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13th Street Bridge – Traffic Impact Analysis Addendum

Overview

The County of San Diego Department of Public Works, (DPW) in cooperation with the California Department of Transportation (Caltrans) proposes to replace the existing undersized culvert with a bridge where 13th Street/Maple Street crosses the Santa Maria Creek, in the unincorporated community of Ramona in San Diego County. The project consists of improvements to 13th Street/Maple Street between Main Street and Walnut Street and construction of an approximately 480-foot-long bridge over Santa Maria Creek to replace the existing corrugated steel culvert. The bridge and approaches would include two 12-foot travel lanes, three-foot shoulders on each side, and an 8-foot wide multi-use pathway to accommodate pedestrians, bicyclists, and equestrians. In addition, three bridge barriers with a total width of approximately 4-feet, consisting of two edge deck rails and one pedestrian barrier would be installed to separate pathway users from the travel lane and creek. The new bridge would be elevated by approximately 10-feet to convey the 100-year storm event based on County and Federal Highway Administration requirements.

The 13th Street Bridge Traffic Impact Analysis Report (TIA) was prepared by Linscott, Law, & Greenspan Engineers (LLG) and the draft finalized in October 2013; the TIA was prepared based on a limited preliminary bridge design available at that time. Since then, the bridge design has progressed, and more information is now available to address gaps in the analysis from the original TIA and ensure the traffic analysis is prepared in accordance with the County of San Diego *Guidelines for Determining Significance (August 2011)*, *County of San Diego Report Format and Content Requirements* (*August 2011*), and the California Environmental Quality Act (CEQA). In addition, since traffic counts for the original TIA were taken in 2013 and more than two years had passed, new counts were taken by Chen Ryan in 2018 and documented in the 13th Street Bridge – Data Validation Memorandum, dated February 28, 2019, to ensure that the results of the original TIA are still accurate and can be relied upon.

This Addendum addresses the following CEQA questions. Would the project:

1. Create (or increase) hazards associated with existing transportation design features due to a substantial increase in traffic; or

2. Create (or increase) hazards to pedestrians or bicyclists due to an increase in traffic volumes, pedestrian volumes, or bicycle volumes.

Based on the scope of the 2013 TIA and *13th Street Bridge – Data Validation Memorandum*, a total of seven (7) roadway segments and five (5) intersections (Figure 1) were evaluated:

Roadways

1. Olive Street, between Maple Street and Pine Street
2. Main Street (SR-67), between 14th Street and 13th Street
3. Main Street (SR-67), between 13th Street and 10th Street
4. Maple Street, between Olive Street and Walnut Street
5. 13th Street, south of Walnut Street
6. 13th Street, north of Main Street (SR-67)
7. Pine Street/10th Street (SR-78), between Olive Street and Main Street (SR-67)

Intersections

1. Maple Street / Olive Street
2. Pine Street / Olive Street
3. Maple Street/13th Street / Walnut Street
4. 13th Street / Main Street (SR-67)
5. 10th Street (SR-78) / Main Street (SR-67)

Hazards Assessment Due to an Existing Transportation Design Feature

Per the County's Transportation and Traffic Guidelines for Determining Significance, the creation (or increased risk) of Hazards Due to Existing Transportation Design Features were evaluated considering the following factors:

- Design features/physical configurations of access roads adversely affecting the safe movement of all users along the roadway.

- The percentage or magnitude of increased traffic on the road due to the proposed project affecting the safety of the roadway.

- The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers, resulting in possible conflicts with other users or stationary objects.

- Conformance of existing and proposed roads to the requirements of the private or public road standards, as applicable.

There are eight (8) existing access driveways/roads directly (physically) connecting to where roadway improvements are being proposed – six (6) on 13th Street and two (2) on Maple Street. Per review of the 70% complete plans, four (4) of these eight (8) access locations have been identified for improvement while the remaining four (4) will be closed. Evaluation of the proposed access driveway/road improvements reveals an intended design compliance with all County Public Road Standards and County Private Road Standards, as applicable. Specifically, the provided plan sheets show allowable slopes, vertical curves, and horizontal geometry at the four (4) locations to be improved based on the aforementioned standards. Because all access driveways/roads to remain are being improved to current standards, no creation (or increased risk) of hazard related to the design features/physical configurations of access roads are anticipated.

Per the 2013 TIA, the proposed project is considered an "Operational Improvement … [and] is expected to redistribute background traffic within the local study areas but not generate new traffic." When reviewing the study segments on Olive Street, Maple Street, and 13th Street, all these segments have forecasted increases in ADT when comparing Long-Term (Year 2035) with Project to without Project. However, these increases do not significantly impact roadway capacity or traffic – this is in part because the improvement of 13th Street/Maple Street from a dirt road to a paved road provides a significant increase in operational safety and capacity for the segment. Additionally, the study segments on Main Street have no forecasted increase in ADT or see a reduction in ADT when comparing Long-Term (Year 2035) with Project to without Project. Therefore, no creation (or increased risk) of hazards due to the percentage or magnitude of increased traffic is anticipated.

Per review of the 70% complete plans, the proposed improvements in context of the physical conditions of the project site and the surrounding area reveal an intended design compliance with all County Public Road Standards, as applicable. The proposed roadway improvements on 13th Street/Maple Street and Walnut Street (non-mobility element roads) are based on a design speed of 30 MPH per the County Public Road Standards. Specifically, the provided plan sheets show all proposed horizontal roadway curves as having radii greater than or equal to 800' – this is acceptable based on the 30 MPH design speed. Additionally, the provided plan sheets show all proposed vertical roadway curves as having lengths and grade differences based on the 30 MPH design speed. Proposed roadway sections also show an acceptable cross slope of 2%. Finally, with the proposed demolition plans (e.g. removal of trees, etc.) designed to maximize sight distance there will be no increased hazards (i.e., stopping sight distance issues at the intersection of 13th Street and Walnut Street) from project grading or surface features. Therefore, no creation (or increased risk) of hazards due to the physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers, resulting in possible conflicts with other users or stationary objects is anticipated.

Per review of the existing project site conditions at the southern, western, and northern termini of the proposed project, the proposed project roadway improvements will tie into existing roadways that conform to the current County Public Road Standards, as applicable. At the eastern terminus of the project's 13th Street/Maple Street and Walnut Street intersection, roadway improvements will be designed to properly transition to the unpaved, existing dirt road, which will appear as a private driveway. Therefore, no creation (or increased risk) of hazard due to proposed improvements physically connecting to existing conditions is anticipated.

Hazards Assessment to Pedestrians or Bicyclists

Per the County Guidelines, creation (or increased) risk of Hazards to Pedestrians or Bicyclists were evaluated considering the following factors:

- Design features/physical configurations on a road segment or at an intersection that may adversely affect the visibility of pedestrians or bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.

- The amount of pedestrian activity at the project access points that may adversely affect pedestrian safety.

- The preclusion or substantial hindrance of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the project site.

- The percentage or magnitude of increased traffic on the road due to the proposed project that may adversely affect pedestrian and bicycle safety.

- The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers that may result in vehicle/pedestrian, vehicle/bicycle conflicts.

- Conformance of existing and proposed roads to the requirements of the private or public road standards, as applicable.

- The potential for a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities.

Per review of the 70% complete plans, the roadways designated for improvement will convert existing dirt lanes to paved lanes in addition to adding accessible pedestrian facilities where none existed previously. New ADA ramps, signing, striping, and stop control will only improve visibility conditions by better delineating the movements of cars, pedestrians, and bicyclists. Therefore, no creation (or increased risk) of hazards related to design features/physical configurations on a road segment or at an intersection that may adversely affect the visibility of pedestrians or bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists are anticipated.

Per existing count data from January 16, 2017, the peak hour pedestrian volume did not exceed 10 pedestrians at any location – this observed pedestrian activity is not significant. Therefore, no creation (or increased risk) of hazards related to the amount of pedestrian activity at the project access points that may adversely affect pedestrian safety are anticipated.

Per review of the County Bicycle Master Plan, there are no planned bikeways within the project limits or adjacent to the project site (no tie-ins at any terminus). Additionally, there is no adopted pedestrian area map for Ramona specifying planned pedestrian improvement. However, the Ramona Community Trails and Pathways Plan shows three (3) proposed trails/pathways within the project limits / adjacent to the project site. In review:

"Trail 8" is proposed along the Santa Maria Creek with a small section also running along Walnut Street east of 13th Street. Per review of the 70% complete plans, only the portion of the proposed trail running along Walnut Street east of the 13th is shown for construction.

"Trail 122" is proposed to run along 13th Street/Maple Street between Main Street and Olive Street. Per review of the 70% complete plans, only a portion of the trail between Walnut Avenue and the southern terminus of the project is shown for construction.

Lastly, "Pathway 30D", is proposed to run along Walnut Street between Lamar and the eastern terminus of Walnut Street (approximately 650' east of 13th Street). Per review of the 70% complete plans, no portion of the trail is shown for construction.

Along all segments of proposed roadway improvement where trails are not shown for construction, sidewalk is shown instead. The construction of these sidewalks and the other proposed project improvements aside from trails do not appear to preclude or substantially hinder the future construction of missing trail and pathway segments. Additionally, because the proposed project is improving facilities for non-motorized users by providing elevated walkways (compared to the existing at-grade dirt shoulders), it can be concluded that no creation (or increased risk) of hazards related to the preclusion or substantial hindrance of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the project site is anticipated.

Per the 2013 TIA, the proposed project is considered an "Operational Improvement … [and] is expected to redistribute background traffic within the local study areas but not generate new traffic." When reviewing the study segments on Olive Street, Maple Street, and 13th Street, all segments see increases in ADT when comparing Long-Term (Year 2035) with Project to without Project. However, these increases do not significantly impact roadway capacity or traffic – this is in part because the improvement of 13th Street/Maple Street from a dirt road to a paved road provides a significant increase in operational safety and capacity for the segment. Additionally, the study segments on Main Street see no increase in ADT or see a reduction in ADT when comparing Long-Term (Year 2035) with Project to without Project. Therefore, no creation (or increased risk) of hazards due to the percentage or magnitude of increased traffic on the road due to the proposed project that may adversely affect pedestrian and bicycle safety is anticipated.

Per review of the 70% complete plans, the proposed improvements in context of the physical conditions of the project site and the surrounding area reveal an intended design compliance with all County Public Road Standards, as applicable. Specifically, proposed trails show an acceptable cross slope of 1.5% and sidewalks, ramps, and other pedestrian improvements are shown to be ADA compliant. Therefore, no creation (or increased risk) of hazards due to the physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers that may result in vehicle/pedestrian, vehicle/bicycle conflicts are anticipated.

Per review of the existing project site conditions, the proposed pedestrian improvements at the southern and northern termini of the project will tie into existing facilities that conform to the current County Public Road Standards, as applicable. At the western terminus of the project on Walnut Street, the proposed sidewalk on the south side of Walnut will terminate at the western boundary of the

project and transition onto existing DG pathway. Additionally, the project will feature sidewalk across the eastern leg of the 13th Street/Maple Street and Walnut Street intersection so pedestrians can safely traverse across Walnut Street. The eastern terminus of the project beyond the 13th Street/Maple Street and Walnut Street intersection will remain in its existing condition as a DG and may be improved with future development. Therefore, no creation (or increased risk) of hazard due to proposed pedestrian and trail facilities connecting to existing roadways not conforming to the requirements of public road standards is anticipated.

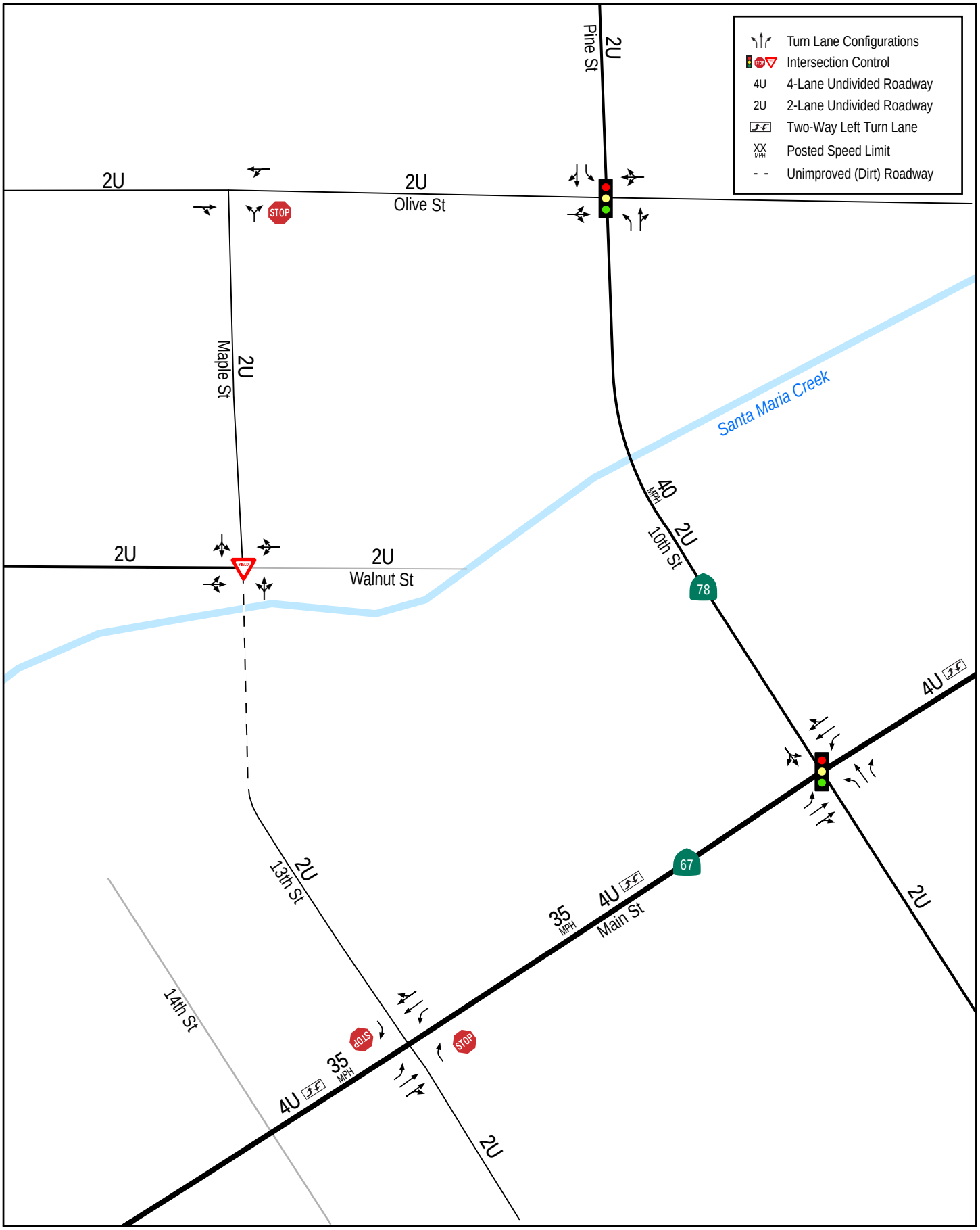
Per review of the 70% complete plans, the proposed project will be providing significant upgrades to roadways by adding paved roads and pedestrian paths. These will be adequate facilities for pedestrians and bicyclist who previously had no facilities in this area. Therefore, no creation (or increased risk) of hazards related to the potential for a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities are anticipated.

Alternative Transportation

Alternative transportation (cycling, walking, and transit use) is addressed in the County's General Plan Public Facilities Element (PFE). The County's stated objective for alternative transportation is addressed by the PFE, Objective 4. Objective 4 asks for a "Reduction in the demand on the road system through increased public use of alternate forms of transportation and other means." Pursuant to Objective 4, Policies 4.1 – 4.4 establish a means for the County to meet the objective. As such, if a proposed project is not in conformance with the applicable alternative transportation policies in the PFE, a significant conflict with the County's alternative transportation policies may occur.

The proposed project is in conformance with the County's alternative transportation policies. Per review of the 70% complete plans, the roadway improvements will convert existing dirt lanes to paved lanes in addition to adding accessible pedestrian facilities where none were previously. New ADA ramps, signing, striping, and stop control will improve visibility and safety of pedestrians and bicyclists by better delineating the movements of cars, pedestrians, and bicyclists.

In addition, the project improvements are consistent with the County's Live Well San Diego vision (Building Better Health, Living Safely, and Thriving) and Active Transportation Plan. The project will increase the safety and mobility of non-motorized users by improving pedestrian and bicycle facilities. With these active transportation improvements to the built environment, the project will help enhance public health and reduce impacts to the environment.



LINSCOTT LAW & GREENSPAN engineers

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Date: 6/6/13

Figure 1

Existing Conditions Diagram

13TH STREET BRIDGE