM	43	96	<b>139</b>	21	44	<b>65</b>
8:00 AM	30	48	<b>78</b>	10	16	<b>26</b>
4:00 PM	86	59	<b>145</b>	4	14	<b>18</b>
5:00 PM	86	51	<b>137</b>	4	14	<b>18</b>
<i>Blume Street and Grande Avenue</i>						
7:00 AM	22	0	<b>22</b>	41	93	<b>134</b>
8:00 AM	27	0	<b>27</b>	28	79	<b>107</b>
4:00 PM	65	0	<b>65</b>	42	75	<b>117</b>
5:00 PM	62	0	<b>62</b>	44	85	<b>129</b>

Source: Metro Traffic Data, 2021.

CAMUTCD Section 2B.07 provides guidance for the installation of multi-way stop control including the minimum volumes as summarized below:

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

The CAMUTCD minimum volume criteria for multi-way stop conditions are not met with or without the addition of project traffic. In addition, the signal warrant, left-turn conflict, sight distance, collision history (five collisions in one year), and other multi-way stop criteria in CAMUTCD Section 2B.07 are not met.

All intersections would operate at LOS B or better with a maximum delay of approximately 12 seconds on any cross street under existing conditions with project traffic. Assuming a one percent growth rate for 20 years, would also result in LOS B or better intersection operations with a maximum delay of 13 seconds under cumulative conditions with project traffic and no additional traffic control is warranted or recommended.

The August 2020 version of the County's Traffic Regulation Codes (TRC) do not include the existing stops signs on Hill Street at Blume Street, or the easterly stop sign on Kelly Court at Blume Street (see 15.215.213 for westerly sign).

### *Sight Distance*

Street features including trees, utility poles, signs, and parked vehicles can inhibit sight distance in urban areas. From the northern driveway on Hill Street, there is a clear line of sight from west of Blume Street to east of Mary Avenue meeting County Standard A-5a for 40 miles per hour (MPH).

From the western driveway on Kelly Lane at Blume Street, the existing grades, parked vehicles, and a utility pole are currently obstructing the sight distance. Construction of the frontage improvements on Blume Street will widen the road and reduce the grades improving the sight distance to the length of the roadway meeting County Standard A-5a for 40 MPH. However, vehicles will still need to “creep” into the parking lane to see oncoming traffic prior to making a turning movement if vehicles are present.

Per CAMUTCD guidance, “At all intersections, one stall length on each side measured from the crosswalk or end of curb return should have parking prohibited. A clearance of 6 feet measured from the curb return should be provided at alleys and driveways.” We recommend red curb and/or no parking signs be installed on Blume Street and Hill Street consistent with CAMUTCD guidance. With the no parking recommendations, less than two parking spaces (approximately 36 feet) would be available on Hill Street between Blume Street and the Hill Street driveway. To maximize sight distance for drivers exiting the driveway we also recommend parking be removed in this location. The recommended no parking areas are shown on **Figure 1**.

### *Frontage Improvements*

The site plan currently shows four-foot detached sidewalks; however, five-foot detached sidewalks are required per County Standard Drawing C-4. In addition, all intersection approaches shall comply with County Standard A-5a and A-5b and the detached sidewalk setback in A-5b is not currently shown.

Although no bike lanes are proposed on Blume Street in the County Bikeways Plan, the plan recommends that, “All new roadway projects shall be evaluated for multi-modal improvements.” Blume Street will be extended by adjacent development from Hill Street to Tefft Street. The portion of Blume Street constructed south of Tefft Street and the frontage improvements just south of the proposed project both constructed Class II bike lanes on the corridor. A twelve-foot travel lane, five-foot bike lane, and eight-foot parking lane as proposed complies with County Standard A-2c and is recommended. The project will complete the sidewalks on Blume Street between Hill Street and Grande Street.

County Standard Drawing A-2c is also recommended on Hill Street and County Standard Drawing A-2b is recommended on Kelly Lane. The improvements are generally consistent with a 21-foot cross-section proposed on Hill Street. The frontage improvement recommendations are shown on **Figure 1**.



## **ATTACHMENTS**

Attachment A: San Luis Obispo County SB743 Sketch VMT Tool

Attachment B: Turning Movement Counts

## **REFERENCES**

\_\_\_\_\_. 2020, Revision 5. California Manual on Uniform Traffic Control Devices, 2014 Edition.

California Governor's Office of Planning and Research (OPR). December 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA.

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GHD. January 2016. 2015 South County Circulation Study & Roadway Improvement Fee Update.

Institute of Transportation Engineers (ITE). 2017. Trip Generation Manual, 10th Edition.

Transportation Research Board (TRB). 2017. Highway Capacity Manual, 6th Edition.