

CITY OF YUBA CITY
STAFF REPORT

Date: April 10, 2018
To: Honorable Mayor & Members of the City Council
From: Public Works Department
Presentation by: Diana Langley, Public Works Director

Summary

Subject: State Route 20/State Route 99 Interchange – Approval of Project Study Report-Project Development Support (PSR-PDS)

Recommendation: Authorize the Public Works Director to sign the Project Study Report-Project Development Support for the State Route 20/State Route 99 Interchange

Fiscal Impact: The estimated total cost for the project ranges from \$105,766,000 to \$136,485,000. The estimated cost for the next phase, Project Approval and Environmental Document, is estimated at \$5,587,000.

Purpose:

To replace the State Route 20 (SR 20)/State Route 99 (SR 99) at-grade intersection with an interchange in order to:

- Provide congestion relief that improves traffic flow on the regional transportation system.
- Improve traffic operations and safety on SR 20 and SR 99.
- Reduce travel time and delays for all modes of transportation.
- Improve travel time reliability.
- Enhance the mobility and safety for multi-modal transportation on SR 20.

Background:

The California Department of Transportation (Caltrans) has identified in their 2017 State Route 99 Transportation Corridor Concept Report (TCCR) a planned project for the construction of an urban interchange at the intersection of State Route 99 (SR 99) and State Route 20 (SR 20) in Yuba City. The TCCR shows an estimated cost of approximately \$31 Million for right-of-way with right-of-way acquisition taking place somewhere in the timeframe of 2021-2036. The TCCR does not provide a total estimated cost for the interchange.

In early 2016, as part of a Transportation Workshop, the City Council expressed a desire to expedite the consideration of the construction of an urban interchange at the SR 99/SR 20 intersection and directed staff to reach out to Caltrans. Staff met with Caltrans District 3 Director Amarjeet Benipal in which Director Benipal indicated that if the City wanted to advance the project, the City would need to pay for the preparation of a Project Study Report – Project Development Support Project Initiation Document (PSR-PDS).

Staff obtained a proposal from Caltrans in the amount of \$292,000 to prepare a PSR-PDS to evaluate up to four interchange alternatives. A Cooperative Agreement was prepared by Caltrans, and approved by the City Council on August 16, 2016, which outlined the scope of work, responsibilities of each agency, and payment terms.

In March 2017, staff provided an update to Council on the development of the PSR-PDS. The update provided an analysis of three interchange configuration alternatives:

- Alternative 1 – Single Quadrant with Slip On-Ramp
- Alternative 2 – Single Point
- Alternative 3 – Single Quadrant

In addition, there was a discussion related to Caltrans' preliminary analysis of an option to lower the profile of SR 20 so that the profile of SR 99 is minimized. During the meeting, Council provided staff direction as follows:

- For SR 20 west of SR 99, assume acquisition of properties on the north side of SR 20, and the widening to take place to the north to facilitate keeping some driveway access open to the properties on the south.
- Consider an alternative similar to Alternative 2 but modify it so that there are 2 signalized intersections at the ramps to facilitate U-turns.
- Continue with the concept of a split level interchange with SR 20 depressed so that the interchange structure can be lowered.

Caltrans took in the City's feedback, performed further analysis, and completed the PSR-PDS in February.

Analysis:

The completed PSR-PDS evaluates four alternatives:

- Alternative 1 – Single Quadrant with Slip On-Ramp
- Alternative 2 – Single Point
- Alternative 3 – Single Quadrant
- Alternative 4 – Single Point with Lowering of SR 20 by 12 Feet

A brief discussion related to each alternative is provided as Attachment 1. Exhibits for the four alternatives are provided as Attachment 2. A copy of the PSR-PDS is available for review at the Public Works Department.

The purpose of the PSR-PDS is to provide an analysis of each alternative, but does not make a recommendation regarding a preferred alternative. The next phase of the project, Project Approval and Environmental Document (PA&ED), is the phase where an environmental analysis is conducted and a preferred alternative is selected for project approval.

Caltrans staff has recommended approval of the PSR-PDS. The next step prior to Caltrans District 3 Director Benipal's final approval is for the City to recommend approval of the PSR-PDS and sign the document. Staff is requesting authorization for the Public Works Director to sign the PSR-PDS on behalf of the City.

Fiscal Impact:

The estimated cost for the next phase of the project, PA&ED, is \$5,587,000. There are no funds programmed at this time at the local, state, or federal level to continue to the next phase. Staff recommends continued dialog with Caltrans and the Sacramento Area Council of Governments to identify funding opportunities in the future.

The PSR-PDS provides a capital outlay project estimate for each alternative, provided below in Table 1.

Table 1: Capital Outlay Project Estimate

Alternative	Range of Estimate		
	Right-of-Way	Construction	Total
1 – Single Quadrant with Slip On-Ramp	\$10,979,000	\$89,200,000	\$100,179,000
2 – Single Point	\$14,288,000	\$112,000,000	\$126,288,000
3 – Single Quadrant	\$16,503,000	\$106,100,000	\$122,603,000
4 – Single Point with Lowering of SR 99	\$17,298,000	\$113,600,000	\$130,898,000

No funds have been programmed for the construction of the project.

Alternatives:

1. Authorize the City Manager or Mayor sign the PSR-PDS on behalf of the City.
2. Do not recommend approval of the PSR-PDS and authorize staff to execute an amendment to the Cooperative Agreement to perform additional analysis. A supplemental appropriation would be required.

Recommendation:

Authorize the Public Works Director to sign the Project Study Report-Project Development Support for the State Route 20/State Route 99 Interchange.

Attachments:

1. Summary Discussion Related to Alternatives 1-4

Prepared by:

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ATTACHMENT 1

SUMMARY DISCUSSION RELATED TO ALTERNATIVES 1-4

Basic Concept for all Four Alternatives

- Shift SR 99 alignment to the west.
- Provide a grade separation with SR 99 crossing over SR 20.
- Access to SR 99 from Woodward Street, East Onstott Frontage Road, and West Onstott Frontage Road would be terminated.
- Kelton Way would be extended to connect to East Onstott Frontage Road.
- A frontage road would be constructed to connect West Onstott Frontage Road with Woodward Street.
- Driveway access to SR 20 will be closed on the south side from the eastern project limits to Civic Center Boulevard. *(Confirming with Caltrans 3-28-18)*
- Driveway access along SR 20 from Civic Center Boulevard to Stabler Lane will be maintained on both the north and south sides.
- Assumes the City will acquire the Union Pacific Railroad right-of-way to connect West Onstott Frontage Road to Civic Center Boulevard. The connection is not part of the project.
- Design constraints include:
 - Weaving distance
 - Merging tapers for SR 20 and possibly the ramps for southbound SR 99
 - Shoulders on SR 20

Alternative 1 – Single Quadrant with Slip On-Ramp

Estimated Capital Outlay Cost: \$100,179,000 Million

SR 20

- Traffic movement on SR 20 (under the structure) controlled by two intersections

Right-of-Way

- Partial/full acquisition of 32 parcels

Alternative 2 – Single Point

Estimated Tentative Cost: \$126,288,000 Million

SR 20

- Traffic movement on SR 20 (under the structure) controlled by a single intersection

Right-of-Way

- Full/partial acquisition of 36 parcels

Alternative 3 – Single Quadrant

Estimated Tentative Cost: \$122,603,000 Million

SR 20

- Traffic movement on SR 20 (under the structure) controlled by two intersections

Right-of-Way

- Full/partial acquisition of 36 parcels

Alternative 4 – Single Point with Lowering of SR 20 by 12 Feet

Estimated Tentative Cost: \$130,898,000 Million

SR 20

- Lower SR 20 by 12 feet to reduce the overall height of the structure
- Traffic movement on SR 20 (under the structure) controlled by a single intersection

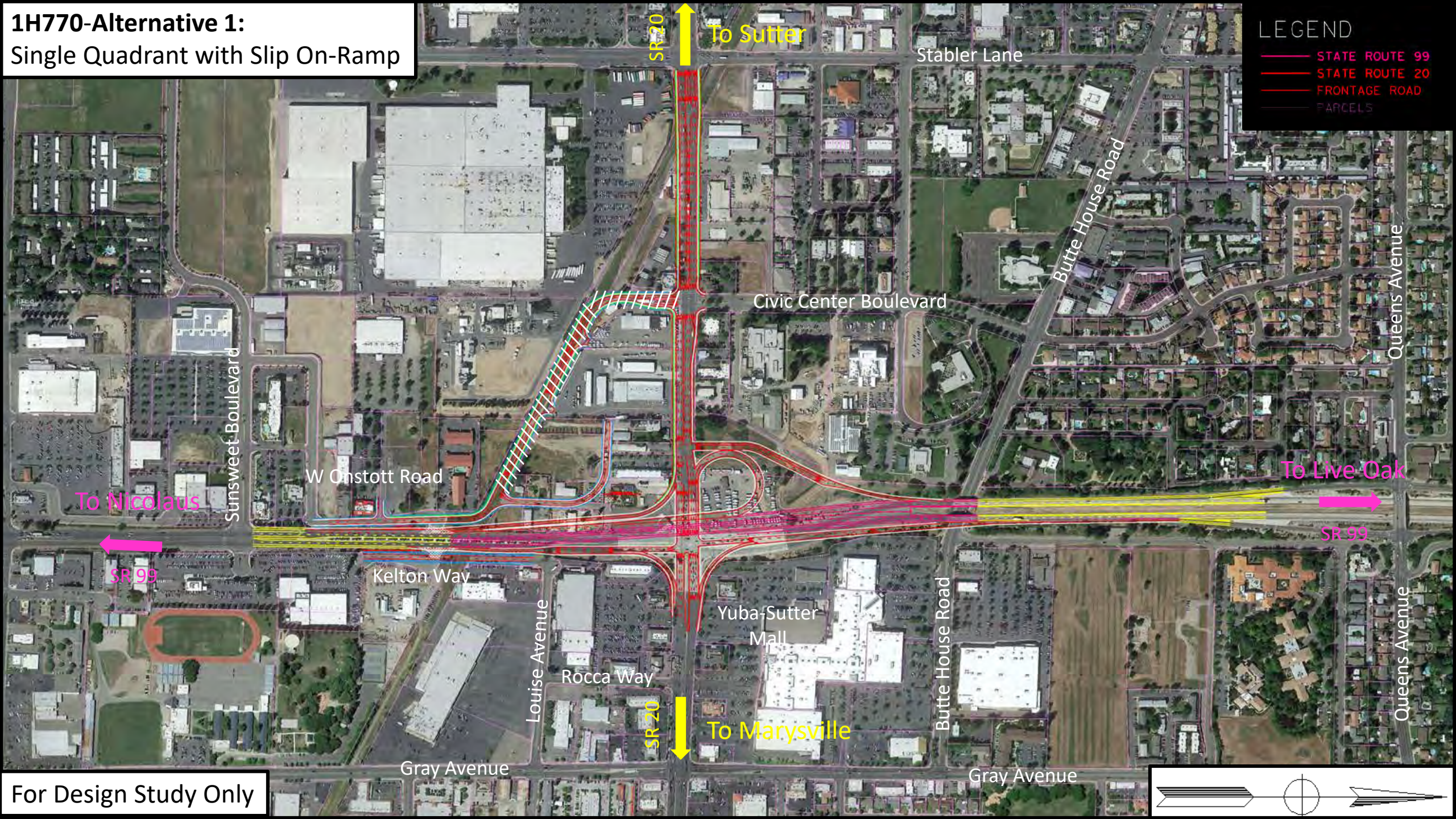
Right-of-Way

- Full/partial acquisition of 42 parcels

1H770-Alternative 1: Single Quadrant with Slip On-Ramp

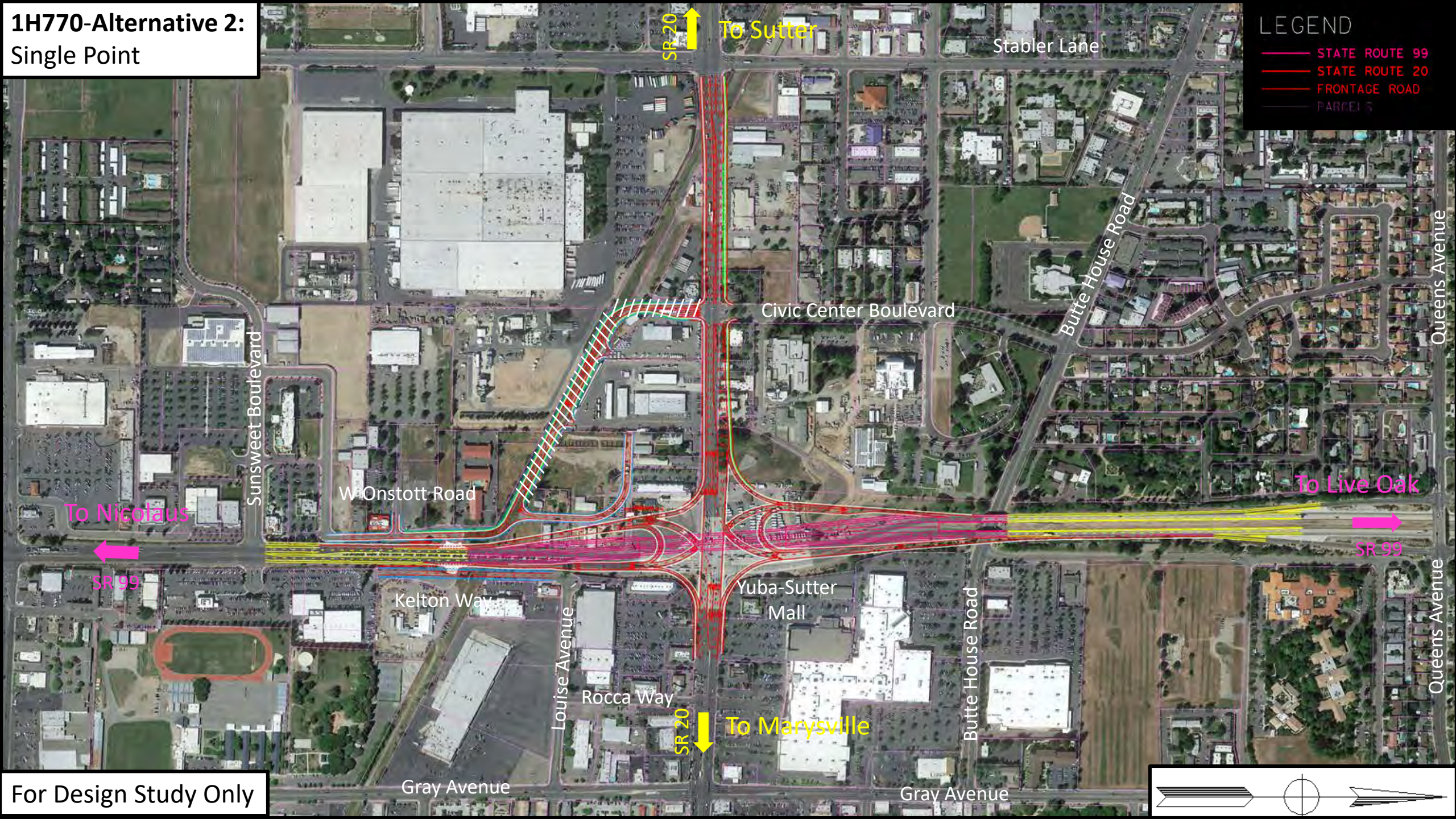
LEGEND

- STATE ROUTE 99
- STATE ROUTE 20
- FRONTAGE ROAD
- PARCELS



For Design Study Only

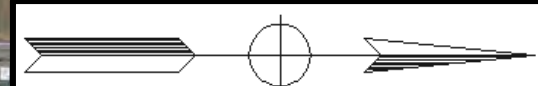
1H770-Alternative 2: Single Point



LEGEND

- STATE ROUTE 99
- STATE ROUTE 20
- FRONTAGE ROAD
- PARCEL 5

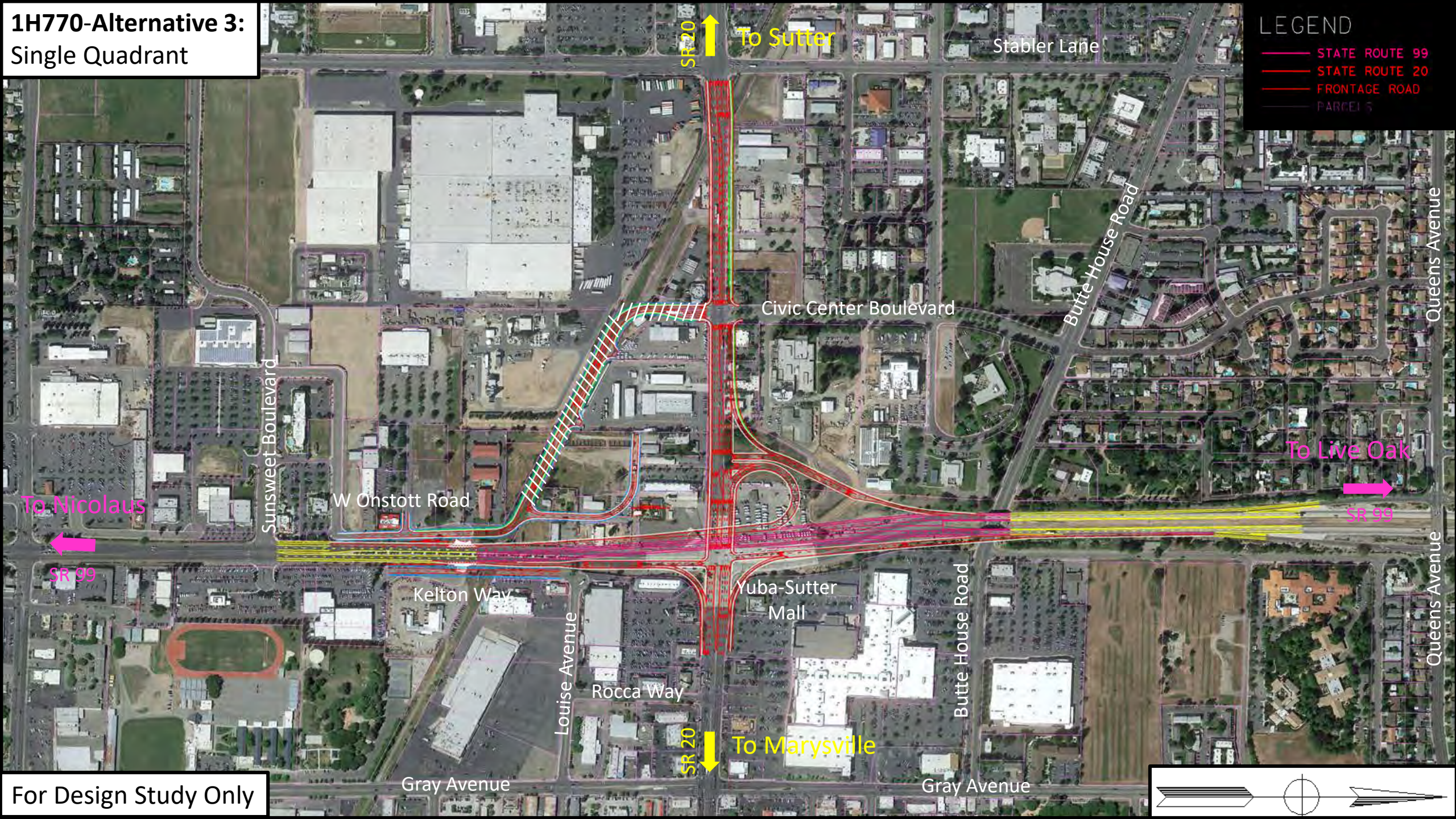
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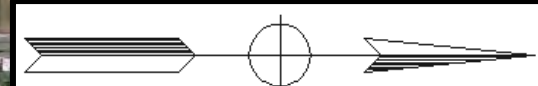
1H770-Alternative 3: Single Quadrant

LEGEND

- STATE ROUTE 99
- STATE ROUTE 20
- FRONTAGE ROAD
- PARCEL 5



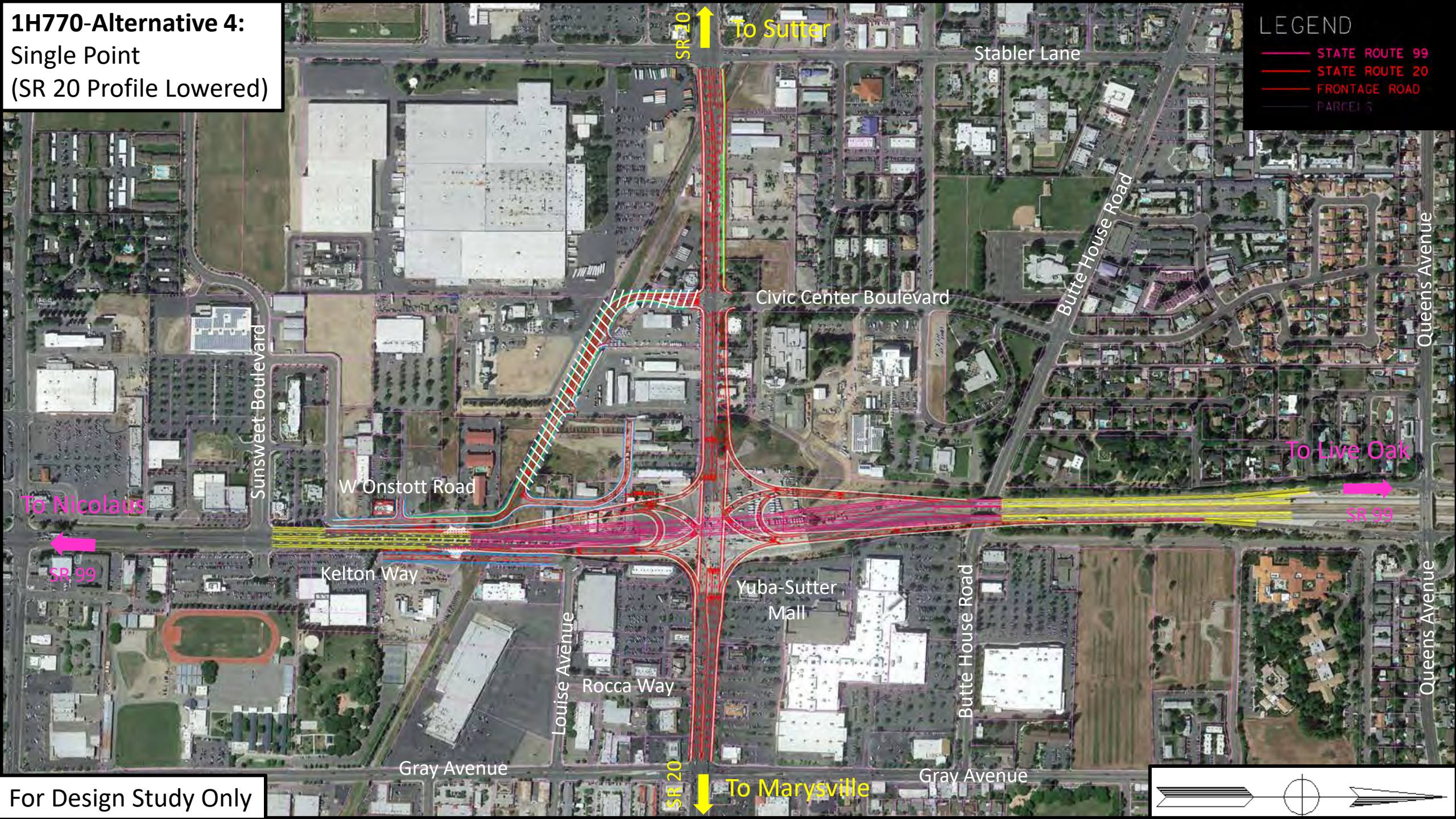
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1H770-Alternative 4:
Single Point
(SR 20 Profile Lowered)

LEGEND

- STATE ROUTE 99
- STATE ROUTE 20
- FRONTAGE ROAD
- PARCEL 5



For Design Study Only

