

**Third Report Addendum to the  
September 10, 2013 Supplemental  
Checkpoint B Summary Report**

in Support of the

San Jose to Merced Section and Merced  
to Fresno Section: Wye Alternatives

Section 404(b) (1) Analysis and Draft  
Supplemental Environmental Impact  
Report/Supplemental Environmental Impact  
Statement

November 2, 2016

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### Attachments

Attachment 1 Appendix B6 of the May 2014 Addendum

## 1 INTRODUCTION

On September 10, 2013, the California High-Speed Rail Authority (Authority) and the Federal Railroad Administration (FRA) submitted two Checkpoint B Summary Reports for the California High-Speed Rail (HSR) system to the United States Army Corps of Engineers (USACE) and the United States Environmental Protection Agency (EPA). The first was the San Jose to Merced Project Section Checkpoint B package and the second was the Merced to Fresno Project Section: Wye Alternatives Checkpoint B package (together, the Checkpoint B packages). The Authority and FRA prepared the Checkpoint B packages in accordance with the National Environmental Policy Act/Clean Water Act Section 404/Rivers and Harbors Act Section 14 Integration Process for the California High-Speed Train Program Memorandum of Understanding dated November 2010 (NEPA/404/408 MOU). The September 2013 Checkpoint B packages identified four wye alternatives to carry forward for further environmental analysis: SR 152 (North) to Road 13 Wye, SR 152 (North) to Road 18 Wye, SR 152 (South) to Road 18 Wye, and Avenue 21 to Road 13 Wye.

Based on comments received from the USACE and EPA and additional stakeholder outreach, the Authority and FRA prepared and submitted an addendum to the Checkpoint B packages in May 2014. The May 2014 addendum included:

- A description of refinements to two alignments included in the Checkpoint B packages
- A qualitative analysis of the potential impacts to the character of affected communities and environmental justice considerations
- Revisions to the SR 152 (North) to Road 18 and SR 152 (South) to Road 18 wye alternatives to reduce aquatic impacts, address comments from the City of Chowchilla, and reduce impacts to the community of Fairmead
- Responses to USACE and EPA comments
- A summary of agency and public input received
- A revised summary of conclusions

In August 2014, the Authority and FRA submitted a second addendum for the Merced to Fresno Project Section: Wye Alternatives to USACE and the EPA. In that addendum, the Authority and FRA proposed to carry forward the SR 152 (North) to Road 19 Wye Alternative for further consideration, replacing the SR 152 (North) to Road 18 Refined Wye and SR 152 (South) to Road 18 Refined Wye Alternatives previously identified in September 2013.

Together, the Checkpoint B packages and the addenda in May and August 2014 analyzed 17 potential wye alternatives. In summary, the Authority and FRA identified three alternatives to be carried forward for further analysis: the SR 152 (North) to Road 13 Wye, the Avenue 21 to Road 13 Wye, and the SR 152 (North) to Road 19 Wye. The Authority and FRA proposed withdrawing the remaining 14 wye alignments from consideration for reasons described in the Checkpoint B packages and the May and August 2014 addenda. The USACE and EPA concurred with the range of alternatives on September 3, 2014, and August 29, 2014, respectively.

Since completing the August 2014 addendum, the Authority and FRA have continued to advance the design and environmental analysis of the wye alternatives while continuing public outreach. This outreach has revealed continuing stakeholder concerns regarding the alignments east (Road 19) and west of Chowchilla (Road 13). In response to these concerns and as part of this advanced design and outreach, the project team revisited a previously considered alternative, namely the SR 152 (North) to Road 11 Wye. The SR 152 (North) to Road 11 Wye Alternative would satisfy the purpose of the project, meet the objective to reduce aquatic impacts as it is among the alternatives with the least effects on aquatic resources, and is responsive to local stakeholders' concerns. This alternative was withdrawn in 2013 because initial estimates illustrated a slightly greater aquatic impact than the SR 152 (North) to Road 13 Wye Alternative. However, because it has the potential to result in lesser impacts to other environmental and community resources, FRA and the Authority determined this alternative warrants further consideration and detailed study in the supplemental EIR/EIS. Based on initial feedback, local

stakeholders appear receptive to this alignment further supporting the decision to carry it forward into the environmental review process.

The Authority and FRA now propose four alternatives be carried forward for environmental review: SR 152 (North) to Road 13 Wye, Avenue 21 to Road 13 Wye, SR 152 (North) to Road 19 Wye, and SR 152 (North) to Road 11 Wye.

This third addendum provides the rationale for carrying forward the SR 152 (North) to Road 11 Wye Alternative and including it with the other three alternatives for further environmental analysis. This addendum references data and other information set out in the Checkpoint B packages and the May and August 2014 addenda, where appropriate.

## 2 WYE ALTERNATIVE ALIGNMENTS

The August 2014 addendum proposed to carry forward three alternatives: the SR 152 (North) to Road 13 Wye, the Avenue 21 to Road 13 Wye, and the SR 152 (North) to Road 19 Wye. The Authority and FRA identified these three alternatives primarily because they have the potential to result in the least overall impacts to aquatic resources amongst all the potential alignments considered. The USACE and EPA concurred that the alternatives proposed by the Authority and FRA constituted a reasonable range of potentially feasible alternatives and that the alternatives included the alternative that would potentially have the least impact on aquatic resources.

Since that time, the Authority has advanced the design and the environmental analysis as well as continued the public engagement process. Public input revealed continued stakeholder concerns with the alignments east (Road 19) and west of Chowchilla (Road 13).

During the design process and after further discussions with local stakeholders,, the Authority reevaluated the alternatives considered in the Checkpoint B process and found the previously considered SR 152 (North) to Road 11 Wye Alternative to be a viable alternative for consideration that satisfies the project purpose and has impacts to aquatic resources comparable to the other alignments carried forward (see Table 1). In addition, it is responsive to the concerns of local stakeholders. After reevaluation of all of the alternatives considered in Checkpoint B, the Authority and FRA propose to include the SR 152 (North) to Road 11 Wye Alternative because it meets the objectives of the project while minimizing the effects to the environment.

**Table 1: Merced to Fresno Section: Wye Alternative Summary of Aquatic Resources Impacts (Acres)**

	SR 152 (North) to Road 11 Wye	SR 152 (North) to Road 13 Wye	SR 152 (North) to Road 19 Wye	Avenue 21 to Road 13 Wye
Waters of the US (acreage)	122.7	118.1	135.9	119

Source: Section 6, May 2014 Addendum

### 2.1 Reevaluation of Checkpoint B and Summary of Reasons for Withdrawing Alternatives

In the spring of 2016, the Authority reevaluated the alternatives considered in the Checkpoint B process to determine whether any of those alternatives should be analyzed in the environmental review process. Appendix B6 of the May 2014 Addendum (see Attachment 1) and the September 2014 Addendum provide the rationale for withdrawing alternatives from further consideration in the Checkpoint B process. After reevaluation, the following rationale for rejecting alternatives presented in the Checkpoint B packages remains valid today:

- **Alternatives along Avenues 22, 24, SR 140 Wye, and South of the GEA Wye.** These alternatives would have relatively high impacts to aquatic resources. Moreover, they do not follow a major existing transportation corridor and the local community opposed them.

- **Alternatives south of SR 152.** These alternatives would conflict with California Department of Transportation safety improvements being planned for SR 152 including widening areas to accommodate loops for off/on-ramps. They would also create a strip of land between SR 152 and the HSR that would result in land use impacts, as described in the second supplemental to the Alternatives Analysis (July 2011). Furthermore,
  - Alternative SR 152 (South) to Ave 21 to SR99 would result in greater impacts on aquatic resources and would not provide advantages over the existing alternatives carried forward.
  - Alternative SR 152 (South) to Ave 21 to Road 19 does not follow an existing transportation corridor. While it has only slightly higher impacts to aquatic resources, it results in moderately higher impacts to agricultural lands.
- **Road 18 north of SR 152.** This alternative was rejected because it would not perform as well as the SR 152 (North) to Road 19 Wye Alternative, as documented in Addendum 2.

The SR 152 (North) Road 11 Wye Alternative performed similarly to the SR 152 (North) to Road 13 Wye Alternative in many areas, including community and natural resource impacts. This alternative was not carried forward previously, however, because it had slightly greater aquatic resource impacts than SR 152 (North) to Road 13 Wye Alternative. As the Authority has developed the alternatives and continued stakeholder outreach, it has determined that the SR 152 (North) to Road 11 Wye Alternative merits study in the supplemental EIR/EIS.

## 2.2 Other Environmental Considerations

Appendix B6 of the May 2014 addendum provides information on other key environmental resources, including potential impacts on sensitive species and agricultural land. Table 2 is an excerpt of Appendix B6 and shows that the SR 152 (North) to Road 11 Wye Alternative performs similarly to the other three alternatives carried forward for select key environmental resources that typically differentiate between the alternatives.

## 2.3 Project Purpose Considerations

Project purpose considerations include journey time and cost. As shown in Table 3, the SR 152 (North) to Road 11 Wye Alternative is comparable to the other alternatives carried forward for consideration in the supplemental EIR/EIS.

## 2.4 Stakeholder Considerations

In the summer of 2016, the Authority and FRA conducted preliminary outreach to stakeholders to seek their input regarding the SR 152 (North) to Road 11 Wye Alternative. Meetings in June through October, 2016 included the County of Madera, Fairmead Community & Friends, Chowchilla Water District, the City of Chowchilla, and the organization Preserve our Heritage. Based on feedback from these entities, the SR 152 (North) to Road 11 Wye Alternative is generally responsive to stakeholder concerns. For instance, the City of Chowchilla and Preserve our Heritage expressed preference for alternatives that locate the HSR further distance from their communities. The SR 152 (North) to Road 11 Wye Alternative is located two miles further west of the SR 152 (North) to Road 13 Wye Alternative from Chowchilla.

## 3 CONCLUSIONS

The Authority and FRA propose to carry forward the SR 152 (North) to Road 11 Wye Alternative for detailed analysis in the supplemental EIR/EIS (in addition to the three previously agreed upon alternatives) based on the potential of the alternative to successfully meet the project purpose, result in the least aquatic impacts and be acceptable to local stakeholders. As such, the supplemental EIR/EIS will evaluate four alternatives (see Figure 1): the SR 152 (North) to Road 13 Wye Alternative, the SR 152 (North) to Road 19 Wye Alternative, the Ave 21 to Road 13 Wye Alternative, and the SR 152 (North) to Road 11 Wye Alternative. The range of alternatives proposed to be carried forward likely includes the least environmentally damaging practicable alternative. Based on the analysis presented above, the Authority and the FRA have determined that these four alternatives constitute a reasonable range of potentially practicable alternatives.

**Table 2: Appendix B6 Excerpt**

Measurement	SR 152 (North)			Avenue 21	
	Road 11	Road 13	Road 19	Road 13	
<b>Environmental Impacts</b>					
Biological Resources (acres per species/ habitat)	California Wildlife Habitat Relationships (CWHR) Range Data				
	California red-legged frog	399	399	399	399
	San Joaquin kit fox	1,708	1,561	1,567	1,505
	California tiger salamander	3,998	3,647	4,027	3,631
	Critical Habitat				
	Vernal pool tadpole shrimp	2.8	None	1.5	None
	Vernal pool fairy shrimp	2.8 <sup>1</sup>	None	None	None
	San Joaquin Orcutt grass	None	None	1.5	None
<b>Cultural Resources</b>					
Properties with buildings over 50 years old	159	153	151	141	
<b>Agricultural Land (acres)<sup>2</sup></b>					
Farmland of Local Importance	186	182	194	257	
Prime Farmland	1,133	908	1,023	1,058	
Unique Farmland	736	737	1,017	748	
Farmland of Statewide Importance	778	687	609	760	
<b>Community Impacts</b>					
Noise/ Vibration (number of potential sensitive receptors)	1,298/276	1,321/269	1,332/273	1,279/232	
Residential Displacements [units]	133-158	142-163	136-153	128-142	

**Table 3: Journey Times and Costs**

Parameter	SR 152 (North) to Road 11 Wye	SR 152 (North) to Road 13 Wye	SR 152 (North) to Road 19 Wye	Avenue 21 to Road 13 Wye
Journey Time San Jose to Fresno (minutes)	23.33	23.33	23.33	23.40
Journey Time to San Jose to Merced (minutes)	17.33	17.86	22.09	18.71
Journey Time Merced to Fresno (minutes)	16.51	16.29	17.59	16.78
Capital Costs (\$2015 millions)	\$6,170	\$6,250	\$6,705	\$5,836
O&M (cost factor based on route miles)	1.1	1.1	1.16	1.13

<sup>1</sup> Current (summer 2016) data: no potential impact to vernal pools within designated critical habitat is anticipated.

<sup>2</sup> Important Farmland consists of the four types of farmland listed. .



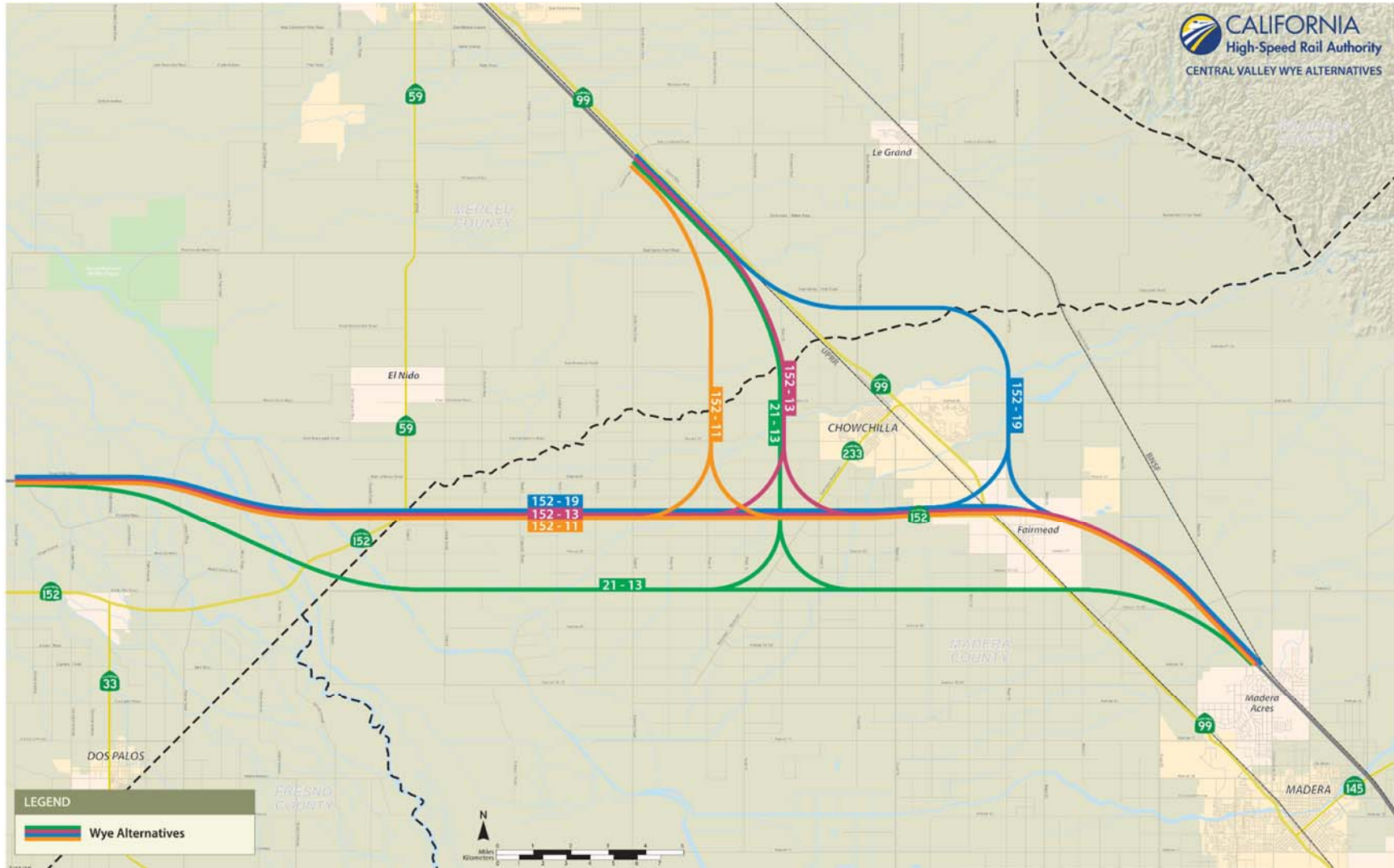


Figure 1: Central Valley Wye Alternatives

# Attachment 1

## Appendix B6 of the May 2014 Addendum



**Appendix B6: Evaluation Decision Summary for Wye Alternatives**

Wye Alternative	Carried Forward or Withdrawn	Decision Explanation
SR 140 Wye	Withdrawn	The SR 140 Wye Alternative is withdrawn from further analysis because the potential impacts to aquatic resources associated with this alternative would be third highest of all of the wye alternatives, and it would be the only wye alternative to impact the North Grasslands Wildlife Area. This wye alternative would also result in high visual intrusiveness by adding a train river crossing within a state park. Further, this alternative would add 4 minutes of travel time between San Francisco and Los Angeles, which would likely make it inconsistent with the maximum travel time requirements of Proposition 1A of 2 hours and 40 minutes between Los Angeles Union Station and the Transbay Terminal in San Francisco. Therefore, this wye alternative is withdrawn from further analysis because it is inconsistent with Proposition 1A and, therefore, does not meet the project's purpose and need (see Sections 3.1.3, 3.2.1, 3.3.1, 3.3.7, and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report and Section 4.5.1 [page 45] of Attachment 1).
Avenue 24 to Road 11 Wye	Withdrawn	The Avenue 24 to Road 11 Wye Alternative is withdrawn from further analysis because it would result in more impacts to aquatic resources than the similarly aligned SR 152 (North) to Road 13 Wye Alternative, which is being carried forward for further analysis (see Sections 3.1.3 and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
Avenue 24 to East of Road 12 Wye	Withdrawn	The Avenue 24 to East of Road 12 Wye Alternative is withdrawn from further analysis because it would result in more impacts to aquatic resources than the similarly aligned SR 152 (North) to Road 13 Wye Alternative, which is being carried forward for further analysis (see Sections 3.1.3 and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
Avenue 24 to Road 13 Wye	Withdrawn	The Avenue 24 to Road 13 Wye Alternative is withdrawn from further analysis because it would have greater impacts to aquatic resources than the similarly aligned SR 152 (North) to Road 13 Wye Alternative, which is being carried forward for further analysis (see Sections 3.1.3 and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
SR 152 (North) to Road 11 Wye	Withdrawn	The SR 152 (North) to Road 11 Wye Alternative is withdrawn from further analysis because it would result in more impacts to aquatic resources than the similarly aligned SR 152 (North) to Road 13 Wye Alternative, which is being carried forward for further analysis (see Sections 3.1.3 and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
SR 152 (North) to Road 13 Wye	Carried Forward	The SR 152 (North) to Road 13 Wye Alternative is potentially practicable and is carried forward for further analysis because it meets the project's purpose and need, and it would have the least aquatic impacts among all wye alternatives (see Sections 3.1.3 and 4.3.5 and Table 4-2 of the Checkpoint B Summary Report).
SR 152 (North) to Road 18 Wye	Carried Forward	The SR 152 (North) to Road 18 Wye Alternative is potentially practicable and is carried forward for further analysis because it meets the project's purpose and need, and it would result in the second fewest aquatic impacts among the SR 152 (North) wye alternatives and the fourth fewest aquatic impacts among all wye alternatives. Further, an SR 152 (North) to Road 18 Wye Alternative has support from many stakeholders and agencies (see Sections 3.1.3 and 4.3.5, Table 4-2, and Appendix A of the Checkpoint B Summary Report).
SR 152 (North) to Road 19 Wye	Withdrawn	The SR 152 (North) to Road 19 Wye Alternative is withdrawn from further analysis because it would have greater acreage of impacts to aquatic resources than the similarly aligned SR 152 (North) to Road 18 Wye Alternative, which is being carried forward for further analysis. This alternative is also withdrawn because it does not follow transportation corridors, leading to diagonal crossings that result in one of the highest impacts to agricultural resources among the wye alternatives. Additionally, this alternative would result in a longer journey time to Merced than the carried forward wye alternatives by approximately 0.5 to 4 minutes, which could negatively affect the overall travel time requirement on the second leg of the HST (Sacramento to LA) (see Sections 3.1.3, 3.2.1, 3.3.2, and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
SR 152 (South) to Road 18 Wye	Carried Forward	The SR 152 (South) to Road 18 Wye Alternative is potentially practicable and is carried forward for further analysis because it meets the project's purpose and need, and it has among the fewest aquatic impacts of all wye alternatives. Further, an SR 152 (South) to Road 18 Wye Alternative has support from many stakeholders and agencies (see Sections 3.1.3 and 4.3.5, Table 4-2, and Appendix A of the Checkpoint B Summary Report).
SR 152 (South) to Avenue 21 to SR 99 Wye	Withdrawn	The SR 152 (South) to Avenue 21 to SR 99 Wye Alternative is withdrawn from further analysis because it would result in more impacts to aquatic resources than the carried forward alternatives along SR 152 (North) and Avenue 21. This alternative is also withdrawn because it does not follow transportation corridors, leading to diagonal crossings that resulted in one of the highest impacts to agricultural resources among the wye alternatives. Another reason for withdrawal is that it would result in a longer journey time to Merced than the carried forward wye alternatives by approximately 0.5 to 4 minutes, which could negatively affect the overall travel time requirement on the second leg of the HST (Sacramento to LA). Further, the SR 152 (South) to Avenue 21 to SR 99 Wye Alternative has a capital cost of more than \$7.2 billion which is approximately \$1.4 to \$1.7 billion more than the other Avenue

Wye Alternative	Carried Forward or Withdrawn	Decision Explanation
		21 wye alternatives. The additional cost of this wye alternative is due to this alignment requiring a greater amount of aerial structure than the other wye alternatives. The expenditure of an additional \$1.4 to \$1.7 billion for this alternative would not yield a justifiably significant environmental benefit relative to the other wye alternatives under consideration and would have the effect of making an already expensive project that much more expensive for taxpayers. As such, it is not "financially viable" relative to the other feasible wye alternatives being carried forward (see Sections 3.1.3, 3.2.1, 3.2.2, 3.3.2, and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
SR 152 (South) to Avenue 21 to Road 19 Wye	Withdrawn	The SR 152 (South) to Avenue 21 to Road 19 Wye Alternative is withdrawn from further analysis because it would result in more impacts to aquatic resources than carried forward alternatives along SR 152 (North) and Avenue 21. This alternative is also withdrawn because it does not follow transportation corridors, leading to diagonal crossings that resulted in one of the highest impacts to agricultural resources among the wye alternatives. Another reason for withdrawal is that it would result in a longer journey time to Merced than the carried forward wye alternatives by approximately 0.5 to 4 minutes, which could negatively affect the overall travel time requirement on the second leg of the HST (Sacramento to LA) (see Sections 3.1.3, 3.2.1, 3.3.2, and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
Avenue 22 Wye	Withdrawn	The Avenue 22 Wye Alternative is withdrawn from further analysis because it would result in the second highest acreage of impacts to aquatic resources among all wye alternatives (see Sections 3.1.3 and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report and Section 4.5.1 [page 46] of Attachment 1).
Avenue 21 to Road 11 Wye	Withdrawn	The Avenue 21 to Road 11 Wye Alternative is withdrawn from further analysis because it would result in more impacts to aquatic resources than the similarly aligned Avenue 21 to Road 13 Wye Alternative, which is being carried forward for further analysis (see Sections 3.1.3 and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
Avenue 21 to Road 13 Wye	Carried Forward	The Avenue 21 to Road 13 Wye Alternative is potentially practicable and is carried forward for further analysis because it meets the project's purpose and need and has the third fewest impacts to aquatic resources among all wye alternatives (see Sections 3.1.3 and 4.3.5 and Table 4-2 of the Checkpoint B Summary Report).
Avenue 21 to SR 99 Wye	Withdrawn	The Avenue 21 to SR 99 Wye Alternative is withdrawn from further analysis because it has a capital cost of more than \$7.3 billion which is the highest estimated capital cost of all the wye alternatives. Further, this is approximately \$1.5 to \$1.8 billion more than the other Avenue 21 wye alternatives. Specifically, the Avenue 21 to Road 13 Wye Alternative would impact fewer aquatic resources than the Avenue 21 to SR 99 Wye Alternative and has a capital cost of approximately \$5.8 billion. The additional cost of this wye alternative is due to the alignment requiring a greater amount of aerial structure than the other wye alternatives. The expenditure of an additional \$1.5 to \$1.8 billion for this alternative would not yield a justifiably significant environmental benefit relative to the other wye alternatives under consideration and would have the effect of making an already expensive project that much more expensive for taxpayers. As such, it is not "financially viable" relative to the other feasible wye alternatives being carried forward (see Sections 3.1.3, 3.2.2, and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
Avenue 21 to Road 19 Wye	Withdrawn	The Avenue 21 to Road 19 Wye Alternative is withdrawn from further analysis because it would result in more impacts to aquatic resources than the similarly aligned Avenue 21 to Road 13 Wye Alternative, which is being carried forward for further analysis. This alternative is also withdrawn because it would result in a longer journey time to Merced than the carried forward wye alternatives by approximately 0.5 to 4 minutes, which could negatively affect the overall travel time requirement on the second leg of the HST (Sacramento to LA) (see Sections 3.1.3, 3.2.1, and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report).
South of GEA Wye	Withdrawn	The South of GEA Wye Alternative was not included in one of the program-level corridors, and this analysis confirms it does not represent the LEDPA. This wye alternative was withdrawn from further analysis because it would have the greatest impact to aquatic resources and has high cost and logistical issues due to its extensive environmental impacts and additional 30 miles of alignment compared to the SR 140 Wye Alternative (see Sections 3.1.3, 3.2.2, 3.3.1, and 4.2.5 and Table 4-1 of the Checkpoint B Summary Report and Section 4.5.1 [page 45] of Attachment 1).

Appendix B5: Wye Alternatives<sup>1</sup>

Measurement	Avenue 24				SR 152 (North)				SR 152 (South)	SR 152 (South) to Avenue 21		Avenue 22 Wye	Avenue 21				South of GEA Wye
	SR 140 Wye	Road 11 Wye	East of Road 12 Wye	Road 13 Wye	Road 11 Wye	Road 13 Wye	Road 18 Wye	Road 19 Wye	Road 18 Wye	SR 99 Wye	Road 19 Wye		Road 11 Wye	Road 13 Wye	SR 99 Wye	Road 19 Wye	
<b>Design Objectives</b>																	
Journey Time to Fresno (minutes)	28.17	23.35	23.35	23.35	23.33	23.33	23.33	23.33	23.63	23.37	23.37	23.20	23.40	23.40	23.44	23.40	23.00
Journey Time to Merced (minutes)	11.72	17.53	17.99	17.89	17.33	17.86	21.57	22.09	21.48	19.65	22.92	18.20	18.71	18.71	18.74	22.95	31.84
Journey Time Merced to Fresno (minutes)	16.45	16.23	16.80	16.22	16.61	16.29	17.61	17.59	16.99	15.09	18.16	16.90	16.78	16.78	15.09	18.16	16.45
<b>Costs</b>																	
Operation and Maintenance Costs per Year (cost factor)	1.00	1.08	1.13	1.07	1.10	1.10	1.16	1.16	1.14	1.16	1.18	1.10	1.08	1.13	1.24	1.23	1.34
Capital Costs (cost in millions)	\$5,276	\$5,830	\$5,456	\$5,233	\$6,170	\$6,250	\$6,723	\$6,705	\$6,840	\$7,193	\$6,570	\$5,935	\$5,530	\$5,836	\$7,338	\$5,646	\$7,103
<b>Aquatic Resources</b>																	
Subtotal of Aquatic Resource Impacts (acres)	173.1	127.2	138.5	132.9	122.7	118.1	121.5	135.9	118.7	124.8	123.0	181.0	128.2	119.2	125.8	123.5	245.4
Wetland Habitat (acres)	33.5	54.4	58.1	56.7	62.1	56.3	63.5	56.9	61.2	53.8	53.8	50.5	55.9	52.3	53.1	53.1	35.7
Vernal Pool Complex (acres)	125.0	48.2	48.6	49.9	40.4	41.0	41.1	42.5	41.1	40.7	43.2	101.7	40.5	41.1	40.7	43.2	197.5
Streams, Creeks or Canals (miles)	8.1	21.2	26.1	23.2	24.4	20.0	24.9	20.3	21.6	25.2	22.1	22.9	23.2	22.3	27.3	23.7	20.4

<sup>1</sup> The colored columns in this table correlate wye alternatives that follow the same north-south trending road (i.e. Road 11 are pink colored, Road 13 are green colored, etc.) to facilitate comparison between similar alternatives

Measurement	Avenue 24				SR 152 (North)				SR 152 (South)	SR 152 (South) to Avenue 21		Avenue 21					South of GEA Wye	
	SR 140 Wye	Road 11 Wye	East of Road 12 Wye	Road 13 Wye	Road 11 Wye	Road 13 Wye	Road 18 Wye	Road 19 Wye	Road 18 Wye	SR 99 Wye	Road 19 Wye	Avenue 22 Wye	Road 11 Wye	Road 13 Wye	SR 99 Wye	Road 19 Wye		
Lakes/Ponds/Rivers (acres)	5.3	8.9	10.7	7.8	8.0	7.0	7.5	7.7	7.0	8.3	7.6	8.4	11.6	6.2	6.7	6.4	4.7	
Reservoir (acres)	6.7	11.9	17.2	14.7	8.4	9.9	5.6	25.0	5.5	18.1	14.5	16	16.3	15.6	21.4	16.9	7.5	
Swamps/Marshes (acres)	2.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.0	4.5	3.9	3.9	3.9	4.0	0.04	
<b>Constructability</b>																		
Constructability Issues Summarized	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>2 mi bridge through environmentally sensitive area</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 16 miles of SR 152</li> <li>Undercrossing of UPRR and SR 99 through Cut and cover box tunnel</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 16 miles of SR 152</li> <li>Undercrossing of UPRR and SR 99 through Cut and cover box tunnel</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 16 miles of SR 152</li> <li>Undercrossing of UPRR and SR 99 through Cut and cover box</li> <li>2<sup>nd</sup> Cut and Cover box tunnel under crossing of UPRR and Future SR 99</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 16 miles of SR 152</li> <li>Undercrossing of UPRR and SR 99 through Cut and cover box</li> <li>2<sup>nd</sup> Cut and Cover box tunnel under crossing of UPRR and Future SR 99</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 16 miles of SR 152</li> <li>Undercrossing of UPRR and SR 99 through Cut and cover box</li> <li>2<sup>nd</sup> Cut and Cover box tunnel under crossing of UPRR and Future SR 99</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 4 miles of SR 152</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 4 miles of SR 152</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 4 miles of SR 152</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 4 miles of SR 152</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 4 miles of SR 152</li> </ul>	<ul style="list-style-type: none"> <li>Mostly conventional construction work</li> <li>1.5 mi bridge through environmentally sensitive area</li> <li>Temporary impacts to 4 miles of SR 152</li> </ul>
Disruption to Existing Railroads	3	3	3	3	3	3	4	4	4	4	4	3	3	3	4	5	4	

Measurement	Avenue 24				SR 152 (North)				SR 152 (South)	SR 152 (South) to Avenue 21		Avenue 21					South of GEA Wye
	SR 140 Wye	Road 11 Wye	East of Road 12 Wye	Road 13 Wye	Road 11 Wye	Road 13 Wye	Road 18 Wye	Road 19 Wye	Road 18 Wye	SR 99 Wye	Road 19 Wye	Avenue 22 Wye	Road 11 Wye	Road 13 Wye	SR 99 Wye	Road 19 Wye	
Disruption to and Relocation of Utilities (miles)	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>10 comm. Lines</li> <li>9 electrical lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>1 sewer line (≥16")</li> <li>10 comm. lines</li> <li>15 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>12 comm. lines</li> <li>16 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>12 comm. lines</li> <li>14 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>10 comm. lines</li> <li>14 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>1 sewer lines (≥16")</li> <li>12 comm. lines</li> <li>14 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>19 comm. lines</li> <li>20 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>17 comm. lines</li> <li>17 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>19 comm. lines</li> <li>18 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>30 comm. lines</li> <li>14 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>19 comm. lines</li> <li>17 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>18 comm. lines</li> <li>13 electrical lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>11 comm. lines</li> <li>17 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>13 comm. lines</li> <li>15 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>30 comm. lines</li> <li>14 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>20 comm. lines</li> <li>18 electric lines (≥50kV)</li> </ul>	<ul style="list-style-type: none"> <li>0 sewer lines (≥16")</li> <li>10 comm. lines</li> <li>6 electrical lines (≥50kV)</li> </ul>
<b>Displacements</b>																	
Residential Displacement (single-family, multi-family, mobile home parks) (parcels)	83 - 98	131 - 143	111 - 122	129 - 143	133 - 158	142 - 163	137 - 160	136 - 153	132 - 155	130 - 146	137 - 153	102 - 111	128 - 144	128 - 142	126 - 137	133 - 144	77 - 86
Business Displacement (commercial, industrial, non-profit) (parcels)	18 - 20	1 - 3	4 - 5	2 - 5	9 - 13	5 - 10	7 - 15	5 - 8	9 - 16	6 - 9	3 - 6	4 - 6	2 - 3	2 - 3	5 - 6	2 - 3	9 - 10
<b>Environmental Resources</b>																	
Biological Resources (acres per species/habitat)	<ul style="list-style-type: none"> <li>95 ac – CRLF</li> <li>1,219 ac – Kit Fox</li> <li>2,168 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – California Red-legged Frog (CRLF)</li> <li>1,755 ac – San Joaquin Kit Fox (SJKF)</li> <li>3,476 ac – California Tiger Salamander (CTS)</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,722 ac – SJKF</li> <li>3,453 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,693 ac – Kit Fox</li> <li>3,618 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,708 ac – Kit Fox</li> <li>3,998 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,561 ac – Kit Fox</li> <li>3,647 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,696 ac – Kit Fox</li> <li>4,158 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,567 ac – Kit Fox</li> <li>4,027 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,648 ac – Kit Fox</li> <li>4,150 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,578 ac – Kit Fox</li> <li>3,300 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,580 ac – Kit Fox</li> <li>3,663 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,642 ac – Kit Fox</li> <li>3,517 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,603 ac – Kit Fox</li> <li>3,753 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,505 ac – Kit Fox</li> <li>3,631 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,569 ac – Kit Fox</li> <li>3,374 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>399 ac – CRLF</li> <li>1,547 ac – Kit Fox</li> <li>3,778 ac – CTS</li> </ul>	<ul style="list-style-type: none"> <li>94 ac – CRLF</li> <li>2,024 ac – Kit Fox</li> <li>2,870 ac – CTS</li> </ul>



Measurement	Avenue 24				SR 152 (North)				SR 152 (South)	SR 152 (South) to Avenue 21		Avenue 21					South of GEA Wye
	SR 140 Wye	Road 11 Wye	East of Road 12 Wye	Road 13 Wye	Road 11 Wye	Road 13 Wye	Road 18 Wye	Road 19 Wye	Road 18 Wye	SR 99 Wye	Road 19 Wye	Avenue 22 Wye	Road 11 Wye	Road 13 Wye	SR 99 Wye	Road 19 Wye	
Critical Habitat	<ul style="list-style-type: none"> <li>• 0.004 ac – Colusa grass</li> <li>• 0.004 ac – Hoover's spurge</li> <li>• 0.004 ac – Vernal pool tadpole shrimp</li> <li>• 0.004 ac – Vernal pool fairy shrimp</li> <li>• 0.004 ac – Conservancy fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>• 2.8 ac – Vernal pool tadpole shrimp</li> <li>• 2.8 ac – Vernal pool fairy shrimp</li> </ul>	None	None	<ul style="list-style-type: none"> <li>• 2.8 ac – Vernal pool tadpole shrimp</li> <li>• 2.8 ac – Vernal pool fairy shrimp</li> </ul>	None	None	<ul style="list-style-type: none"> <li>• 1.5 ac – Vernal pool tadpole shrimp</li> <li>• 1.5 ac – San Joaquin Orcutt grass</li> </ul>	None	None	<ul style="list-style-type: none"> <li>• 0.1 ac – Vernal Pool Tadpole Shrimp</li> <li>• 0.1 ac – San Joaquin Orcutt Grass</li> </ul>	None	<ul style="list-style-type: none"> <li>• 2.8 ac – Vernal pool tadpole shrimp</li> <li>• 2.8 ac – Vernal pool fairy shrimp</li> </ul>	None	None	<ul style="list-style-type: none"> <li>• 1.5 ac – Vernal Pool Tadpole Shrimp</li> <li>• 1.5 ac – San Joaquin Orcutt Grass</li> </ul>	None
California Natural Diversity Database (CNDDDB)	<ul style="list-style-type: none"> <li>• 62 ac - moestan blister beetle</li> <li>• 0.2 ac - CTS</li> <li>• 14 ac - giant garter snake</li> <li>• 5.9 ac - western pond turtle</li> <li>• 7.1 ac - succulent owl's clover</li> <li>• 14 ac - forked hare-leaf</li> <li>• 0.2 ac - California linderiella</li> <li>• 0.2 ac - western spadefoot</li> <li>• 14 ac - western mastiff bat</li> <li>• 10 ac - delta button-celery</li> <li>• 0.2 ac - San Joaquin kit</li> </ul>	<ul style="list-style-type: none"> <li>• 127 ac - moestan blister beetle</li> <li>• 442 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 15 ac - recurved larkspur</li> <li>• 4.3 ac - lesser saltscale</li> <li>• 15 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 4.3 ac - Wright's</li> </ul>	<ul style="list-style-type: none"> <li>• 116 ac - moestan blister beetle</li> <li>• 442 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 18 ac - recurved larkspur</li> <li>• 4.3 ac - lesser saltscale</li> <li>• 18 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 4.3 ac - Wright's</li> </ul>	<ul style="list-style-type: none"> <li>• 161 ac - moestan blister beetle</li> <li>• 442 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 9.6 ac - recurved larkspur</li> <li>• 4.3 ac - lesser saltscale</li> <li>• 9.6 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 4.3 ac - Wright's</li> </ul>	<ul style="list-style-type: none"> <li>• 124 ac - moestan blister beetle</li> <li>• 437 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 229 ac - recurved larkspur</li> <li>• 4.3 ac - lesser saltscale</li> <li>• 229 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 21 ac - subtle orache</li> </ul>	<ul style="list-style-type: none"> <li>• 129 ac - moestan blister beetle</li> <li>• 422 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 194 ac - recurved larkspur</li> <li>• 4.3 ac - lesser saltscale</li> <li>• 194 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 4.3 ac - Wright's</li> </ul>	<ul style="list-style-type: none"> <li>• 125 ac - moestan blister beetle</li> <li>• 452 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 174 ac - recurved larkspur</li> <li>• 4.3 ac - lesser saltscale</li> <li>• 174 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 21 ac - subtle orache</li> </ul>	<ul style="list-style-type: none"> <li>• 202 ac - moestan blister beetle</li> <li>• .01 ac - CTS</li> <li>• 422 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 231 ac - recurved larkspur</li> <li>• 4.3 ac - lesser saltscale</li> <li>• 231 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 4.3 ac - Wright's</li> </ul>	<ul style="list-style-type: none"> <li>• 110 ac - moestan blister beetle</li> <li>• 402 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 39 ac - recurved larkspur</li> <li>• 158 ac - lesser saltscale</li> <li>• 39 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 20 ac - subtle orache</li> <li>• 4.3 ac - Wright's</li> </ul>	<ul style="list-style-type: none"> <li>• 289 ac - moestan blister beetle</li> <li>• .01 ac - CTS</li> <li>• 437 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 40 ac - recurved larkspur</li> <li>• 106 ac - lesser saltscale</li> <li>• 40 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 22 ac - subtle orache</li> <li>• 4.3 ac - Wright's</li> </ul>	<ul style="list-style-type: none"> <li>• 169 ac - moestan blister beetle</li> <li>• 371 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 21 ac - recurved larkspur</li> <li>• 126 ac - lesser saltscale</li> <li>• 21 ac - Hoover's cryptantha</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 74 ac - subtle orache</li> </ul>	<ul style="list-style-type: none"> <li>• 161 ac - moestan blister beetle</li> <li>• 420 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 100 ac - lesser saltscale</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 4.5 ac - subtle orache</li> <li>• 4.3 ac - Wright's trichocoronis</li> <li>• 11 ac - Swainson's hawk</li> </ul>	<ul style="list-style-type: none"> <li>• 161 ac - moestan blister beetle</li> <li>• 420 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 201 ac - lesser saltscale</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 85 ac - subtle orache</li> <li>• 4.3 ac - Wright's trichocoronis</li> <li>• 18 ac - Swainson's hawk</li> </ul>	<ul style="list-style-type: none"> <li>• 110 ac - moestan blister beetle</li> <li>• 409 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 139 ac - lesser saltscale</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 0.7 ac - subtle orache</li> <li>• 4.3 ac - Wright's trichocoronis</li> <li>• 16 ac - Swainson's</li> </ul>	<ul style="list-style-type: none"> <li>• 289 ac - moestan blister beetle</li> <li>• .01 ac - CTS</li> <li>• 420 ac - giant garter snake</li> <li>• 2.4 ac - western pond turtle</li> <li>• 8.9 ac - hispid bird's-beak</li> <li>• 90 ac - lesser saltscale</li> <li>• 4.3 ac - American badger</li> <li>• 4.3 ac - northern harrier</li> <li>• 0.7 ac - subtle orache</li> <li>• 4.3 ac - Wright's trichocoronis</li> <li>• 17 ac - Swainson's</li> </ul>	<ul style="list-style-type: none"> <li>• 1.6 ac - burrowing owl</li> <li>• 62 ac - moestan blister beetle</li> <li>• 8.0 ac - giant garter snake</li> <li>• 7.1 ac - succulent owl's clover</li> <li>• 0.1 ac - lesser saltscale</li> <li>• 32 ac - Nelson's antelope squirrel</li> <li>• 26 ac - blunt nosed-leopard lizard</li> <li>• 16 ac - Swainson's hawk</li> <li>• 1.6 ac - California horned lark</li> <li>• 3.1 ac - San Joaquin whipsnake</li> <li>• 63.5 ac - San</li> </ul>	



Measurement	Avenue 24				SR 152 (North)				SR 152 (South)	SR 152 (South) to Avenue 21		Avenue 21					South of GEA Wye
	SR 140 Wye	Road 11 Wye	East of Road 12 Wye	Road 13 Wye	Road 11 Wye	Road 13 Wye	Road 18 Wye	Road 19 Wye	Road 18 Wye	SR 99 Wye	Road 19 Wye	Avenue 22 Wye	Road 11 Wye	Road 13 Wye	SR 99 Wye	Road 19 Wye	
	<ul style="list-style-type: none"> <li>fox</li> <li>1.7 ac – Yuma myotis</li> <li>0.2 ac – vernal pool tadpole shrimp</li> <li>3.7 ac - Cismontane Alkali Marsh</li> <li>13 ac – Swainson's hawk</li> <li>14 ac – round-leaved filaree</li> <li>18 ac - Sanford's arrowhead</li> <li>553 ac – longhorn fairy shrimp</li> <li>48 ac – tricolored blackbird</li> </ul>	<ul style="list-style-type: none"> <li>trichocoronis</li> <li>12 ac - Swainson's hawk</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>35 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac - longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>trichocoronis</li> <li>16 ac - Swainson's hawk</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>35 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac - longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>trichocoronis</li> <li>17 ac - Swainson's hawk</li> <li>0.6 ac - Yuma myotis</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>35 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac - longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>4.3 ac - Wright's trichocoronis</li> <li>7.6 ac - Swainson's hawk</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>35 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac - longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>trichocoronis</li> <li>17 ac - Swainson's hawk</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>35 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac - longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>4.3 ac - Wright's trichocoronis</li> <li>17 ac - Swainson's hawk</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>35 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac - longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>Wright's trichocoronis</li> <li>17 ac - Swainson's hawk</li> <li>1.5 ac – Yuma myotis</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>35 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>261 ac – longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>trichocoronis</li> <li>17 ac - Swainson's hawk</li> <li>4.7 ac - Yuma myotis</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>167 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>261 ac – longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>trichocoronis</li> <li>17 ac - Swainson's hawk</li> <li>1.0 – Yuma myotis</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>137 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac – longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>4.3 ac - Wright's trichocoronis</li> <li>16 ac - Swainson's hawk</li> <li>17 ac – succulent owl's clover</li> <li>1.7 ac - Yuma myotis</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>157 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>ac – longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>40 ac - Cismontane Alkali Marsh</li> <li>131 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac – longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>40 ac - Cismontane Alkali Marsh</li> <li>232 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac – longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>hawk</li> <li>4.7 ac - Yuma myotis</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>147 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>261 ac – longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>hawk</li> <li>1.0 ac - Yuma myotis</li> <li>40 ac - Cismontane Alkali Marsh</li> <li>121 ac - heartscale</li> <li>4.3 ac - Sanford's arrowhead</li> <li>285 ac – longhorn fairy shrimp</li> </ul>	<ul style="list-style-type: none"> <li>Joaquin kit fox</li> <li>6.0 ac – giant kangaroo rat</li> <li>96 ac - prairie falcon</li> <li>1.8 ac - heartscale</li> <li>1.7 ac – Yuma myotis</li> <li>125 ac – Valley Sacaton Grassland</li> </ul>	
Wildlife Refuges/Conservation Areas	<ul style="list-style-type: none"> <li>90 ac – GEA</li> <li>22 ac – North Grasslands Wildlife Area</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – Grassland Ecological Area (GEA)</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>243 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>243 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>244 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>244 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>243 ac – GEA</li> </ul>	<ul style="list-style-type: none"> <li>268 ac – GEA</li> </ul>	None
Cultural Resources (potential historical properties, known archaeological sites, archaeological sensitivity)	<ul style="list-style-type: none"> <li>93 properties w/ buildings over 50 years old</li> <li>6 NRHP eligible or listed properties</li> <li>6 known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>100 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>112 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>1 known archaeological site</li> </ul>	<ul style="list-style-type: none"> <li>106 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>2 known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>159 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>153 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>168 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>151 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>148 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>129 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>1 known archaeological site</li> </ul>	<ul style="list-style-type: none"> <li>126 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>122 properties w/ buildings over 50 years old</li> <li>12 NRHP eligible or listed properties</li> <li>3 known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>125 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>141 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>127 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>1 known archaeological site</li> </ul>	<ul style="list-style-type: none"> <li>122 properties w/ buildings over 50 years old</li> <li>11 NRHP eligible or listed properties</li> <li>No known archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>98 properties w/ buildings over 50 years old</li> <li>6 NRHP eligible or listed property</li> <li>5 known archaeological sites</li> </ul>

Measurement	Avenue 24				SR 152 (North)				SR 152 (South)	SR 152 (South) to Avenue 21		Avenue 21					South of GEA Wye
	SR 140 Wye	Road 11 Wye	East of Road 12 Wye	Road 13 Wye	Road 11 Wye	Road 13 Wye	Road 18 Wye	Road 19 Wye	Road 18 Wye	SR 99 Wye	Road 19 Wye	Avenue 22 Wye	Road 11 Wye	Road 13 Wye	SR 99 Wye	Road 19 Wye	
Parklands	None	None	None	None	None	None	None	0.5 ac – Berenda Reservoir	None	None	0.5 ac – Berenda Reservoir	None	None	None	None	0.5 ac – Berenda Reservoir	0.2 ac – Dos Amigos
Agricultural Land (acres) <sup>2</sup>	<ul style="list-style-type: none"> <li>• 139 ac – Farmland of Local Importance</li> <li>• 607 ac – Prime Farmland</li> <li>• 536 ac – Unique Farmland</li> <li>• 466 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 197 ac – Farmland of Local Importance</li> <li>• 934 ac – Prime Farmland</li> <li>• 791 ac – Unique Farmland</li> <li>• 680 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 189 ac – Farmland of Local Importance</li> <li>• 971 ac – Prime Farmland</li> <li>• 771 ac – Unique Farmland</li> <li>• 682 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 225 ac – Farmland of Local Importance</li> <li>• 1,032 ac – Prime Farmland</li> <li>• 746 ac – Unique Farmland</li> <li>• 677 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 186 ac – Farmland of Local Importance</li> <li>• 1,133 ac – Prime Farmland</li> <li>• 736 ac – Unique Farmland</li> <li>• 778 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 182 ac – Farmland of Local Importance</li> <li>• 908 ac – Prime Farmland</li> <li>• 737 ac – Unique Farmland</li> <li>• 687 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 211 ac – Farmland of Local Importance</li> <li>• 1,147 ac – Prime Farmland</li> <li>• 899 ac – Unique Farmland</li> <li>• 577 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 194 ac – Farmland of Local Importance</li> <li>• 1,023 ac – Prime Farmland</li> <li>• 1,017 ac – Unique Farmland</li> <li>• 609 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 200 ac – Farmland of Local Importance</li> <li>• 1,244 ac – Prime Farmland</li> <li>• 1,014 ac – Unique Farmland</li> <li>• 773 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 187 ac – Farmland of Local Importance</li> <li>• 1,024 ac – Prime Farmland</li> <li>• 746 ac – Unique Farmland</li> <li>• 689 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 233 ac – Farmland of Local Importance</li> <li>• 1,155 ac – Prime Farmland</li> <li>• 960 ac – Unique Farmland</li> <li>• 672 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 200 ac – Farmland of Local Importance</li> <li>• 967 ac – Prime Farmland</li> <li>• 912 ac – Unique Farmland</li> <li>• 588 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 256 ac – Farmland of Local Importance</li> <li>• 1,074 ac – Prime Farmland</li> <li>• 876 ac – Unique Farmland</li> <li>• 748 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 257 ac – Farmland of Local Importance</li> <li>• 1,058 ac – Prime Farmland</li> <li>• 748 ac – Unique Farmland</li> <li>• 760 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 187 ac – Farmland of Local Importance</li> <li>• 961 ac – Prime Farmland</li> <li>• 830 ac – Unique Farmland</li> <li>• 539 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 232 ac – Farmland of Local Importance</li> <li>• 1,092 ac – Prime Farmland</li> <li>• 1,085 ac – Unique Farmland</li> <li>• 517 ac – Farmland of Statewide Importance</li> </ul>	<ul style="list-style-type: none"> <li>• 241 ac – Farmland of Local Importance</li> <li>• 790 ac – Prime Farmland</li> <li>• 672 ac – Unique Farmland</li> <li>• 967 ac – Farmland of Statewide Importance</li> </ul>
Williamson Act Farmland (acres)	760	1,148	1,070	1,073	1,191	1,024	1,123	1,353	1,286	1,147	1,492	1,217	1,303	1,192	1,030	1,399	1,512
<b>Natural Environment</b>																	
Noise/Vibration (number of potential sensitive receptors)	1,137/236	1,224/208	1,044/147	1,216/174	1,298/276	1,321/269	888/207	1,332/273	1,034/100	1,094/110	978/245	1,015/202	1,259/246	1,279/232	1,184/115	1,356/244	1,051/153
Visual/Scenic Resources	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	2.0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	2.0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting	0 mi of aerial structure in urban setting

<sup>2</sup> The SR 152 (North) to Road 18 Wye, SR 152 (North) to Road 19 Wye, SR 152 (South) to Road 18 Wye, Avenue 21 to Road 19 Wye, SR 152 (South) to Avenue 21 to SR 99 Wye, and SR 152 (South) to Avenue 21 to Road 19 Wye alignment alternatives would render large areas of farmland inaccessible and economically unusable because of the way in which farmland is boxed in between alternatives, and thus would result in a direct loss of that agricultural land. This area has been included in the total acreage of impacted agricultural land, including the conversion of Williamson Act farmland. Please refer to Attachment 4 for further discussion of the study area methodology used for this impacts analysis.

Measurement	Avenue 24				SR 152 (North)				SR 152 (South)	SR 152 (South) to Avenue 21		Avenue 21					South of GEA Wye	
	SR 140 Wye	Road 11 Wye	East of Road 12 Wye	Road 13 Wye	Road 11 Wye	Road 13 Wye	Road 18 Wye	Road 19 Wye	Road 18 Wye	SR 99 Wye	Road 19 Wye	Avenue 22 Wye	Road 11 Wye	Road 13 Wye	SR 99 Wye	Road 19 Wye		
Geotechnical Constraints (known fault crossings, seismic zones, liquefaction zones)	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	No crossings of seismic faults or fault rupture hazard zones; No liquefaction zones	
<b>Land Use</b>																		
Consistency with Local Plans/ General Plans	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans. Crosses through City of Chowchilla's Site Annexation Plan area.	City of Chowchilla opposes SR 99 alignments within City limits. Crosses through City of Chowchilla's Site Annexation Plan area.	Consistent with current plans.	Consistent with current plans.
<b>School Districts</b>																		
Schools within 1500 feet of Alignment	2	0	0	0	1	1	1	1	1	1	0	2	1	2	2	1	0	
<b>Traffic</b>																		
Local Traffic Effects around Stations (increased congestion)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Road Closures <sup>3</sup>	21	21	31	40	32	32	33	32	33	31	32	25	41	40	41	42	29	

<sup>3</sup> SR152 wye alternatives will include elimination of cross median turns i.e. installation of median barrier.

Measurement	Avenue 24				SR 152 (North)				SR 152 (South)	SR 152 (South) to Avenue 21		Avenue 22 Wye	Avenue 21				South of GEA Wye
	SR 140 Wye	Road 11 Wye	East of Road 12 Wye	Road 13 Wye	Road 11 Wye	Road 13 Wye	Road 18 Wye	Road 19 Wye	Road 18 Wye	SR 99 Wye	Road 19 Wye		Road 11 Wye	Road 13 Wye	SR 99 Wye	Road 19 Wye	
<b>Agency and Public Input</b>																	
Agency and Public Input	<ul style="list-style-type: none"> <li>There is more support for the Avenue 21 Wye over the Avenue 24 Wye from the farming community, which expressed strong concerns about the Avenue 24 Wye. Some of these concerns included loss of usable farmland and the impact to farm operations and irrigation infrastructure, especially wells.</li> <li>The City of Chowchilla is strongly opposed to any Avenue 24 alignment.</li> <li>Rural interests generally favor a Road 11 or Road 13 alignment over East of Road 12.</li> <li>Madera and Merced County property owners noted their concern that the Authority was still considering routes that do not follow existing corridors, specifically, the A2/Hybrid Alternatives with the Avenue 24 Wye. The Refined Avenue 24 Wye connection is the same Wye that was used for the A3 route, which was not carried forward. A commenter stated that the Refined Avenue 24 Wye and West Chowchilla Bypass Option should not have been included in the Draft EIR/EIS for the Merced to Fresno Section.</li> <li>Los Banos residents expressed support for the Henry Miller to Avenue 24 Alternative</li> </ul>				<ul style="list-style-type: none"> <li>Certain communities expressed preferences that the Wye Alternatives should be selected from within the existing transportation corridor, specifically mentioning the I-5 corridor and SR 152 alternative as an appropriate alternative to address this concern.</li> <li>SR 152 is generally preferred by most stakeholders over either Avenue 24 or Avenue 21.</li> <li>Among the easterly alignments, the City of Chowchilla favors a Road 19 alignment over Road 18.</li> </ul>						<ul style="list-style-type: none"> <li>There is more support for the Avenue 21 Wye over the Avenue 24 Wye from the farming community, which expressed strong concerns about the Avenue 24 Wye. Some of these concerns included loss of usable farmland and the impact to farm operations and irrigation infrastructure, especially wells.</li> </ul>				<ul style="list-style-type: none"> <li>Numerous commenters also opposed the West Chowchilla Bypass option, instead indicating a preference for a Wye connection south of Chowchilla.</li> </ul>		
	<b>Farmers' Concerns</b> <ul style="list-style-type: none"> <li>- Loss of Farmland</li> <li>- Reduced access and connectivity</li> <li>- Remnant Parcels</li> <li>- Impacts on dairies</li> <li>- Pesticide Buffer zone</li> <li>- Bee activity/pollination</li> <li>- Irrigation Systems</li> <li>- Road closures resulting in reduced school bus safety and limited agricultural goods movement opportunities from the farms to local markets</li> </ul>				<b>Irrigation District Concerns</b> <ul style="list-style-type: none"> <li>- Impacts on infrastructure</li> <li>- Access for O&amp;M</li> <li>- Loss of revenue</li> </ul>				<b>Community Concerns</b> <ul style="list-style-type: none"> <li>- Access across HSR alignment</li> <li>- Impact on development</li> <li>- Emergency Response</li> <li>- Air quality</li> <li>- Safety concerns due to fog</li> <li>- Select alternative that would not pass through valuable Central Valley farmland if possible, because of its impact on the local and statewide agricultural economy</li> <li>- High cost and lack of funding</li> <li>- The City of Chowchilla prefers routes which are farthest from the City (Road 11 and Road 19).</li> </ul>				<b>School District Concerns</b> <ul style="list-style-type: none"> <li>- Disruption of bus routes</li> <li>- Loss of Revenue</li> <li>- Noise &amp; Vibration</li> </ul>				<b>Department of Corrections</b> <ul style="list-style-type: none"> <li>- Security concerns</li> <li>- Loss of Property</li> <li>- Loss of Revenue</li> </ul>