Stanislaus County
Striving to be the Best

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10th Street, Suite 3400, Modesto, CA 95354
Phone: 209.525.6330 Fax: 209.525.5911

CEQA Referral
Initial Study and
Notice of Intent to Adopt a Mitigated Negative Declaration

Date: **March 6, 2017**

To: **Distribution List (See Attachment A)**

From: **Kristin Doud, Associate Planner, Planning and Community Development**

Subject: **USE PERMIT APPLICATION NO. PLN2015-0130 – THE FRUIT YARD AMPHITHEATER**

Comment Period: **March 6, 2017 – April 10, 2017**

Respond By: **April 10, 2017**

Public Hearing Date: **April 20, 2017**

You may have previously received an Early Consultation Notice regarding this project, and your comments, if provided, were incorporated into the Initial Study. Based on all comments received, Stanislaus County anticipates adopting a Mitigated Negative Declaration for this project. This referral provides notice of a 30-day comment period during which Responsible and Trustee Agencies and other interested parties may provide comments to this Department regarding our proposal to adopt the Mitigated Negative Declaration.

All applicable project documents are available for review at: Stanislaus County Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, CA 95354. Please provide any additional comments to the above address or call us at (209) 525-6330 if you have any questions. Thank you.

Applicant: **Joe Traina**

Project Location: **7924 & 7948 Yosemite Blvd. (Hwy 132), at the southwest corner of Yosemite Blvd. and Geer Road, between the cities of Modesto, Waterford, and Hughson.**

APN: **009-027-004**

Williamson Act Contract: **N/A**

General Plan: **Planned Development (PD)**

Current Zoning: **Planned Development – P-D (317)**

Project Description: Request to expand an existing Planned Development with an outdoor, fenced, 3,500 person capacity amphitheater event center, a 5,000 square-foot stage, a 5,000 square-foot roof structure, a 4,000 square-foot storage building, a parking lot to the rear of the stage, and an additional 1,302-space temporary parking area. A maximum of 12 amphitheater events are proposed to take place per year. This use permit also includes a covered seating area of approximately 4,800 square-foot and a 1,600 square-foot gazebo in the eastern half of the park area, east of the outdoor amphitheater, and replacement of the existing pylon freestanding pole sign with an electronic reader board sign.

Full document with attachments available for viewing at:
http://www.stancounty.com/planning/pl/act-projects.shtm

USE PERMIT APPLICATION NO. 2015-0130 – THE FRUIT YARD AMPHITHEATER
Attachment A

Distribution List

	CA DEPT OF CONSERVATION Land Resources / Mine Reclamation		STAN CO ALUC
X	CA DEPT OF FISH & WILDLIFE		STAN CO ANIMAL SERVICES
	CA DEPT OF FORESTRY (CAL FIRE)	X	STAN CO BUILDING PERMITS DIVISION
X	CA DEPT OF TRANSPORTATION DIST 10	X	STAN CO CEO
X	CA OPR STATE CLEARINGHOUSE		STAN CO CSA
X	CA RWQCB CENTRAL VALLEY REGION	X	STAN CO DER
X	CA STATE LANDS COMMISSION	X	STAN CO ERC
	CEMETERY DISTRICT	X	STAN CO FARM BUREAU
	CENTRAL VALLEY FLOOD PROTECTION	X	STAN CO HAZARDOUS MATERIALS
X	CITY OF: MODESTO AND WATERFORD	X	STAN CO PARKS & RECREATION
	COMMUNITY SERVICES/SANITARY DIST	X	STAN CO PUBLIC WORKS
X	COOPERATIVE EXTENSION		STAN CO RISK MANAGEMENT
	COUNTY OF:	X	STAN CO SHERIFF
X	FIRE PROTECTION DIST: CONSOLIDATED	X	STAN CO SUPERVISOR DIST #1: OLSEN
	HOSPITAL DIST:	X	STAN COUNTY COUNSEL
X	IRRIGATION DIST: MODESTO	X	StanCOG
X	MOSQUITO DIST: EASTSIDE	X	STANISLAUS FIRE PREVETION BUREAU
X	MOUNTIAN VALLEY EMERGENCY MEDICAL SERVICES	X	STANISLAUS LAFCO
	MUNICIPAL ADVISORY COUNCIL:	X	SURROUNDING LAND OWNERS/RESPONDING NEIGHBORS (on file w/the Clerk to the Board of Supervisors)
X	PACIFIC GAS & ELECTRIC	X	TELEPHONE COMPANY: AT&T
	POSTMASTER:	X	TRIBAL CONTACTS (CA Government Code §65352.3)
	RAILROAD:	X	TUOLUMNE RIVER TRUST
X	SAN JOAQUIN VALLEY APCD	X	US ARMY CORPS OF ENGINEERS
X	SCHOOL DIST 1: EMPIRE	X	US FISH & WILDLIFE
X	SCHOOL DIST 2: MODESTO	X	US MILITARY (SB 1462) (7 agencies)
	STAN ALLIANCE	X	USDA NRCS
X	STAN CO AG COMMISSIONER	X	WATER DIST: MODESTO (DEL ESTE)

STANISLAUS COUNTY
CEQA REFERRAL RESPONSE FORM

TO: **Stanislaus County Planning & Community Development**
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

SUBJECT: **USE PERMIT APPLICATION NO. 2015-0130 – THE FRUIT YARD AMPHITHEATER**

Based on this agencies particular field(s) of expertise, it is our position the above described project:

_____ Will not have a significant effect on the environment.
_____ May have a significant effect on the environment.
_____ No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheet if necessary)

1.
2.
3.
4.

Listed below are possible mitigation measures for the above-listed impacts: *PLEASE BE SURE TO INCLUDE WHEN THE MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

1.
2.
3.
4.

In addition, our agency has the following comments (attach additional sheets if necessary).

_____

_____

Response prepared by:

_____

Name Title Date

Stanislaus County
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DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10th Street, Suite 3400, Modesto, CA 95354
Phone: 209.525.6330 Fax: 209.525.5911

CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, December 30, 2009

1.	**Project title:**	Use Permit Application No. PLN2015-0130 – The Fruit Yard. SCH No.2016072019
2.	**Lead agency name and address:**	Stanislaus County 1010 10th Street, Suite 3400 Modesto, CA 95354
3.	**Contact person and phone number:**	Kristin Doud, Associate Planner (209) 525-6330
4.	**Project location:**	7924 & 7948 Yosemite Blvd. (Hwy 132), at the southwest corner of Yosemite Blvd. and Geer Road, between the cities of Modesto, Waterford and Hughson. (APN: 009-027-004)
5.	**Project sponsor's name and address:**	The Fruit Yard – Joe Traina 7948 Yosemite Blvd Modesto, CA 95356
6.	**General Plan designation:**	PD (Planned Development)
7.	**Zoning:**	PD (317)

8. Description of project:

This is a request to expand an existing Planned Development (PD-317) with an outdoor, fenced, 3,500 person capacity amphitheater event center, a 5,000 square-foot amphitheater concrete stage with a 5,000 square-foot roof structure, a 4,000 square-foot storage building and parking lot adjacent and to the rear of the stage, and an additional 1,302-space temporary parking area, north and south of the amphitheater and east of the park. Vehicular access to the temporary parking lots will be provided by two additional paved access driveways off of Yosemite Boulevard (State Highway 132) and one additional driveway off of Geer Road. The on-site access driveways are proposed to be paved, lighted, and will provide on-site circulation access around the amphitheater. A traffic management plan is proposed to address ingress and egress to the site during special events. A maximum of 12 amphitheater events are proposed to take place per year, ending at 10:00 p.m. Sunday through Thursday, or 11:00 p.m. Friday and Saturday.

The Planned Development approved for this project, by the Board of Supervisors on August 19, 2008, allowed for the development of a 9,000 square-foot banquet facility, a new convenience market, relocation of an existing gas station, relocation of the existing "card lock" fueling facility and construction of a 3,000 square-foot retail shell building, which includes a drive-through establishment of unknown type. The Planned Development also permitted a 322-space boat/RV mini storage (both covered and uncovered spaces), a 66 space travel trailer park for short term (overnight) stays, a two acre site for retail tractor (large agricultural equipment) sales and a new facility for fruit packing and warehousing. A time extension approved by the Planning Commission on December 3, 2015, allowed the planned development schedule to extend out to August 19, 2030, to start construction of any one of the project phases.

The approved Planned Development also permitted occasional outdoor special events to be held on-site, near and on the nine acre park area, including fund raising activities to private parties. This Use Permit also includes a request to construct a covered seating area of approximately 4,800 square-feet and a 1,600 square-foot gazebo in the eastern half of the existing park area, east of the outdoor amphitheater.

Although the approved Planned Development included events to be held both in the park and in the future banquet hall, the Planned Development included a condition of approval which required that prior to the use of amplified music for these events, a Noise Analysis must be completed. Accordingly, the Noise Analysis and associated mitigation measures prepared for this project, cover amplified music events in the amphitheater, banquet hall and park.

Lastly, this Use Permit request also includes replacement of the existing pylon identification freestanding pole sign to an electronic reader board sign.

On January 21, 2010, the Planning Commission approved Vesting Tentative Parcel Map Application No. 2009-08 – The Fruit Yard, allowing the creation of twelve parcels ranging in size from 0.60+/- to 12.70 acres in conformance with uses allowed under P-D No. 317. The Fruit Yard Parcel Map (56PM83) was recorded on October 31, 2012.

9.	**Surrounding land uses and setting:**	North: church, fire station, agriculture - East: PD for Agricultural Businesses - South: agriculture, mobile home park - West: agriculture.
10.	**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**	Stanislaus County Public Works Department CALTRANS, District 10 Stanislaus Fire Prevention Bureau Department of Environmental Resources Sheriff's Department

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ **Aesthetics**	☐ **Agriculture & Forestry Resources**	☐ **Air Quality**
☐ **Biological Resources**	☐ **Cultural Resources**	☐ **Geology / Soils**
☐ **Greenhouse Gas Emissions**	☐ **Hazards & Hazardous Materials**	☐ **Hydrology / Water Quality**
☐ **Land Use / Planning**	☐ **Mineral Resources**	☒ **Noise**
☐ **Population / Housing**	☒ **Public Services**	☐ **Recreation**
☒ **Transportation / Traffic**	☐ **Utilities / Service Systems**	☐ **Mandatory Findings of Significance**

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☐ **I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.**

☒ **I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ **I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.**

☐ **I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.**

☐ **I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.**

Kristin Doud, Associate Planner
Signature

March 1, 2017
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, than the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

> **a) Earlier Analysis Used. Identify and state where they are available for review.**
>
> **b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.**
>
> **c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.**

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

> **a) the significant criteria or threshold, if any, used to evaluate each question; and**
>
> **b) the mitigation measure identified, if any, to reduce the impact to less than significant.**

ISSUES

I. AESTHETICS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		

Discussion: The site is located at the southwest corner of Geer Road and Yosemite Boulevard (Hwy 132). Aesthetic impacts from the approved Planned Development were addressed as part of the previous approved project, General Plan Amendment Application No. 2007-03 and Rezone Application No. 2007-03. This included landscaping plans, building elevations and a sign plan.

This project proposes the following additional lighting: two street lights along Geer Road, proposed to be 28 feet tall with 15 foot wide arms, in accordance with Public Works Standards and Specifications; five additional pole lights, proposed to be located at the back of the amphitheater, each 27 feet in height; five pole lights to be located in the driveway and parking area, each 27 feet in height; and stage lighting which is either mounted on the roof of the stage or placed at ground level.

A Mitigation Measure has been applied to the project to ensure that all proposed lighting will be aimed down to prevent any glaring impacts onto adjacent properties or roadways. With this mitigation measure in place, aesthetic impacts are considered to be less than significant with mitigation included.

Mitigation Measure No. 1: *All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include but not be limited to: the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and to prevent light trespass (glare and spill light that shines onto neighboring properties). Amphitheater lighting shall be shut off by 11:00 p.m. on Sunday – Thursday, and by midnight on Friday and Saturday evenings.*

References: Application information; General Plan Amendment No. 2007-03, Rezone No. 2007-03 – The Fruit Yard; and the Stanislaus County General Plan and Support Documentation[1].

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			**X**	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			**X**	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			**X**	
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			**X**	

Discussion: The property is not currently restricted by a Williamson Act Contract. The project site is classified as Prime Farmland and Urban and Built-Up Land by the Farmland Mapping and Monitoring Program. The soils on site are listed as Hanford fine sandy loams (0-1% and 0-3% slopes, Index Rating of 90-100, Grade 1) and Greenfield sandy loams (0-3% slopes, Index Rating of 68, Grade 2).

The project site is adjacent to an animal feed and supply business (zoned P-D 268, Planned Development) located on the northeast corner of the intersection, a drilling company (Masellis Drilling) on the northwest corner, a fire station and church are located to the north. Production Agricultural parcels are to the west, south, and east of the project site. The 45± acre parcel currently supports the existing Fruit Yard produce market, the Fruit Yard restaurant, two separate Gas Fueling facilities, all of which currently have paved parking and landscaping; a concave grass outdoor amphitheater and a park site, where special events are currently held. The remaining part of the property is currently planted in orchard. The Planned Development approved for this project, by the Board of Supervisors on August 19, 2008, allowed for the additional development of a 9,000 square-foot banquet facility, a new convenience market, relocation of an existing gas station, relocation of the existing "card lock" fueling facility and construction of a 3,000 square-foot retail shell building, which includes a drive-through establishment of unknown type. The planned development also permitted a 322 space boat/RV mini storage (both covered and uncovered spaces), a 66 space travel trailer park for short term (overnight) stays, a two acre site for retail tractor (large agricultural equipment) sales, and a new facility for fruit packing and warehousing. This project is addressing the outdoor amphitheater, which proposes a maximum capacity of 3,500 persons and to hold up to 12 events per year, and the use of amplified music events at the amphitheater, park and banquet hall.

Although the approved development described above was approved by the Board of Supervisors, which requires finding the project to be compatible with surrounding land uses, including agriculture, and to meet the criteria for ag land conversion, the staff report written for the project identified some of the proposed uses included in phase 2 of the project as needing further analysis in terms of potential impacts to surrounding agriculture and whether or not they meet the criteria for ag land conversion. Consequently, the project was conditioned to require a Use Permit be obtained prior to implementation of the tractor sales facility and the fruit packing facility identified in phase 2 of the Planned Development.

In December of 2007, Stanislaus County adopted an updated Agricultural Element which incorporated guidelines for the implementation of agricultural buffers applicable to new and expanding non-agricultural uses within or adjacent to the A-2 Zoning District. The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts such as spray drift and trespassing resulting from the interaction of agricultural and non-agricultural uses. Prior to project approval, the applicant may present an alternative to the buffer requirements to the Agricultural Advisory Board for support. Alternatives may be approved provided the Planning Commission finds that the alternative provides equal or greater protection than the existing buffer standards. The proposed project does meet the recommended 300 feet buffer for people intensive uses from the use to all property lines.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03, Rezone No. 2007-03 – The Fruit Yard; Stanislaus County General Plan and Support Documentation[1]; Stanislaus County General Plan and Support Documentation[1]; Stanislaus County Agricultural Element[1]; Stanislaus County Zoning Ordinance; California State Department of Conservation Farmland Mapping and Monitoring Program - Stanislaus County Farmland 2004; United States Department of Agriculture Soil Survey 1964 - Eastern Stanislaus Area, California.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

Discussion: The project site is within the San Joaquin Valley Air Basin, which has been classified as "non-attainment" for ozone and respirable particulate matter (PM-10 and PM-2.5) as defined by the Federal Clean Air Act. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has been established by the State in an effort to control and minimize air pollution. As such, the District maintains permit authority over stationary sources of pollutants.

Any pollutants generated by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming, and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of the California EPA which sets emissions standards for vehicles, and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the SJVAPCD has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the basin. The project will be subject to compliance with all applicable district rules including, but not limited to fugitive PM-10 prohibitions, nuisance, and architectural coatings, and cutback, and slow cure and emulsified asphalt. This project was referred to the SJVAPCD for early comments. At maximum capacity the amphitheater can hold 3,500 attendees. At a rate of three attendees per vehicle, the project is estimated to include a total of 1,167 additional car trips per event. There are a maximum of 12 events per year proposed as a part of this project. A referral response received from SJVAPCD indicated that this proposed project may be subject to District Rule 9510 and subject to obtaining an Air Impact Assessment (AIA) Application. The project will be conditioned to require that the applicant obtain this permit and any other applicable permits from the Air District prior to onset of amphitheater events. With these permits in place, and considering that the events are temporary in nature and limited in number, no significant impacts to air quality are anticipated.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03, Rezone No. 2007-03 – The Fruit Yard; Referral response received from the San Joaquin Valley Air Pollution Control District on July 19, 2016; Stanislaus County General Plan and Support Documentation[1].

IV. BIOLOGICAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

Discussion: The project is located within the Waterford Quad of the California Natural Diversity Database. There are 15 plants and animals which are state or federally listed, threatened, or identified as species of special concern within the Waterford California Natural Diversity Database Quad. These species include the Swainson's hawk, Tricolored Blackbird, Burrowing Owl, Riffle Sculpin, Sacramento Hitch, Hardhead, Sacramento-San Joaquin Tule Perch, Steelhead, Chinook Salmon, Valley Elderberry Longhorn Beetle, Stinkbells, Beaked Clarkia, Colusa Grass, San Joaquin Valley Orcutt Grass, and Greene's Tuctoria. However, the project site is already developed or planted in orchard making the likelihood for existence of these species on the project site very low.

The project will not conflict with a Habitat Conservation Plan, a Natural Community Conservation Plan, or other locally approved conservation plans. Impacts to endangered species or habitats, locally designated species, or wildlife dispersal or mitigation corridors are considered to be less than significant.

An early consultation was referred to the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and no response was received.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03, Rezone No. 2007-03 – The Fruit Yard; California Department of Fish and Wildlife (formerly the Department of Fish and Game); California Natural Diversity Database; and the Stanislaus County General Plan and Support Documentation[1].

V. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?			X	

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion: It does not appear this project will result in significant impacts to any archaeological or cultural resources. The applicant submitted a records search from the Central California Information Center (CCIC) with the previous 2007 Planned Development project request. The records search indicated that the project area has a low sensitivity for the possible discovery of prehistoric resources, due to the distance from a natural water source, as well as a low sensitivity for historic archaeological resources. A Sacred Lands File Check, completed by the Native American Heritage Commission during the processing of the 2007 Planned Development, indicated that no sacred sites were present within the project site. Conditions of approval will be placed on the project requiring that construction activities will be halted if any resources are found, until appropriate agencies are contacted and an archaeological survey is completed.

It does not appear this project will result in significant impacts to any archaeological or cultural resources. Cultural resources are not known to exist on the project site. However, a standardized condition of approval will be added to this project to address any discovery of cultural resources during the construction phases.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03; Rezone No. 2007-03 – The Fruit Yard; Stanislaus County General Plan and Support Documentation[1]; Records search dated May 27, 2009, from the Central California Information Center; Referral response from the Native American Heritage Commission dated November 17, 2009.

VI. GEOLOGY AND SOILS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil creating substantial risks to life or property?			X	

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	

Discussion: The soils on site are listed as Hanford fine sandy loams (0-1% and 0-3% slopes, Index Rating of 90-100, Grade 1) and Greenfield sandy loams (0-3% slopes, Index Rating of 68, Grade 2). As contained in Chapter 5 of the General Plan, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5. However, as per the California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and a soils test may be required at building permit application. Results from the soils test will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Any structures resulting from this project will be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. Any earth moving is subject to Public Works Standards and Specifications, which considers the potential for erosion and run-off prior to permit approval. Likewise, any addition of a septic tank or alternative waste water disposal system would require the approval of the Department of Environmental Resources (DER) through the building permit process, which also takes soil type into consideration within the specific design requirements.

Stanislaus County Department of Public Works has already reviewed and approved a grading and drainage plan for the amphitheater. Additional grading and drainage plans are required to be submitted to the Department of Public Works for review and approval for any additional grading activities, which will be reflected as a Condition of Approval for the project.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03; Rezone No. 2007-03 – The Fruit Yard; California Building Code (2016); Stanislaus County General Plan and Support Documentation - Safety Element[1].

VII. GREENHOUSE GAS EMISSIONS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion: The principal Greenhouse Gasses (GHGs) are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), perfluorocarbons (PFCs), hydrofluorocarbons (HCFCs), and tropospheric Ozone (O3). CO2 is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as CO2 equivalents (CO2e). In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] No. 32), which requires the California Air Resources Board (ARB) design and implement emission limits, regulations and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.

The proposed structures are subject to the mandatory planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency and environmental quality measures of the California Green Building Standards (CALGreen) Code (California Code of Regulations, Title 24, Part 11). Minimal greenhouse gas emissions will occur during construction. Construction activities are considered to be less than significant as they are temporary in nature and are subject to meeting SJVAPCD standards for air quality control. Minimal greenhouse gas emissions will also be generated from additional vehicle and truck trips. At maximum capacity the amphitheater can hold 3,500 attendees. At a rate of three attendees per vehicle, the project is estimated to include a total of 1,167 additional car trips per event. There are a maximum of 12 events per year proposed as a part of this project. A referral response

received from SJVAPCD indicated that this proposed project may be subject to District Rule 9510 and subject to obtaining an AIA Application. The project will be conditioned to require that the applicant obtain this permit and any other applicable permits from the Air District prior to onset of amphitheater events. With these permits in place, and considering that the events are temporary in nature and limited in number, no significant impacts to greenhouse gas emissions occurring as a result of this project are anticipated.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03; Rezone No. 2007-03 – The Fruit Yard; Referral response received from the San Joaquin Valley Air Pollution Control District on July 19, 2016; Stanislaus County General Plan and Support Documentation[1]

VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			**X**	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			**X**	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				**X**
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				**X**
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			**X**	

Discussion: DER is responsible for overseeing hazardous materials and has not indicated any particular concerns in this area. Pesticide exposure is a risk in areas located in the vicinity of agriculture. Sources of exposure include contaminated groundwater, which is consumed and drift from spray applications. Application of sprays is strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. Spraying activities on adjacent properties will be conditioned by the Agricultural Commissioner's Office. The project site is not located within an airport land use plan or a wildlands area. The project site is not located in a very high or high fire severity zone and is located within the Stanislaus Consolidated Fire District. Standard conditions of approval regarding fire protection will be incorporated into the project.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03, Rezone No. 2007-03 – The Fruit Yard; Stanislaus County General Plan and Support Documentation[1].

IX. HYDROLOGY AND WATER QUALITY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	

Discussion: Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act (FEMA). The project site is located in FEMA Flood Zone X, which includes areas determined to be outside the 0.2% annual chance floodplains. All flood zone requirements will be addressed by the Building Permits Division during the building permit process. The Central Valley Regional Water Quality Control Board (RWQCB) provided an early consultation referral response requesting that the applicant coordinate with their agency to determine if any permits or Water Board requirements must be obtained/met prior to operation. Conditions of approval will be added to the project requiring the applicant comply with this request prior to issuance of a building permit.

A Grading and Drainage Plan for the amphitheater has already been reviewed and approved by the Public Works Department.

The California Safe Drinking Water Act (CA Health and Safety Code Section 116275(h)) defines a Public Water System as a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following:

(1) Any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system.

(2) Any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system.

(3) Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.

This project is subject to the public water system permit and will be required to work with DER to ensure these permit requirements are met. This will be applied to the project as a condition of approval.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03; Rezone No. 2007-03 – The Fruit Yard; Referral response from Stanislaus County Department of Public Works dated November 12, 2009; Stanislaus County General Plan and Support Documentation[1].

X. LAND USE AND PLANNING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Physically divide an established community?			**X**	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			**X**	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			**X**	

Discussion: This is a request to expand an existing Planned Development (PD-317) with an outdoor, fenced, 3,500 person capacity amphitheater event center; a 5,000 square-foot amphitheater concrete stage with a 5,000 square-foot roof structure; a 4,000 square-foot storage building and parking lot adjacent and to the rear of the stage, and an additional 1,302-space temporary parking area, north and south of the amphitheater and east of the park. A maximum of 12 amphitheater events are proposed to take place per year, ending at 10:00 p.m. Sunday through Thursday, or 11:00 p.m. Friday and Saturday. This Use Permit also includes a request to construct a covered seating area of approximately 4,800 square-feet and a 1,600 square-foot gazebo in the eastern half of the existing park area, east of the outdoor amphitheater and replacement of the existing pylon identification freestanding pole sign to an electronic reader board sign.

The Planned Development approved for this project, by the Board of Supervisors on August 19, 2008, allowed for the development of a 9,000 square-foot banquet facility, a new convenience market, relocation of an existing gas station, relocation of the existing "card lock" fueling facility and construction of a 3,000 square-foot retail shell building, which includes a drive-through establishment of unknown type. The planned development also permitted a 322 space boat/RV mini storage (both covered and uncovered spaces), a 66 space travel trailer park for short term (overnight) stays, a two acre site for retail tractor (large agricultural equipment) sales, and a new facility for fruit packing and warehousing. A time

extension approved by the Planning Commission on December 3, 2015, allowed the Planned Development schedule to extend out to August 19, 2030, to start construction of any one of the project phases. The Planned Development also permitted occasional outdoor special events to be held on-site, near and on the nine acre park area, including fund raising activities to private parties.

Although the approved Planned Development already included events to be held both in the park and in the future banquet hall, the Planned Development included a condition of approval which required that prior to the use of amplified music for these events, a Noise Analysis must be completed. Accordingly, the Noise Analysis and associated mitigation measures prepared for this project, cover amplified music events in the amphitheater, banquet hall, and park.

In accordance with Section 21.40.080 amendments to the development plan may be permitted in accordance with the procedure set forth with the processing of a use permit, provided they are not of such a size or nature as to change the character of the development plan.

This request will not physically divide an existing community, nor does it conflict with any applicable land use plan, policy, or regulation, or any habitat or natural community conservation plan. The project must be consistent with the county's general plan, zoning ordinance, and noise ordinance in order to be approved. Through the application of mitigation measures, the project will be consistent will these policies.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03; Rezone No. 2007-03 – The Fruit Yard; Stanislaus County General Plan and Support Documentation[1].

XI. MINERAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

Discussion: The location of all commercially viable mineral resources in Stanislaus County has been mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site.

Mitigation: None.

References: State Division of Mining & Geology - Special Report 173 (1993); Stanislaus County General Plan and Support Documentation[1].

XII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?		X		
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Discussion: This project proposes to hold a maximum of 12 amphitheater events per year, ending at 10:00 p.m. Sunday through Thursday, or 11:00 p.m. Friday and Saturday. The Stanislaus County General Plan[1] identifies noise levels up to 75 dB L_{dn} (or CNEL) as the normally acceptable level of noise for industrial, manufacturing, utility and agricultural uses; and up to 70 dB L_{dn} (or CNEL) as the normally acceptable level of noise for auditoriums, concert halls, and amphitheaters. Without mitigation in place, noise impacts associated with the use of amplified sound during the amphitheater events have the potential to exceed the normally acceptable levels of noise.

An Environmental Noise Analysis, conducted by Bollard Acoustical Consultants, Inc., dated February 3, 2016, was conducted for the project. This study was peer reviewed by J.C. Brennan and Associates and was subsequently amended on December 28, 2016, based on peer review comments. The amended Environmental Noise Analysis incorporated comments received by J.C. Brennan and Associates. J.C. Brennan and Associates reviewed the amended document and determined that it adequately covered all of the concerns they had included in their original peer review response. The revised Environmental Noise Analysis provided a number of recommendations for mitigation measures to be incorporated into the project, ranging from on-going sound monitoring, limits on hours of operation, and methods for corrective actions, to ensure the project meets the noise limits identified both in the Stanislaus County Noise Element of the General Plan and the Noise Ordinance.

The previous general plan amendment and rezone for the project (P-D 317) included a condition of approval which required that, *"An acoustical analysis shall be prepared in accordance with the Noise Element of the Stanislaus County General Plan prior to any outdoor use of amplified sound or blasting devices to insure noise levels do not exceed the maximum allowable noise levels as allowed by the Noise Element".* To address this condition of approval, the use of amplified sound at the park and banquet hall have been incorporated into the mitigation monitoring plan.

With mitigation measures in place, this project's noise impacts are considered to be less than significant with mitigation included. (see Mitigation Measures 2-14 below.)

The site is not located within an airport land use plan.

No. 2 Mitigation Measure: *Prior to onset of any amplified music events at the amphitheater, a noise berm shall be constructed. Specifically, the noise berm shall consist of a 100 foot long by 40 foot wide and 20 foot tall building, labeled on the Planning Commission approved project site plan as a "storage building" to be located directly behind (northwest) of the stage, as identified on the project site plan. A certificate of occupancy shall be obtained for the noise berm prior to the onset of any amphitheater activity. If the storage building changes in size or shape, or is proposed to be replaced with a backstage soundwall or other construction to create an adequate noise berm, the modified facility will need to be reviewed and approved by an acoustical consultant, in accordance with Mitigation Measure No. 14, and a determination made that it has adequate sound dampening characteristics so that sound will fall within the noise levels described within this Mitigation Monitoring Plan.*

No. 3 Mitigation Measure: *Prior to issuance of a building permit for the banquet hall, and prior to onset of any amplified music event held at the banquet hall, the banquet hall shall be designed and constructed with sound proofing (including sound proofing for the roof, windows, and walls). Sound proofing plans shall be reviewed for full compliance with the approved plans by a noise consultant, as described in Mitigation Measure No. 14.*

No. 4 Mitigation Measure: *All amphitheater, park, and banquet hall events shall maintain the noise levels described in Table 1 of the December 30, 2016, Environmental Noise Analysis, conducted by Bollard Acoustical Consultants, Inc., and the C-weighted standards described below:*

Table 1

Stanislaus County Noise Standards Applied to this Project

After Adjustment for Elevated Ambient and Noise Source Consisting of Music

Receptor (See Figure 1)	Noise Metric	Adjusted Daytime Standard (7 a.m.-10 p.m.)	Adjusted Nighttime Standard (10 p.m.-7 a.m.)
A, B, D, F (near busy roadways)	Hourly L_{eq}, dBA	60	55
	Maximum Level (L_{max}), dBA	80	70
C, E (setback from roadways 250-350 feet)	Hourly L_{eq}, dBA	55	50
	Maximum Level (L_{max}), dBA	75	65
G, H, I (isolated from busy roads)	Hourly L_{eq}, dBA	50	40
	Maximum Level (L_{max}), dBA	65	55

Source: Stanislaus County Noise Element of the General Plan adjusted for ambient conditions and music noise source.

In addition to the Table 1 standards, low-frequency noise shall be limited to daytime and nighttime C-weighted noise level limits of 80 dBC Leq and 70 dBC Leq shall be applied at the nearest residences, existing at the time of the event. These standards may be adjusted upwards or downwards as appropriate following collection of C-weighted ambient noise level data near the existing residences immediately before and after the first two large amphitheater events (with 500 or more in attendance). Before any adjustments are made, a report documenting existing C-weighted ambient noise levels shall be reviewed by a noise consultant, as described in Mitigation Measure No. 14, and approved by the Planning Department.

No. 5 Mitigation Measure: *To ensure compliance with County noise standards, amphitheater sound system output shall be limited to an average of 90 dBA Leq averaged over a five minute period and a maximum of 100 dBA Lmax at a position located 100 feet from the amphitheater stage.*

Park and banquet hall sound system output shall be limited to an average of 75 dBA Leq averaged over a 5-minute period and a maximum of 85 dBA Lmax at a position located 100 feet from the sound system speakers. Sound levels up to 80 dBA Leq at the 100 foot reference distance would be acceptable provided the sound system speakers are oriented south or southwest.

Noise measurements during the first two amplified music events for each event space (banquet hall, park and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to measure the noise standards set forth within this Mitigation Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

No.6 Mitigation Measure: *To control low-frequency sound in the surrounding neighborhood during amphitheater events, C-weighted sounds levels shall be limited to 100 dBC Leq averaged over a five minute period and a maximum of 110 dBC Lmax at a position located 100 feet from the Amphitheater stage. In addition, amplified music shall be limited to an average of 85 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.*

To control low-frequency sound in the surrounding neighborhood during park events, C-weighted sound levels shall be limited to 85 dBC Leq averaged over a five minute period and a maximum of 95 dBC Lmax at a position located 100 feet from the speakers. In addition, amplified music shall be limited to an average of 75 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

Noise measurements during the first two amplified music events for each event space (banquet hall, park, and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to measure the noise standards set forth within this Mitigation Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

No. 7 Mitigation Measure: *Prior to any amplified music event at the park, banquet hall, or amphitheater the operator/property owner shall obtain a sound monitoring system; which shall be reviewed and approved by a Noise Consultant, as described in Mitigation Measure No. 14, prior to first use. Sound levels shall be monitored during sound check and during each amplified music event occurring at the park, banquet hall and amphitheater. Measurement microphones should be placed 100 feet from the midpoint of the main speaker array.*

Monitoring equipment options include 1) an iOS option available in combination with an iPad/iPhone using microphone and acquisition hardware from AudioControl and software from Studio Six Digital (SSD). SSD software would include the AudioTools and several in-app purchases including SPL Graph and SPL Traffic Light; or 2) an alternative system recommended by noise consultant, in accordance with Mitigation Measure No. 14.

A Type/Class 1 or 2 (per ANSI S1.43) measurement microphone system shall be used and laboratory calibrated prior to first use and field-calibrated at regular intervals (a minimum of 4 times a year). The system shall be laboratory calibrated at intervals not exceeding two years. The system shall be capable of measuring and logging Leq statistics over consecutive five minute intervals in both A and C weighted levels. The system shall also be capable of capturing and logging 1/3-octave band data. For simplification and to minimize equipment costs, sound level limit triggers shall be set to Leq, C-weighting. The sound technician shall locally check both C-weighted and 1/3-octave band results during sound check prior to an event to establish system gain limits and to ensure compliance with the specified limits. Data shall be maintained for 30 days and made available to the County upon request.

The amphitheater operator/property owner shall make it very clear to event producers what the sound level limits are at the sound stage and the time at which music is required to cease. Suitable measures shall be implemented to both ensure the limits are maintained and penalties established if producers fail to comply with the noise level limits.

Noise measurements during the first two amplified music events for each event space (banquet hall, park and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to measure the noise standards set forth within this Mitigation

Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

No. 8 Mitigation Measure: *During the first two large concerts (with 500 or more in attendance) held at the amphitheater, noise levels shall be monitored by a qualified noise consultant, to be procured by the operator/property owner. The monitoring shall be conducted continuously from the sound stage (100-feet from stage), with periodic noise monitoring near the closest residences, existing at the time of the event, in all directions surrounding the amphitheater. The noise measurements shall include the sound check prior to the concert so the event promoters understand the noise thresholds to be satisfied during the concert event. The purpose of the measurements is to verify compliance with the project's noise standards. If the measurement results indicate that the music levels exceed the noise standards described in this Mitigation Monitoring Plan, additional sound controls shall be developed by a noise consultant in accordance with Mitigation Measure No. 14. Implementation of additional sound controls shall be implemented and verified prior to the following concert. Such measures could include reducing the overall output of the amplified sound system, relocating and/or reorienting speakers, use of acoustic curtains along the sides of the speakers to further focus the sound energy into the amphitheater seating areas, and limiting amplified music to before 10:00 p.m.*

No. 9 Mitigation Measure: *All amplified music events (including the amphitheater, park, and banquet hall events), occurring Sunday through Thursday shall end at or before 10 p.m. All patrons shall be off the premises (including the amphitheater, park, and banquet hall events) as of 11:00 p.m. Employees and contract staff, associated with the amplified music events, shall be off the premises (including the amphitheater, park, and banquet hall events) by 12:00 a.m.*

No. 10 Mitigation Measure: *The first two large amplified music events (with 500 or more in attendance) held at the amphitheater Friday and Saturday, shall end at or before 10:00 p.m., as described in Mitigation Measure No. 9. If monitoring results of the first two large amphitheater events show that such events are able to maintain levels at or lower than those required in this Mitigation Monitoring Plan, then amphitheater events on Friday and Saturday may be extended to 11:00 p.m. All patrons shall be off the premises (including the amphitheater, park and banquet hall events) by 12:00 a.m. Employees and contract staff, associated with the amplified music events, shall be off the premises by 1:00 a.m.*

No. 11 Mitigation Measure: *Operator/ property owner shall establish a written "Good Neighbor Policy" to be approved by the Planning Department, which shall establish the permittee's plan to mitigate any ancillary impacts from amplified music events (park, banquet hall or amphitheater) on surrounding properties. The plan shall include means for neighbors to contact management regarding complaints and steps management will take upon receiving a complaint. The policy shall be submitted and approved 30 days prior to the first amplified music event. No changes to the policy shall be made without prior review and approval by the Planning Department.*

No. 12 Mitigation Measure: *In the event that documented noise complaints are received for bass thumping, microphones/public address systems, etc., associated with any use of the property (inclusive of parcels 1-3, 7-12, and the remainder of parcel map 56-PM-083), such complaints shall be investigated to determine if the noise standards contained in this mitigation monitoring program were exceeded. In the event that the complaint investigation reveals that the noise standards were exceeded at the location where the complaint was received, additional sound controls shall be developed by a noise consultant, in accordance with Mitigation Measure No. 14. Implementation of additional*

sound controls shall be implemented and verified prior to the following concert. Such measures could include reducing the overall output of the amplified sound system, relocating and/or reorienting speakers, use of acoustic curtains along the sides of the speakers to further focus the sound energy into the amphitheater seating areas and limiting amplified music to before 10:00 p.m.

No. 13 Mitigation Measure: *Following removal of orchard trees located on the project site (inclusive of parcels 1-3, 7-12, and the remainder of parcel map 56-PM-083) potential changes in noise impacts shall be evaluated by a noise consultant, as described in Mitigation Measure No. 14, and additional noise mitigation measures shall be implemented, if determined to be necessary, to ensure compliance with the applicable County noise standards.*

No. 14 Mitigation Measure: *Any future additional noise analysis required to be conducted, including review, acceptance, and/or inspection associated with noise mitigation, shall be conducted by a noise consultant, whose contract shall be procured by the Planning Department, and paid for by the operator/property owner. A deposit based on actual cost shall be made with the Planning Department, by the operator/property owner, prior to any work being conducted. The applicant may choose to procure the noise consultant provided they pay the costs for the County to have all work peer reviewed by a third party. If future noise analysis is required, amplified music events will be limited, as determined by the Planning Department, until the noise consultant verifies to the Planning Department that all recommended noise control measures have been completely implemented.*

References: Application information; General Plan Amendment No. 2007-03; Rezone No. 2007-03 – The Fruit Yard; Environmental Noise Analysis, prepared by Bollard Acoustical Consultants, Inc., dated February 3, 2016, revised December 30, 2016; Peer review response, prepared by J.C. Brennan & Associates, dated November 15, 2016; An e-mail dated January 10, 2017; Stanislaus County General Plan and Support Documentation[1].

XIII. POPULATION AND HOUSING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			X	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X	

Discussion: The proposed use of the site will not create significant service extensions or new infrastructure which could be considered as growth inducing. No housing or persons will be displaced by this project. As the project site is surrounded by agricultural land, it is unlikely that residential development will occur due to the fact that County voters passed the Measure E vote in February of 2008. Measure E, which was incorporated into Zoning Ordinance Chapter 21.118 (the 30-Year Land Use Restriction), requires that redesignation or rezoning of land from agricultural/open space to residential use shall require approval by a majority vote of the County voters at a general or special local election.

Mitigation: None.

References: Stanislaus County Zoning Ordinance; Stanislaus County General Plan and Support Documentation[1].

XIV. PUBLIC SERVICES --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:			X	
Fire protection?			X	
Police protection?		X		
Schools?			X	
Parks?			X	
Other public facilities?			X	

Discussion: The County has adopted Public Facilities Fees, as well as one for the Fire Facility Fees on behalf of the appropriate fire district, to address impacts to public services. Such fees are required to be paid at the time of building permit issuance. Conditions of approval will be added to this project to insure that the proposed development complies with all applicable fire department standards with respect to access and water for fire protection. The types of Conditions of approval will be for adequate turning around for a fire apparatus and on-site water supply for fire suppression may also be needed. The applicant will construct all buildings in accordance with the current adopted building and fire codes.

To address potential impacts to police protection services a mitigation measure has been incorporated into the project, which requires that the operator submit a security plan for amplified music events to the Sheriff for review and approval, prior to onset of the events. With mitigation in place impacts from the project on public services is considered to be less than significant with mitigation included.

No. 15 Mitigation Measure: *Within sixty (60) days of project Use Permit approval, the operator/property owner shall submit for approval a security plan for amplified music events (park, banquet hall or amphitheater) to the Sheriff's Department. The plan shall be approved prior to any use of the amphitheater. Any changes to the security plan shall be approved by the Sheriff's Department.*

References: Application information; Stanislaus County General Plan and Support Documentation[1]

XV. RECREATION --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Discussion: The proposed project is not anticipated to significantly increase demand on recreational facilities or to have an adverse physical effect on the environment. Although not a part of this project request, the existing gas stations, produce market, restaurant and park are open to the public during specified hours. The amphitheater, park and banquet hall all hold special events which are for ticket holders or invitees only. Land use permission for the amphitheater only, is part of this Use Permit request.

Mitigation: None.

References: Application information; General Plan Amendment No. 2007-03; Rezone No. 2007-03 – The Fruit Yard; Stanislaus County General Plan and Support Documentation[1].

XVI. TRANSPORATION/TRAFFIC -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		X		
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		X		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?		X		
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
e) Result in inadequate emergency access?		X		
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?		X		

Discussion: A Traffic Impact Analysis for the 2007 Planned Development project (P-D 317) was prepared by KD Anderson & Associates, Inc., dated December 6, 2007. A Supplemental Traffic Impact Analysis, prepared by Pinnacle Traffic Engineering, dated February 5, 2016, was prepared for this current project and was circulated as part of an early consultation to the Stanislaus County Public Works Department and the California Department of Transportation (CalTrans). The analysis evaluated traffic impacts from the amphitheater events with worse-case scenario factors, which included the site at full Planned Development build out and traffic impacts to the intersection of Geer Road and Yosemite Boulevard (Hwy 132). CalTrans provided a response requesting that the Traffic Impact Analysis be amended. The applicant then worked with Caltrans to address their comments, and provided clarification that although the existing and approved uses for the Planned Development were considered in the Traffic Impact Analysis, that the other uses listed in the study were already approved and that amphitheater events were the only traffic generating part included in this project request. Ultimately, Caltrans agreed with the assessment of the project's traffic impacts provided in the report and requested the addition of a left turn lane extension in front of the project site on Highway 132 to the second main driveway accessing the amphitheater to increase traffic safety during amphitheater events. This has been incorporated into the project as a mitigation measure. Additionally, mitigation has been applied to the project to require that the payment of traffic impacts fees and that a traffic management plan for amphitheater events is submitted to the Department of Public Works for review and approval.

No. 16 Mitigation Measure: *Prior to issuance of a building permit, all applicable traffic impact fees shall be paid to the Department of Public Works.*

No. 17 Mitigation Measure: *An Event Traffic Management Plan shall be submitted and approved four weeks prior to holding the first event at the amphitheater. Both County Planning and Public Works shall review and approve the plan.*

a. The Event Traffic Management Plan shall include a westbound left turn lane from Highway 132 to the fourth `driveway from the intersection (at Geer and Highway 132);

b. This plan shall include all event traffic circulation into and out of the site, including a description of how the different on-site parking areas will be filled;

c. Event Staff and signs shall not be in the State or Stanislaus County Right-of-way without an encroachment permit. This shall be addressed as part of the Event Traffic Management Plan. Each individual event shall have an encroachment permit from both the State and Stanislaus County, if applicable;

d. If the Event Traffic Management Plan requires updating, the updates shall be accepted both by County Planning and by Public Works, six weeks prior to the next event being held at the amphitheater. This update can be triggered either by the applicant or by Stanislaus County;

e. Fees may be collected for amphitheater event parking, provided no queuing of vehicles occurs. Parking fees may be collected as part of the fee collected for the price of the ticket for the event, or may be collected at a stationary electronic machine, installed in the parking area. Parking fees may not be collected while vehicles are waiting to enter the parking lot;

f. Prior to the implementation or construction of any additional phases of the approved Plan Development No. 317, a revised Event Traffic Management Plan shall be submitted to and approved by County Planning and Public Works;

g. A left turn lane shall be installed on Geer Road for the driveway into the project labeled as D Drive. The plans shall be completed prior to the approval of the Event Traffic Management Plan. This driveway is roughly 575 feet south of the intersection of Geer Road and Yosemite Blvd;

i. Improvement plans are to be submitted to County Public Works for approval. These improvement plans shall meet standards set forth within the Stanislaus County Standards and Specifications and the Caltrans Highway Design Manual;

ii. An acceptable financial guarantee for the road improvements shall be provided to County Public Works prior to the approval of the Event Traffic Management Plan;

iii. An Engineer's Estimate shall be provided for the road improvements so that the amount of the financial guarantee can be determined;

iv. The left turn lane shall be installed before the first event is held at the amphitheater.

References: Traffic Impact Analysis prepared by KD Anderson & Associates, Inc., dated November 23, 2016; Supplemental Traffic Impact Analysis, prepared by Pinnacle Traffic Engineering, dated February 5, 2016; Referral response from California Department of Transportation (CalTrans) dated September 14, 2016, and an email dated November 29, 2016; Stanislaus County General Plan and Support Documentation[1].

XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			**X**	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Discussion: Limitations on providing services have not been identified. Conditions of approval will be added to the project to address necessary permits from DER. On-site services will be provided by an approved septic system and water well as determined by DER. A public water system permit will be required to be obtained through DER.

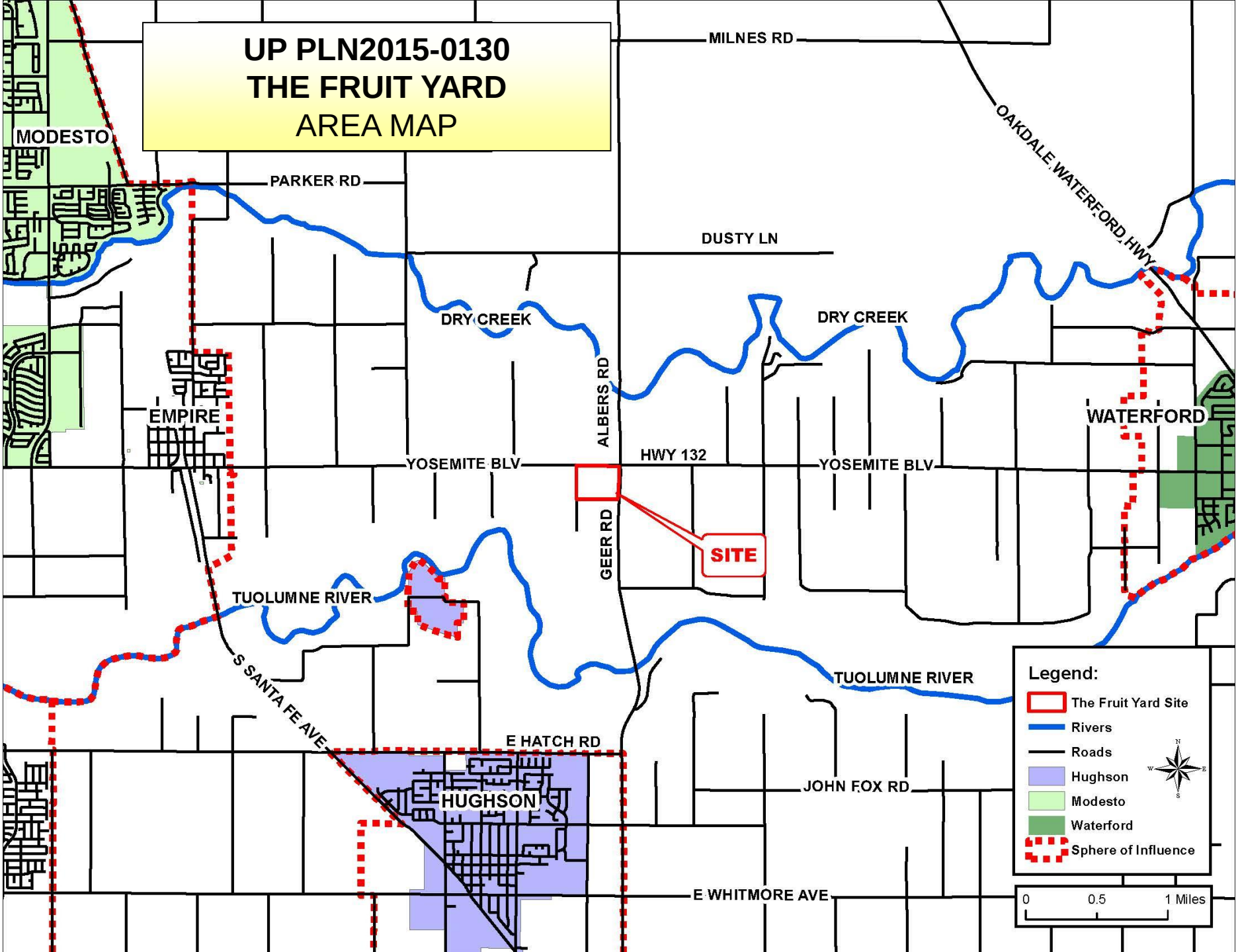
Mitigation: None.

References: Application information; Stanislaus County General Plan and Support Documentation[1].

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Discussion: Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or the surrounding area. Any potential impacts from this project have been mitigated to a level of less than significant.

[1] Stanislaus County General Plan and Support Documentation adopted on August 23, 2016. ***Housing Element*** adopted on April 5, 2016.


UP PLN2015-0130
THE FRUIT YARD
AREA MAP
MODESTO
PARKER RD
MILNES RD
OAKDALE WATERFORD HWY
DUSTY LN
DRY CREEK
DRY CREEK
ALBERS RD
EMPIRE
WATERFORD
YOSEMITE BLV
HWY 132
YOSEMITE BLV
GEER RD
SITE
TUOLUMNE RIVER
TUOLUMNE RIVER
S SANTA FE AVE
E HATCH RD
HUGHSON
JOHN FOX RD
E WHITMORE AVE
Legend:
The Fruit Yard Site
Rivers
Roads
Hughson
Modesto
Waterford
Sphere of Influence
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W
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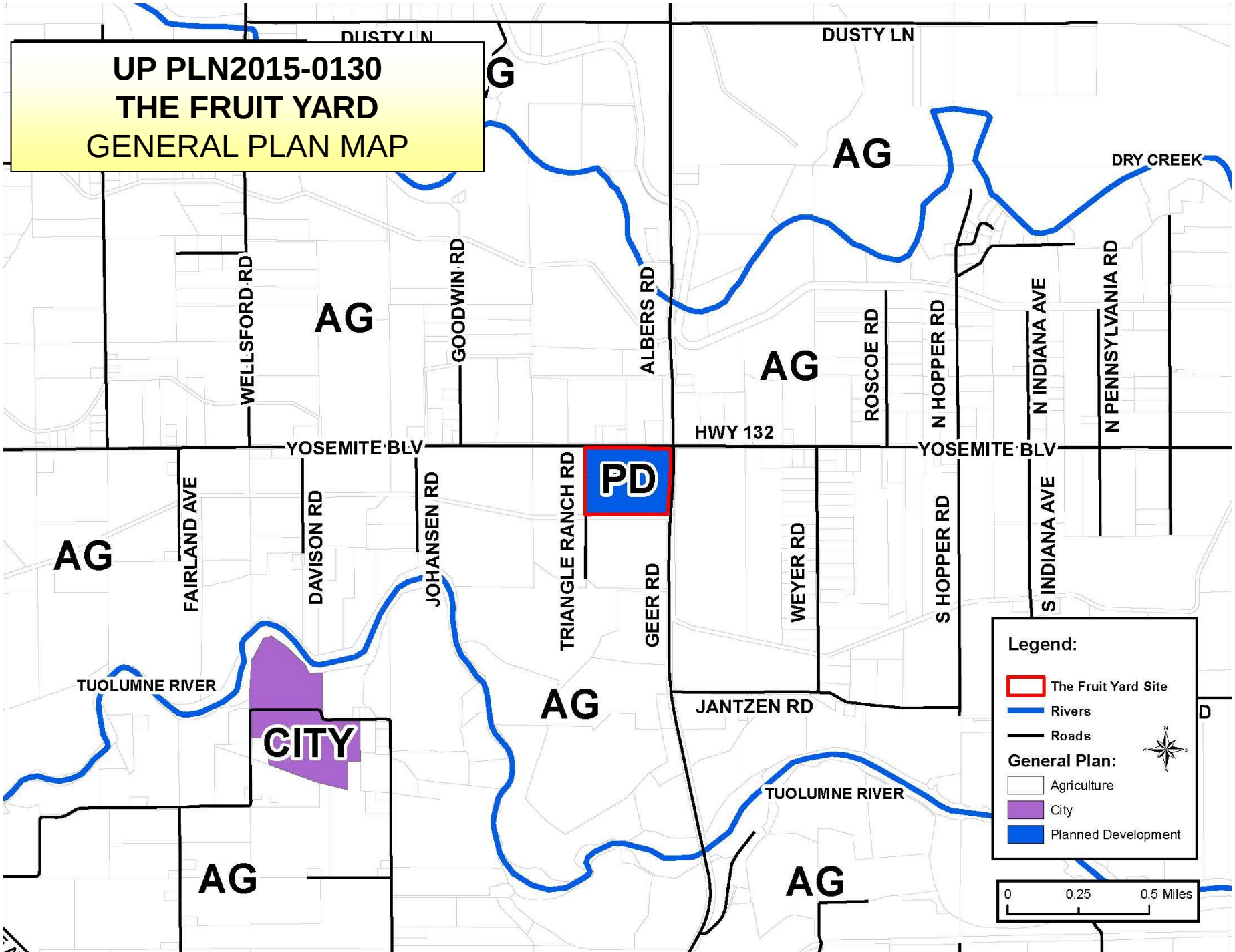
1 Miles


UP PLN2015-0130
THE FRUIT YARD
GENERAL PLAN MAP
DUSTY LN
DUSTY LN
AG
DRY CREEK
WELLSFORD RD
AG
GOODWIN RD
ALBERS RD
AG
ROSCOE RD
N HOPPER RD
N INDIANA AVE
N PENNSYLVANIA RD
HWY 132
YOSEMITE BLV
YOSEMITE BLV
PD
AG
FAIRLAND AVE
DAVISON RD
JOHANSEN RD
TRIANGLE RANCH RD
GEER RD
WEYER RD
S HOPPER RD
S INDIANA AVE
TUOLUMNE RIVER
CITY
AG
JANTZEN RD
TUOLUMNE RIVER
AG
AG
Legend:
The Fruit Yard Site
Rivers
Roads
General Plan:
Agriculture
City
Planned Development
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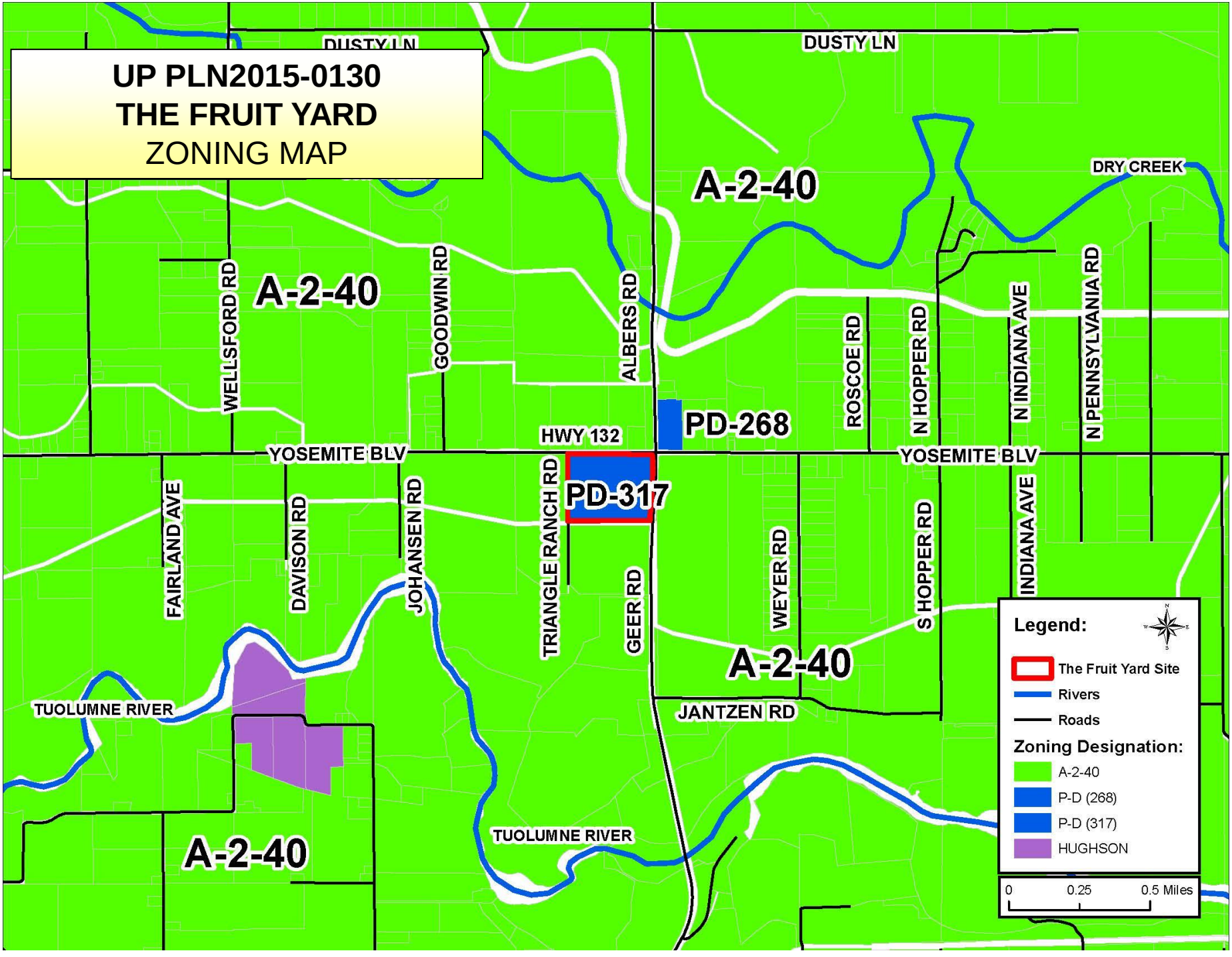
0.25
0.5 Miles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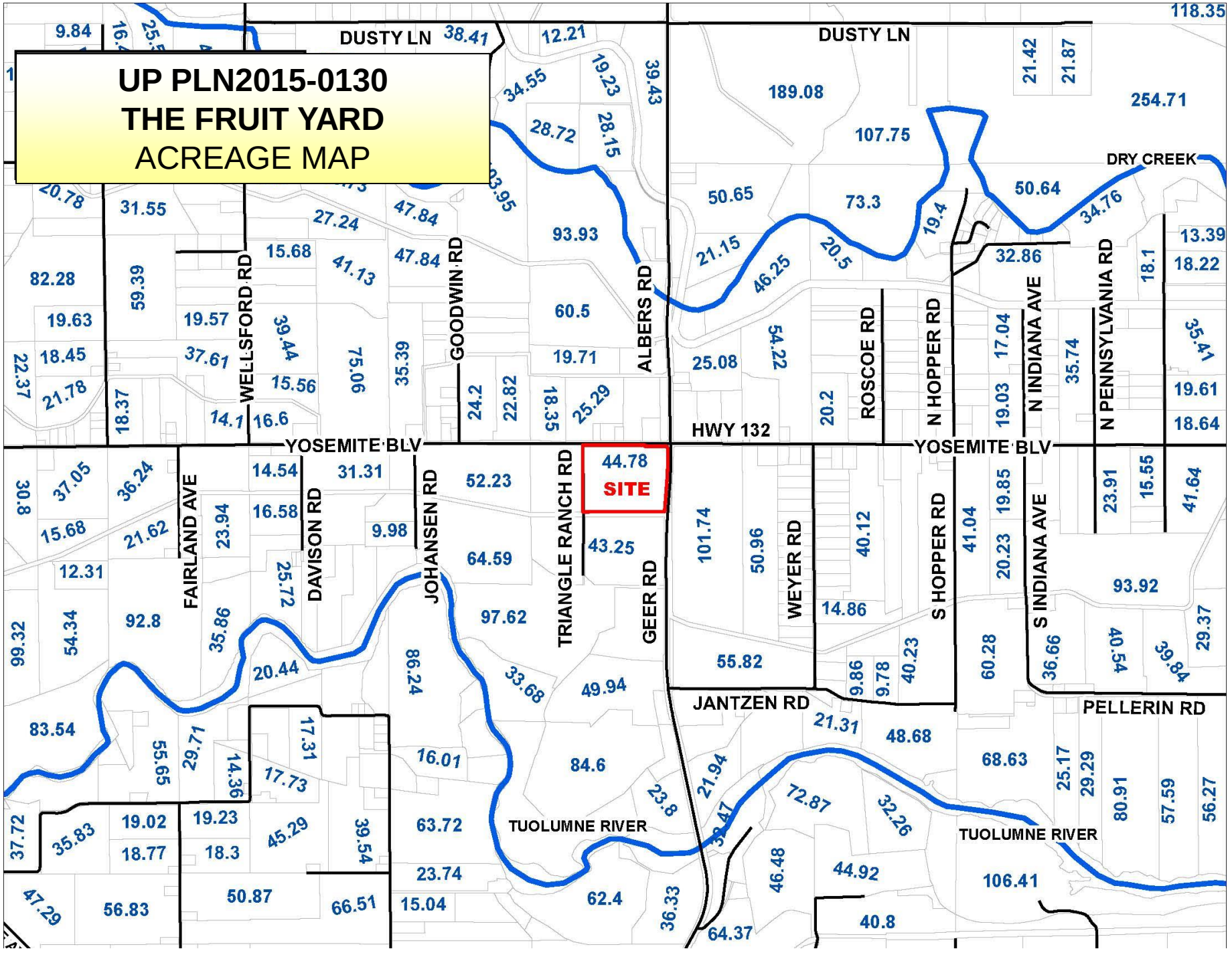
THE FRUIT YARD
ZONING MAP
DUSTY LN
DUSTY LN
A-2-40
DRY CREEK
A-2-40
WELLSFORD RD
GOODWIN RD
ALBERS RD
ROSCOE RD
N HOPPER RD
N INDIANA AVE
N PENNSYLVANIA RD
PD-268
HWY 132
YOSEMITE BLV
YOSEMITE BLV
PD-317
FAIRLAND AVE
DAVISON RD
JOHANSEN RD
TRIANGLE RANCH RD
GEER RD
WEYER RD
S HOPPER RD
INDIANA AVE
A-2-40
TUOLUMNE RIVER
JANTZEN RD
TUOLUMNE RIVER
A-2-40
Legend:
The Fruit Yard Site
Rivers
Roads
Zoning Designation:
A-2-40
P-D (268)
P-D (317)
HUGHSON
0
0.25
0.5 Miles


UP PLN2015-0130
THE FRUIT YARD
ACREAGE MAP
DUSTY LN
DUSTY LN
DRY CREEK
WELLSFORD RD
GOODWIN RD
ALBERS RD
ROSCOE RD
N HOPPER RD
N INDIANA AVE
N PENNSYLVANIA RD
HWY 132
YOSEMITE BLV
YOSEMITE BLV
FAIRLAND AVE
DAVISON RD
JOHANSEN RD
TRIANGLE RANCH RD
GEER RD
WEYER RD
S HOPPER RD
S INDIANA AVE
SITE
44.78
43.25
JANTZEN RD
PELLERIN RD
TUOLUMNE RIVER
TUOLUMNE RIVER
9.84
38.41
12.21
34.55
19.23
39.43
28.72
28.15
189.08
107.75
254.71
118.35
21.42
21.87
50.65
73.3
50.64
34.76
19.4
21.15
46.25
20.5
93.93
47.84
27.24
47.84
41.13
15.68
20.78
31.55
82.28
59.39
19.63
19.57
39.44
18.45
37.61
15.56
75.06
35.39
21.78
18.37
14.1
16.6
60.5
19.71
24.2
22.82
18.35
25.29
25.08
54.22
20.2
19.03
17.04
35.74
32.86
13.39
18.22
18.1
35.41
19.61
18.64
30.8
37.05
36.24
14.54
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52.23
15.68
21.62
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16.58
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37.72
35.83
19.02
18.77
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18.3
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23.74
50.87
66.51
15.04
62.4
47.29
56.83
23.8
21.94
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64.37
40.8
101.74
50.96
40.12
14.86
55.82
9.86
9.78
40.23
60.28
41.04
19.85
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36.66
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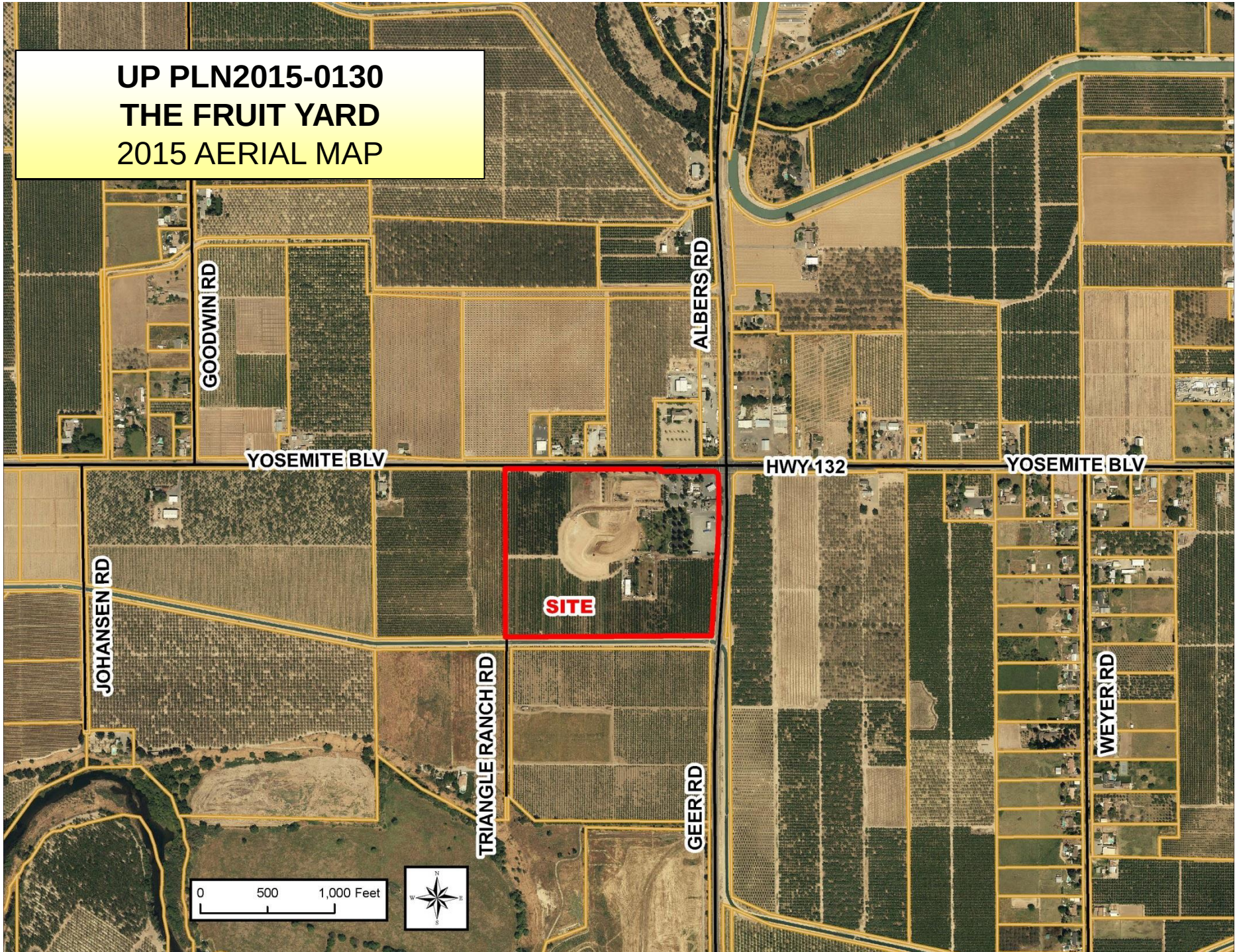
56.27


UP PLN2015-0130
THE FRUIT YARD
2015 AERIAL MAP
GOODWIN RD
ALBERS RD
YOSEMITE BLV
HWY 132
YOSEMITE BLV
SITE
JOHANSEN RD
TRIANGLE RANCH RD
GEER RD
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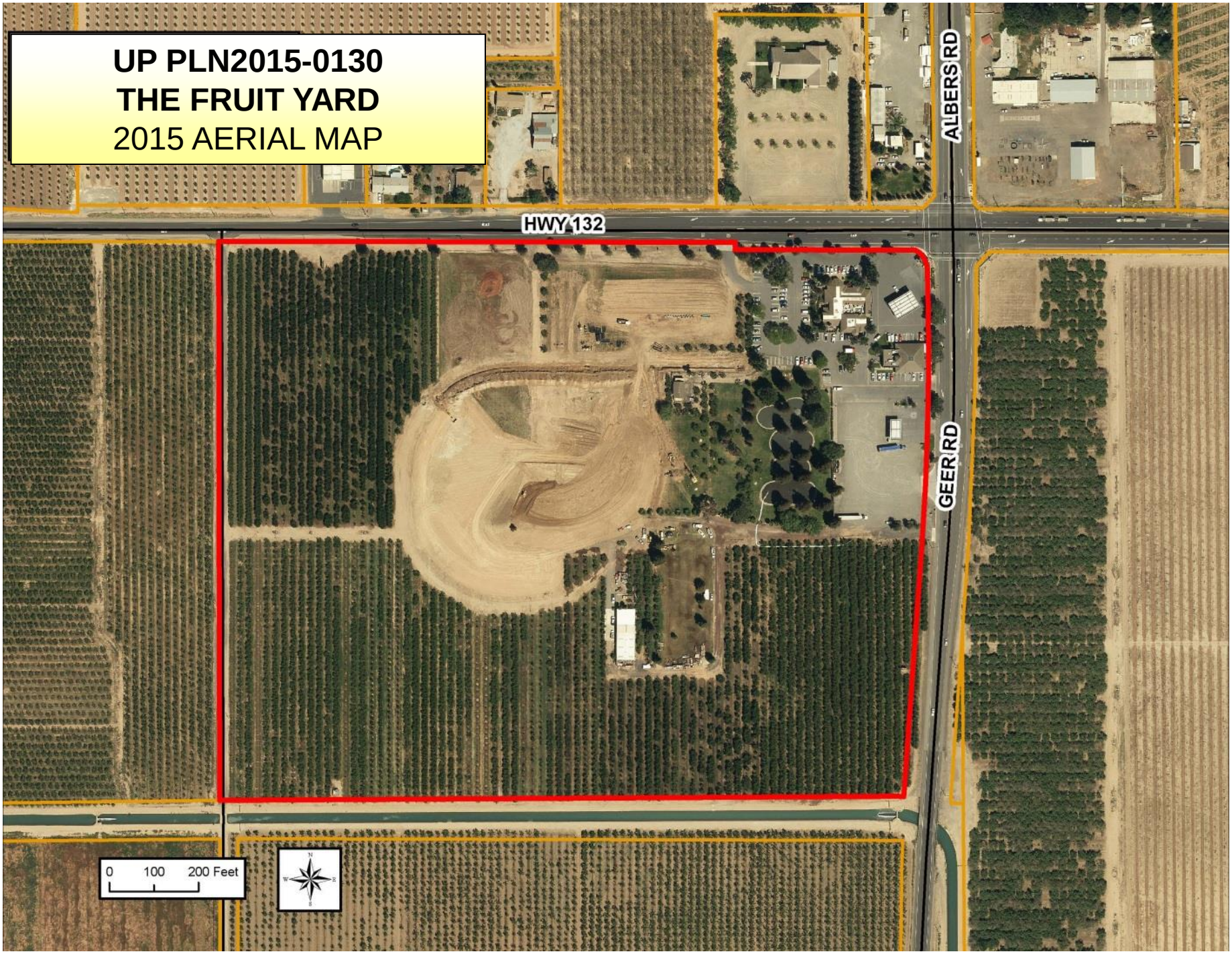
UP PLN2015-0130
THE FRUIT YARD
2015 AERIAL MAP
HWY 132
ALBERS RD
GEER RD
0 100 200 Feet

MITIGATED NEGATIVE DECLARATION

NAME OF PROJECT: Use Permit Application No. PLN2015-0130 – The Fruit Yard

LOCATION OF PROJECT: 7924 & 7948 Yosemite Blvd. (Hwy 132), at the southwest corner of Yosemite Blvd. and Geer Road, between the cities of Modesto, Waterford and Hughson. Stanislaus County. APN: 009-027-004

PROJECT DEVELOPER: The Fruit Yard – Joe Traina
7948 Yosemite Blvd
Modesto, CA 95356

DESCRIPTION OF PROJECT: Request to expand an existing Planned Development with an outdoor, fenced, 3,500 person capacity amphitheater event center, a 5,000 square-foot stage, a 5,000 square-foot roof structure, a 4,000 square-foot storage building, a parking lot to the rear of the stage, and an additional 1,302-space temporary parking area. A maximum of 12 amphitheater events are proposed to take place per year. This use permit also includes a covered seating area of approximately 4,800 square-foot and a 1,600 square-foot gazebo in the eastern half of the park area, east of the outdoor amphitheater, and replacement of the existing pylon freestanding pole sign with an electronic reader board sign.

Based upon the Initial Study, dated **March 1, 2017**, the Environmental Coordinator finds as follows:

1. This project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.

2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.

3. This project will not have impacts which are individually limited but cumulatively considerable.

4. This project will not have environmental impacts which will cause substantial adverse effects upon human beings, either directly or indirectly.

The aforementioned findings are contingent upon the following mitigation measures (if indicated) which shall be incorporated into this project:

1. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include but not be limited to: the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and to prevent light trespass (glare and spill light that shines onto neighboring properties). Amphitheater lighting shall be shut off by 11:00 p.m. on Sunday – Thursday, and by midnight on Friday and Saturday evenings.

2. Prior to onset of any amplified music events at the amphitheater, a noise berm shall be constructed. Specifically, the noise berm shall consist of a 100 foot long by 40 foot wide and 20 foot tall building, labeled on the Planning Commission approved project site plan as a “storage building” to be located directly behind (northwest) of the stage, as identified on the project site plan. A certificate of occupancy shall be obtained for the noise berm prior to the onset of any amphitheater activity. If the

storage building changes in size or shape, or is proposed to be replaced with a backstage soundwall or other construction to create an adequate noise berm, the modified facility will need to be reviewed and approved by an acoustical consultant, in accordance with Mitigation Measure No. 14, and a determination made that it has adequate sound dampening characteristics so that sound will fall within the noise levels described within this Mitigation Monitoring Plan.

3. Prior to issuance of a building permit for the banquet hall, and prior to onset of any amplified music event held at the banquet hall, the banquet hall shall be designed and constructed with sound proofing (including sound proofing for the roof, windows, and walls). Sound proofing plans shall be reviewed for full compliance with the approved plans by a noise consultant, as described in Mitigation Measure No. 14.

4. All amphitheater, park, and banquet hall events shall maintain the noise levels described in Table 1 of the December 30, 2016, Environmental Noise Analysis, conducted by Bollard Acoustical Consultants, Inc., and the C-weighted standards described below:

Table 1
Stanislaus County Noise Standards Applied to this Project
After Adjustment for Elevated Ambient and Noise Source Consisting of Music

Receptor (See Figure 1)	Noise Metric	Adjusted Daytime Standard (7 a.m.-10 p.m.)	Adjusted Nighttime Standard (10 p.m.-7)
A, B, D, F (near busy roadways)	Hourly L_{eq}, dBA	60	55
	Maximum Level (L_{max}), dBA	80	70
C, E (setback from roadways 250-350 feet)	Hourly L_{eq}, dBA	55	50
	Maximum Level (L_{max}), dBA	75	65
G, H, I (isolated from busy roads)	Hourly L_{eq}, dBA	50	40
	Maximum Level (L_{max}), dBA	65	55

Source: Stanislaus County Noise Element of the General Plan adjusted for ambient conditions and music noise source.

In addition to the Table 1 standards, low-frequency noise shall be limited to daytime and nighttime C-weighted noise level limits of 80 dBC Leq and 70 dBC Leq shall be applied at the nearest residences, existing at the time of the event. These standards may be adjusted upwards or downwards as appropriate following collection of C-weighted ambient noise level data near the existing residences immediately before and after the first two large amphitheater events (with 500 or more in attendance). Before any

adjustments are made, a report documenting existing C-weighted ambient noise levels shall be reviewed by a noise consultant, as described in Mitigation Measure No. 14, and approved by the Planning Department.

5. To ensure compliance with County noise standards, amphitheater sound system output shall be limited to an average of 90 dBA Leq averaged over a five minute period and a maximum of 100 dBA Lmax at a position located 100 feet from the amphitheater stage.

   Park and banquet hall sound system output shall be limited to an average of 75 dBA Leq averaged over a 5-minute period and a maximum of 85 dBA Lmax at a position located 100 feet from the sound system speakers. Sound levels up to 80 dBA Leq at the 100 foot reference distance would be acceptable provided the sound system speakers are oriented south or southwest.

   Noise measurements during the first two amplified music events for each event space (banquet hall, park and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to measure the noise standards set forth within this Mitigation Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

6. To control low-frequency sound in the surrounding neighborhood during amphitheater events, C-weighted sounds levels shall be limited to 100 dBC Leq averaged over a five minute period and a maximum of 110 dBC Lmax at a position located 100 feet from the Amphitheater stage. In addition, amplified music shall be limited to an average of 85 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

   To control low-frequency sound in the surrounding neighborhood during park events, C-weighted sound levels shall be limited to 85 dBC Leq averaged over a five minute period and a maximum of 95 dBC Lmax at a position located 100 feet from the speakers. In addition, amplified music shall be limited to an average of 75 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

   Noise measurements during the first two amplified music events for each event space (banquet hall, park, and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to measure the noise standards set forth within this Mitigation Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

7. Prior to any amplified music event at the park, banquet hall, or amphitheater the operator/property owner shall obtain a sound monitoring system; which shall be reviewed and approved by a Noise Consultant, as described in Mitigation Measure No. 14, prior to first use. Sound levels shall be

monitored during sound check and during each amplified music event occurring at the park, banquet hall and amphitheater. Measurement microphones should be placed 100 feet from the midpoint of the main speaker array.

Monitoring equipment options include 1) an iOS option available in combination with an iPad/iPhone using microphone and acquisition hardware from AudioControl and software from Studio Six Digital (SSD). SSD software would include the AudioTools and several in-app purchases including SPL Graph and SPL Traffic Light; or 2) an alternative system recommended by noise consultant, in accordance with Mitigation Measure No. 14.

A Type/Class 1 or 2 (per ANSI S1.43) measurement microphone system shall be used and laboratory calibrated prior to first use and field-calibrated at regular intervals (a minimum of 4 times a year). The system shall be laboratory calibrated at intervals not exceeding two years. The system shall be capable of measuring and logging Leq statistics over consecutive five minute intervals in both A and C weighted levels. The system shall also be capable of capturing and logging 1/3-octave band data. For simplification and to minimize equipment costs, sound level limit triggers shall be set to Leq, C-weighting. The sound technician shall locally check both C-weighted and 1/3-octave band results during sound check prior to an event to establish system gain limits and to ensure compliance with the specified limits. Data shall be maintained for 30 days and made available to the County upon request.

The amphitheater operator/property owner shall make it very clear to event producers what the sound level limits are at the sound stage and the time at which music is required to cease. Suitable measures shall be implemented to both ensure the limits are maintained and penalties established if producers fail to comply with the noise level limits.

Noise measurements during the first two amplified music events for each event space (banquet hall, park and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to measure the noise standards set forth within this Mitigation Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

8. During the first two large concerts (with 500 or more in attendance) held at the amphitheater, noise levels shall be monitored by a qualified noise consultant, to be procured by the operator/property owner. The monitoring shall be conducted continuously from the sound stage (100-feet from stage), with periodic noise monitoring near the closest residences, existing at the time of the event, in all directions surrounding the amphitheater. The noise measurements shall include the sound check prior to the concert so the event promoters understand the noise thresholds to be satisfied during the concert event. The purpose of the measurements is to verify compliance with the project's noise standards. If the measurement results indicate that the music levels exceed the noise standards described in this Mitigation Monitoring Plan, additional sound controls shall be developed by a noise consultant in accordance with Mitigation Measure No. 14. Implementation of additional sound controls shall be implemented and verified prior to the following concert. Such measures could include

reducing the overall output of the amplified sound system, relocating and/or reorienting speakers, use of acoustic curtains along the sides of the speakers to further focus the sound energy into the amphitheater seating areas, and limiting amplified music to before 10:00 p.m.

9. All amplified music events (including the amphitheater, park, and banquet hall events), occurring Sunday through Thursday shall end at or before 10 p.m. All patrons shall be off the premises (including the amphitheater, park, and banquet hall events) as of 11:00 p.m. Employees and contract staff, associated with the amplified music events, shall be off the premises (including the amphitheater, park, and banquet hall events) by 12:00 a.m.

10. The first two large amplified music events (with 500 or more in attendance) held at the amphitheater Friday and Saturday, shall end at or before 10:00 p.m., as described in Mitigation Measure No. 9. If monitoring results of the first two large amphitheater events show that such events are able to maintain levels at or lower than those required in this Mitigation Monitoring Plan, then amphitheater events on Friday and Saturday may be extended to 11:00 p.m. All patrons shall be off the premises (including the amphitheater, park and banquet hall events) by 12:00 a.m. Employees and contract staff, associated with the amplified music events, shall be off the premises by 1:00 a.m.

11. Operator/property owner shall establish a written "Good Neighbor Policy" to be approved by the Planning Department, which shall establish the permittee's plan to mitigate any ancillary impacts from amplified music events (park, banquet hall or amphitheater) on surrounding properties. The plan shall include means for neighbors to contact management regarding complaints and steps management will take upon receiving a complaint. The policy shall be submitted and approved 30 days prior to the first amplified music event. No changes to the policy shall be made without prior review and approval by the Planning Department.

12. In the event that documented noise complaints are received for bass thumping, microphones/public address systems, etc., associated with any use of the property (inclusive of parcels 1-3, 7-12, and the remainder of parcel map 56-PM-083), such complaints shall be investigated to determine if the noise standards contained in this mitigation monitoring program were exceeded. In the event that the complaint investigation reveals that the noise standards were exceeded at the location where the complaint was received, additional sound controls shall be developed by a noise consultant, in accordance with Mitigation Measure No. 14. Implementation of additional sound controls shall be implemented and verified prior to the following concert. Such measures could include reducing the overall output of the amplified sound system, relocating and/or reorienting speakers, use of acoustic curtains along the sides of the speakers to further focus the sound energy into the amphitheater seating areas and limiting amplified music to before 10:00 p.m.

13. Following removal of orchard trees located on the project site (inclusive of parcels 1-3, 7-12, and the remainder of parcel map 56-PM-083) potential changes in noise impacts shall be evaluated by a noise consultant, as described in Mitigation Measure No. 14, and additional noise mitigation measures shall be implemented, if determined to be necessary, to ensure compliance with the applicable County noise standards.

14. Any future additional noise analysis required to be conducted, including review, acceptance, and/or inspection associated with noise mitigation, shall be conducted by a noise consultant, whose contract

shall be procured by the Planning Department, and paid for by the operator/property owner. A deposit based on actual cost shall be made with the Planning Department, by the operator/property owner, prior to any work being conducted. The applicant may choose to procure the noise consultant provided they pay the costs for the County to have all work peer reviewed by a third party. If future noise analysis is required, amplified music events will be limited, as determined by the Planning Department, until the noise consultant verifies to the Planning Department that all recommended noise control measures have been completely implemented.

15. Within sixty (60) days of project Use Permit approval, the operator/property owner shall submit for approval a security plan for amplified music events (park, banquet hall or amphitheater) to the Sheriff's Department. The plan shall be approved prior to any use of the amphitheater. Any changes to the security plan shall be approved by the Sheriff's Department.

16. Prior to issuance of a building permit, all applicable traffic impact fees shall be paid to the Department of Public Works.

17. An Event Traffic Management Plan shall be submitted and approved four weeks prior to holding the first event at the amphitheater. Both County Planning and Public Works shall review and approve the plan.

    a. The Event Traffic Management Plan shall include a westbound left turn lane from Highway 132 to the fourth driveway from the intersection (at Geer and Highway 132);
    b. This plan shall include all event traffic circulation into and out of the site, including a description of how the different on-site parking areas will be filled;
    c. Event Staff and signs shall not be in the State or Stanislaus County Right-of-way without an encroachment permit. This shall be addressed as part of the Event Traffic Management Plan. Each individual event shall have an encroachment permit from both the State and Stanislaus County, if applicable;
    d. If the Event Traffic Management Plan requires updating, the updates shall be accepted both by County Planning and by Public Works, six weeks prior to the next event being held at the amphitheater. This update can be triggered either by the applicant or by Stanislaus County;
    e. Fees may be collected for amphitheater event parking, provided no queuing of vehicles occurs. Parking fees may be collected as part of the fee collected for the price of the ticket for the event, or may be collected at a stationary electronic machine, installed in the parking area. Parking fees may not be collected while vehicles are waiting to enter the parking lot;
    f. Prior to the implementation or construction of any additional phases of the approved Plan Development No. 317, a revised Event Traffic Management Plan shall be submitted to and approved by County Planning and Public Works;
    g. A left turn lane shall be installed on Geer Road for the driveway into the project labeled as D Drive. The plans shall be completed prior to the approval of the Event Traffic Management Plan. This driveway is roughly 575 feet south of the intersection of Geer Road and Yosemite Blvd;
        i. Improvement plans are to be submitted to County Public Works for approval. These improvement plans shall meet standards set forth within the Stanislaus County Standards and Specifications and the Caltrans Highway Design Manual;

ii. An acceptable financial guarantee for the road improvements shall be provided to County Public Works prior to the approval of the Event Traffic Management Plan;
iii. An Engineer's Estimate shall be provided for the road improvements so that the amount of the financial guarantee can be determined;
iv. The left turn lane shall be installed before the first event is held at the amphitheater.

The Initial Study and other environmental documents are available for public review at the Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, California.

Initial Study prepared by: Kristin Doud, Associate Planner

Submit comments to: Stanislaus County
Planning and Community Development Department
1010 10th Street, Suite 3400
Modesto, California 95354

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Stanislaus County

Planning and Community Development

1010 10th Street, Suite 3400
Modesto, CA 95354

Phone: (209) 525-6330
Fax: (209) 525-5911

Mitigation Monitoring Plan

Adapted from CEQA Guidelines sec. 15097 Final Text, October 26, 1998

March 3, 2017

1. Project title and location:	Use Permit Application No. PLN2015-0130 – The Fruit Yard Amphitheater 7924 & 7948 Yosemite Blvd. (Hwy 132), at the southwest corner of Yosemite Blvd. and Geer Road, between the cities of Modesto, Waterford, and Hughson. (APN: 009-027-004)
2. Project Applicant name and address:	The Fruit Yard - Joe Traina 7948 Yosemite Blvd. Modesto, CA 95357
3. Contact person at County:	Kristin Doud, Associate Planner (209) 525-6330

MITIGATION MEASURES AND MONITORING PROGRAM:

List all Mitigation Measures by topic as identified in the Mitigated Negative Declaration and complete the form for each measure.

I. AESTHETICS

No. 1 Mitigation Measure: All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include but not be limited to: the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and to prevent light trespass (glare and spill light that shines onto neighboring properties). Amphitheater lighting shall be shut off by 11:00 p.m. on Sunday – Thursday, and by midnight on Friday and Saturday evenings.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Ongoing.
When should it be completed:	Ongoing.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	None.

XII. NOISE

No. 2 Mitigation Measure: Prior to onset of any amplified music events at the amphitheater, a noise berm shall be constructed. Specifically, the noise berm shall consist of a 100 foot long by 40 foot wide and 20 foot tall building, labeled on the Planning Commission approved project site plan as a “storage building”

to be located directly behind (northwest) of the stage, as identified on the project site plan. A certificate of occupancy shall be obtained for the noise berm prior to the onset of any amphitheater activity. If the storage building changes in size or shape, or is proposed to be replaced with a backstage soundwall or other construction to create an adequate noise berm, the modified facility will need to be reviewed and approved by an acoustical consultant, in accordance with Mitigation Measure No. 14, and a determination made that it has adequate sound dampening characteristics so that sound will fall within the noise levels described within this Mitigation Monitoring Plan.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Prior to onset of any amplified music event held at the amphitheater.
When should it be completed:	Prior to onset of any amplified music event held at the amphitheater.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 3 Mitigation Measure: Prior to issuance of a building permit for the banquet hall, and prior to onset of any amplified music event held at the banquet hall, the banquet hall shall be designed and constructed with sound proofing (including sound proofing for the roof, windows, and walls). Sound proofing plans shall be reviewed for full compliance with the approved plans by a noise consultant, as described in Mitigation Measure No. 14.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Prior to issuance of a building permit for the banquet hall.
When should it be completed:	Prior to onset of any amplified music event held at the banquet hall.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 4 Mitigation Measure: All amphitheater, park, and banquet hall events shall maintain the noise levels described in Table 1 of the December 30, 2016, Environmental Noise Analysis, conducted by Bollard Acoustical Consultants, Inc., and the C-weighted standards described below:

Table 1
Stanislaus County Noise Standards Applied to this Project
After Adjustment for Elevated Ambient and Noise Source Consisting of Music

Receptor (See Figure 1)	Noise Metric	Adjusted Daytime Standard (7 a.m.-10 p.m.)	Adjusted Nighttime Standard (10 p.m.-7 a.m.)
A, B, D, F (near busy roadways)	Hourly L_{eq}, dBA	60	55
	Maximum Level (L_{max}), dBA	80	70
C, E (setback from roadways 250-350 feet)	Hourly L_{eq}, dBA	55	50
	Maximum Level (L_{max}), dBA	75	65
G, H, I (isolated from busy roads)	Hourly L_{eq}, dBA	50	40
	Maximum Level (L_{max}), dBA	65	55

Source: Stanislaus County Noise Element of the General Plan adjusted for ambient conditions and music noise source.

In addition to the Table 1 standards, low-frequency noise shall be limited to daytime and nighttime C-weighted noise level limits of 80 dBC Leq and 70 dBC Leq shall be applied at the nearest residences, existing at the time of the event. These standards may be adjusted upwards or downwards as appropriate following collection of C-weighted ambient noise level data near the existing residences immediately before and after the first two large amphitheater events (with 500 or more in attendance). Before any adjustments are made, a report documenting existing C-weighted ambient noise levels shall be reviewed by a noise consultant, as described in Mitigation Measure No. 14, and approved by the Planning Department.

Who Implements the Measure: Operator/property owner.
When should the measure be implemented: On an on-going basis, when events are held.
When should it be completed: On an on-going basis, when events are held.
Who verifies compliance: Stanislaus County Planning and Community Development Department.
Other Responsible Agencies: Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 5 Mitigation Measure: To ensure compliance with County noise standards, amphitheater sound system output shall be limited to an average of 90 dBA Leq averaged over a five minute period and a maximum of 100 dBA Lmax at a position located 100 feet from the amphitheater stage.

Park and banquet hall sound system output shall be limited to an average of 75 dBA Leq averaged over a 5-minute period and a maximum of 85 dBA Lmax at a position located 100 feet from the sound system speakers. Sound levels up to 80 dBA Leq at the 100 foot reference distance would be acceptable provided the sound system speakers are oriented south or southwest.

Noise measurements during the first two amplified music events for each event space (banquet hall, park and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to measure the noise standards set forth within this Mitigation Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	On an on-going basis, when events are held.
When should it be completed:	On an on-going basis, when events are held.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No.6 Mitigation Measure: To control low-frequency sound in the surrounding neighborhood during amphitheater events, C-weighted sounds levels shall be limited to 100 dBC Leq averaged over a five minute period and a maximum of 110 dBC Lmax at a position located 100 feet from the Amphitheater stage. In addition, amplified music shall be limited to an average of 85 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

To control low-frequency sound in the surrounding neighborhood during park events, C-weighted sound levels shall be limited to 85 dBC Leq averaged over a five minute period and a maximum of 95 dBC Lmax at a position located 100 feet from the speakers. In addition, amplified music shall be limited to an average of 75 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

Noise measurements during the first two amplified music events for each event space (banquet hall, park, and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to

measure the noise standards set forth within this Mitigation Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property

owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	On an on-going basis, when events are held.
When should it be completed:	On an on-going basis, when events are held.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 7 Mitigation Measure: Prior to any amplified music event at the park, banquet hall, or amphitheater the operator/property owner shall obtain a sound monitoring system; which shall be reviewed and approved by a Noise Consultant, as described in Mitigation Measure No. 14, prior to first use. Sound levels shall be monitored during sound check and during each amplified music event occurring at the park, banquet hall and amphitheater. Measurement microphones should be placed 100 feet from the midpoint of the main speaker array.

Monitoring equipment options include 1) an iOS option available in combination with an iPad/iPhone using microphone and acquisition hardware from AudioControl and software from Studio Six Digital (SSD). SSD software would include the AudioTools and several in-app purchases including SPL Graph and SPL Traffic Light; or 2) an alternative system recommended by noise consultant, in accordance with Mitigation Measure No. 14.

A Type/Class 1 or 2 (per ANSI S1.43) measurement microphone system shall be used and laboratory calibrated prior to first use and field-calibrated at regular intervals (a minimum of 4 times a year). The system shall be laboratory calibrated at intervals not exceeding two years. The system shall be capable of measuring and logging Leq statistics over consecutive five minute intervals in both A and C weighted levels. The system shall also be capable of capturing and logging 1/3-octave band data. For simplification and to minimize equipment costs, sound level limit triggers shall be set to Leq, C-weighting. The sound technician shall locally check both C-weighted and 1/3-octave band results during sound

check prior to an event to establish system gain limits and to ensure compliance with the specified limits. Data shall be maintained for 30 days and made available to the County upon request.

The amphitheater operator/property owner shall make it very clear to event producers what the sound level limits are at the sound stage and the time at which music is required to cease. Suitable measures shall be implemented to both ensure the limits are maintained and penalties established if producers fail to comply with the noise level limits.

Noise measurements during the first two amplified music events for each event space (banquet hall, park and amphitheater) shall be conducted by a qualified Noise Consultant to be procured by the operator/property owner. The consultant shall provide training to facility staff, on how to measure the noise standards set forth within this Mitigation Monitoring Plan, to ensure that noise is monitored during each event properly. The operator/property owner shall make available to the Planning Department noise measurements and training records, upon request by the County. Noise measurements and training records shall be subject to peer review in accordance with Mitigation Measure No. 14, upon request by the County.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Prior to any amplified music event at the park, banquet hall, or amphitheater.
When should it be completed:	On an on-going basis, when events are held.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 8 Mitigation Measure: During the first two large concerts (with 500 or more in attendance) held at the amphitheater, noise levels shall be monitored by a qualified noise consultant, to be procured by the operator/property owner. The monitoring shall be conducted continuously from the sound stage (100-feet from stage), with periodic noise monitoring near the closest residences, existing at the time of the event, in all directions surrounding the amphitheater. The noise measurements shall include the sound check prior to the concert so the event promoters understand the noise thresholds to be satisfied during the concert event. The purpose of the measurements is to verify compliance with the project's noise standards. If the measurement results indicate that the music levels exceed the noise standards described in this Mitigation Monitoring Plan, additional sound controls shall be developed by a noise consultant in accordance

with Mitigation Measure No. 14. Implementation of additional sound controls shall be implemented and verified prior to the following concert. Such measures could include reducing the overall output of the amplified sound system, relocating and/or reorienting speakers, use of acoustic curtains along the sides of the speakers to further focus the sound energy into the amphitheater seating areas, and limiting amplified music to before 10:00 p.m.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Prior to the first two large events (with 500 or more in attendance).
When should it be completed:	Following the second large event (with 500 or more in attendance)
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 9 Mitigation Measure: All amplified music events (including the amphitheater, park, and banquet hall events), occurring Sunday through Thursday shall end at or before 10 p.m. All patrons shall be off the premises (including the amphitheater, park, and banquet hall events) as of 11:00 p.m. Employees and contract staff, associated with the amplified music events, shall be off the premises (including the amphitheater, park, and banquet hall events) by 12:00 a.m.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	On an on-going basis, when events are held.
When should it be completed:	On an on-going basis, when events are held.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 10 Mitigation Measure: The first two large amplified music events (with 500 or more in attendance) held at the amphitheater Friday and Saturday, shall end at or before 10:00 p.m., as described in Mitigation Measure No. 9. If monitoring results of the first two large amphitheater events show that such events are able to maintain levels at or lower than those required in this Mitigation Monitoring Plan, then amphitheater events on Friday and Saturday may be extended to 11:00 p.m. All patrons shall be off the premises (including the amphitheater, park and banquet hall events) by

12:00 a.m. Employees and contract staff, associated with the amplified music events, shall be off the premises by 1:00 a.m.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	On an on-going basis, when events are held
When should it be completed:	On an on-going basis, when events are held. After it is demonstrated through noise level measurements of concert events that nighttime operations will not result in adverse nighttime noise impacts.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 11 Mitigation Measure: Operator/property owner shall establish a written "Good Neighbor Policy" to be approved by the Planning Department, which shall establish the permittee's plan to mitigate any ancillary impacts from amplified music events (park, banquet hall or amphitheater) on surrounding properties. The plan shall include means for neighbors to contact management regarding complaints and steps management will take upon receiving a complaint. The policy shall be submitted and approved 30 days prior to the first amplified music event. No changes to the policy shall be made without prior review and approval by the Planning Department.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Prior to amplified music events (park, banquet hall, or amphitheater).
When should it be completed:	On an on-going basis, when events are held.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 12 Mitigation Measure: In the event that documented noise complaints are received for bass thumping, microphones/public address systems, etc., associated with any use of the property (inclusive of parcels 1-3, 7-12, and the remainder of parcel map 56-PM-083), such complaints shall be investigated to determine if the noise standards contained in this mitigation monitoring program were exceeded. In the event that the complaint investigation reveals that the noise standards were exceeded at the location where the complaint was received, additional sound controls shall be developed by a noise consultant, in accordance with Mitigation Measure No. 14. Implementation of additional sound controls shall be implemented and

verified prior to the following concert. Such measures could include reducing the overall output of the amplified sound system, relocating and/or reorienting speakers, use of acoustic curtains along the sides of the speakers to further focus the sound energy into the amphitheater seating areas and limiting amplified music to before 10:00 p.m.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Upon onset of amplified music events. Work shall begin within 30 days of notification by the County.
When should it be completed:	Prior to holding an amplified music event, after notification by the County.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 13 Mitigation Measure: Following removal of orchard trees located on the project site (inclusive of parcels 1-3, 7-12, and the remainder of parcel map 56-PM-083) potential changes in noise impacts shall be evaluated by a noise consultant, as described in Mitigation Measure No. 14, and additional noise mitigation measures shall be implemented, if determined to be necessary, to ensure compliance with the applicable County noise standards.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Following removal of orchard trees located on the project site
When should it be completed:	Prior to any amplified music event, after orchard trees have been removed.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

No. 14 Mitigation Measure: Any future additional noise analysis required to be conducted, including review, acceptance, and/or inspection associated with noise mitigation, shall be conducted by a noise consultant, whose contract shall be procured by the Planning Department, and paid for by the operator/property owner. A deposit based on actual cost shall be made with the Planning Department, by the operator/property owner, prior to any work being conducted. The applicant may choose to procure the noise consultant provided they pay the costs for the County to have all work peer reviewed by a third party. If future noise analysis is required,

amplified music events will be limited, as determined by the Planning Department, until the noise consultant verifies to the Planning Department that all recommended noise control measures have been completely implemented.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	When a noise consultant is specified within this Mitigation Monitoring Plan.
When should it be completed:	Prior to any amplified music event, as specified within this Mitigation monitoring Plan.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	None.

XIV. PUBLIC SERVICES

No. 15 Mitigation Measure: Within sixty (60) days of project Use Permit approval, the operator/property owner shall submit for approval a security plan for amplified music events (park, banquet hall or amphitheater) to the Sheriff's Department. The plan shall be approved prior to any use of the amphitheater. Any changes to the security plan shall be approved by the Sheriff's Department.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Sixty (60) days after Use Permit approval.
When should it be completed:	On an on-going basis, when events are held.
Who verifies compliance:	Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	Stanislaus County Department of Environmental Resources - Code Enforcement, and the Stanislaus County Sheriff's Department.

XVI. TRANSPORTATION/TRAFFIC

No. 16 Mitigation Measure: Prior to issuance of a building permit, all applicable traffic impact fees shall be paid to the Department of Public Works.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Prior to issuance of a building permit
When should it be completed:	Prior to issuance of a building permit
Who verifies compliance:	Stanislaus County Department of Public Works
Other Responsible Agencies:	Stanislaus County Planning and Community Development Department

No. 17 Mitigation Measure: An Event Traffic Management Plan shall be submitted and approved four (4) weeks prior to holding the first event at the amphitheater. Both County Planning and Public Works shall review and approve the plan.

a. The Event Traffic Management Plan shall include a westbound left turn lane from Highway 132 to the fourth driveway from the intersection (at Geer and Highway 132);
b. This plan shall include all event traffic circulation into and out of the site, including a description of how the different on-site parking areas will be filled;
c. Event Staff and signs shall not be in the State or Stanislaus County Right-of-way without an encroachment permit. This shall be addressed as part of the Event Traffic Management Plan. Each individual event shall have an encroachment permit from both the State and Stanislaus County, if applicable;

d. If the Event Traffic Management Plan requires updating, the updates shall be accepted both by County Planning and by Public Works, six (6) weeks prior to the next event being held at the amphitheater. This update can be triggered either by the applicant or by Stanislaus County;
e. Fees may be collected for amphitheater event parking, provided no queuing of vehicles occurs. Parking fees may be collected as part of the fee collected for the price of the ticket for the event, or may be collected at a stationary electronic machine, installed in the parking area. Parking fees may not be collected while vehicles are waiting to enter the parking lot;
f. Prior to the implementation or construction of any additional phases of the approved Plan Development No. 317, a revised Event Traffic Management Plan shall be submitted to and approved by County Planning and Public Works;
g. A left turn lane shall be installed on Geer Road for the driveway into the project labeled as D Drive. The plans shall be completed prior to the approval of the Event Traffic Management Plan. This driveway is roughly 575 feet south of the intersection of Geer Road and Yosemite Blvd;
    i. Improvement plans are to be submitted to County Public Works for approval. These improvement plans shall meet standards set forth within the Stanislaus County Standards and Specifications and the Caltrans Highway Design Manual;
    ii. An acceptable financial guarantee for the road improvements shall be provided to County Public Works

prior to the approval of the Event Traffic Management Plan;

iii. An Engineer's Estimate shall be provided for the road improvements so that the amount of the financial guarantee can be determined;

iv. The left turn lane shall be installed before the first event is held at the amphitheater.

Who Implements the Measure:	Operator/property owner.
When should the measure be implemented:	Four (4) weeks prior to any amphitheater event.
When should it be completed:	Prior to amphitheater event, as specified in the mitigation measure.
Who verifies compliance:	Stanislaus County Department of Public Works and Stanislaus County Planning and Community Development Department.
Other Responsible Agencies:	CalTrans.

I, the undersigned, do hereby certify that I understand and agree to be responsible for implementing the Mitigation Program for the above listed project.

Person Responsible for Implementing Mitigation Program **Date**

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PARCEL MAP

BEING A DIVISION OF A PORTION OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN STANISLAUS COUNTY, CALIFORNIA

PREPARED FOR: THE FRUITYARD
OCTOBER, 2012

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE: (209) 545-3390 FAX: (209) 545-3875 www.assoceng.com

OWNER'S STATEMENT:

WE, THE UNDERSIGNED OWNER(S), HEREBY CERTIFY THAT WE ARE THE OWNER(S) OF, OR HAVE SOME RIGHT, TITLE OR INTEREST OF RECORD IN THE LAND SHOWN ON THIS PARCEL MAP, AND WE CONSENT TO THE MAKING AND FILING OF THIS MAP IN THE OFFICE OF THE COUNTY RECORDER.

WE HEREBY OFFER FOR DEDICATION TO THE PUBLIC, FOR PUBLIC USE, THE PUBLIC UTILITY EASEMENTS AS SHOWN ON THIS MAP.

WE ALSO HEREBY OFFER FOR DEDICATION FOR THE MUTUAL BENEFIT OF THE PARCELS SHOWN HEREON, THE 30.00 FOOT WIDE PRIVATE INGRESS AND EGRESS EASEMENT AS SHOWN ON THIS MAP.

OWNER: FRUITYARD PROPERTY, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BY: Joseph Traina — 10/8/12
JOSEPH TRAINA, MEMBER — DATE

BY: William Traina — 10/8/12
WILLIAM TRAINA, MEMBER — DATE

BENEFICIARY: WELLS FARGO BANK, NATIONAL ASSOCIATION

BY DOCUMENT RECORDED JUNE 25 2008 AS DOCUMENT. NO. 2008-0068530, S.C.R.

Donny L Rocha — 10/25/12
DATE

Donny L. Rocha, Vice President
PRINT NAME & TITLE

ACKNOWLEDGMENT:

STATE OF CALIFORNIA:
COUNTY OF Stanislaus:
ON 10/8/12 BEFORE ME, Rachel Correia, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED,
Joseph Traina & William Traina

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND.
Rachel Correia, NOTARY PUBLIC
PRINT NAME: Rachel Correia
COMMISSION NUMBER: 1951769
COMMISSION EXPIRES: Oct. 8, 2015
PRINCIPAL OFFICE LOCATION (COUNTY): Stanislaus

ACKNOWLEDGMENT:

STATE OF CALIFORNIA:
COUNTY OF STANISLAUS:
ON 10-25-12 BEFORE ME, ANNA FILIPPI, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED,
DONNY L. ROCHA

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND.
Anna Filippi, NOTARY PUBLIC
PRINT NAME: ANNA FILIPPI
COMMISSION NUMBER: 1848157
COMMISSION EXPIRES: MAY 8, 2013
PRINCIPAL OFFICE LOCATION (COUNTY): STANISLAUS

NOTE:

"ALL PERSONS PURCHASING LOTS WITHIN THE BOUNDARIES OF THIS APPROVED MAP SHOULD BE PREPARED TO ACCEPT THE INCONVENIENCES ASSOCIATED WITH THE AGRICULTURAL OPERATIONS, SUCH AS NOISE, ODORS, FLIES, DUST OR FUMES. STANISLAUS COUNTY HAS DETERMINED THAT SUCH INCONVENIENCES SHALL NOT BE CONSIDERED TO BE A NUISANCE IF AGRICULTURAL OPERATIONS ARE CONSISTENT WITH ACCEPTED CUSTOMS AND STANDARDS."

CLERK OF THE BOARD OF SUPERVISOR'S CERTIFICATE:

THIS IS TO CERTIFY THAT THE OWNERS OF THE PROPERTY SHOWN ON THE ACCOMPANYING MAP HAVE FILED WITH THE BOARD OF SUPERVISORS: (CHECK ONE)

☐ A. A BOND OR DEPOSIT APPROVED BY SAID BOARD TO SECURE THE PAYMENT OF TAXES AND SPECIAL ASSESSMENTS COLLECTED AS TAXES, WHICH ARE AT THE TIME OF FILING THIS MAP, A LIEN AGAINST SAID PROPERTY OR ANY PART THEREOF.

☒ B. RECEIPTED TAX BILL OR BILLS OR SUCH OTHER EVIDENCE AS MAY BE REQUIRED BY SAID BOARD SHOWING FULL PAYMENT OF ALL APPLICABLE TAXES.

DATED THIS 23 DAY OF October 2012.

CHRISTINE FERRARO TALLMAN
CLERK OF THE BOARD OF SUPERVISORS.

BY: Pam Villarreal, DEPUTY
Pam Villarreal
PRINT NAME

TAX COLLECTOR'S CERTIFICATE:

THIS IS TO CERTIFY THAT THERE ARE NO LIENS FOR ANY UNPAID STATE, COUNTY, SCHOOLS, MUNICIPAL, OR SPECIAL ASSESSMENTS, EXCEPT SPECIAL ASSESSMENTS OR TAXES NOT YET PAYABLE AGAINST THE LAND SHOWN ON THIS MAP.

ASSESSOR'S PARCEL NO. 009-027-004.

DATED THIS 23rd DAY OF October 2012.

GORDON B. FORD
COUNTY TAX COLLECTOR.

BY: Segan L. Raja, DEPUTY
SEGAN L. RAJA
PRINT NAME

OMITTED SIGNATURE:

PURSUANT TO SECTION 66436 OF THE SUBDIVISION MAP ACT, THE SIGNATURES OF THE FOLLOWING EASEMENT HOLDER'S OF RECORD HAVE BEEN OMITTED:

MODESTO IRRIGATION DISTRICT, CANAL AND INCIDENTAL PRUPOSES, RECORDED MAR. 13, 1925, IN BK. 105 OF OFFICIAL RECORDS, PG. 331, S.C.R.

MODESTO IRRIGATION DISTRICT, PUBLIC UTILITY PRUPOSES, RECORDED JUNE 6, 2007, AS DOCUMENT NO. 2007-0075715, S.C.R.

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF JOE TRAINA ON OCTOBER 1, 2012 I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY. ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED AND ARE SUFFICIENT TO ENABLE THIS SURVEY TO BE RETRACED.

DATED THIS 8th DAY OF OCTOBER 2012.

DAVE L. SKIDMORE, L.S. 7126

LICENSED LAND SURVEYOR — D.L. SKIDMORE — No.7126 — STATE OF CALIFORNIA

COUNTY SURVEYOR'S STATEMENT:

THIS IS TO CERTIFY THAT THE ACCOMPANYING MAP HAS BEEN EXAMINED AND THAT IT SUBSTANTIALLY CONFORMS TO THE TENTATIVE MAP AND ANY APPROVED ALTERATIONS THEREOF. ALSO, CHAPTER 2, AND TITLE 20, OF THE STANISLAUS COUNTY SUBDIVISION CODE HAVE BEEN COMPLIED WITH AND THE MAP IS TECHNICALLY CORRECT.

I HEREBY ACCEPT ON BEHALF OF THE PUBLIC FOR PUBLIC USE, THE OFFER OF DEDICATION OF THE PUBLIC UTILITY EASEMENTS AS SHOWN ON THIS MAP.

DATED THIS 29th DAY OF OCTOBER 2012.

WAYNE G. SUTTON
COUNTY SURVEYOR

Wayne G. Sutton
L.S. 3863

LICENSED LAND SURVEYOR — WAYNE G. SUTTON — No. 3863 — STATE OF CALIFORNIA

RECORDER'S CERTIFICATE:

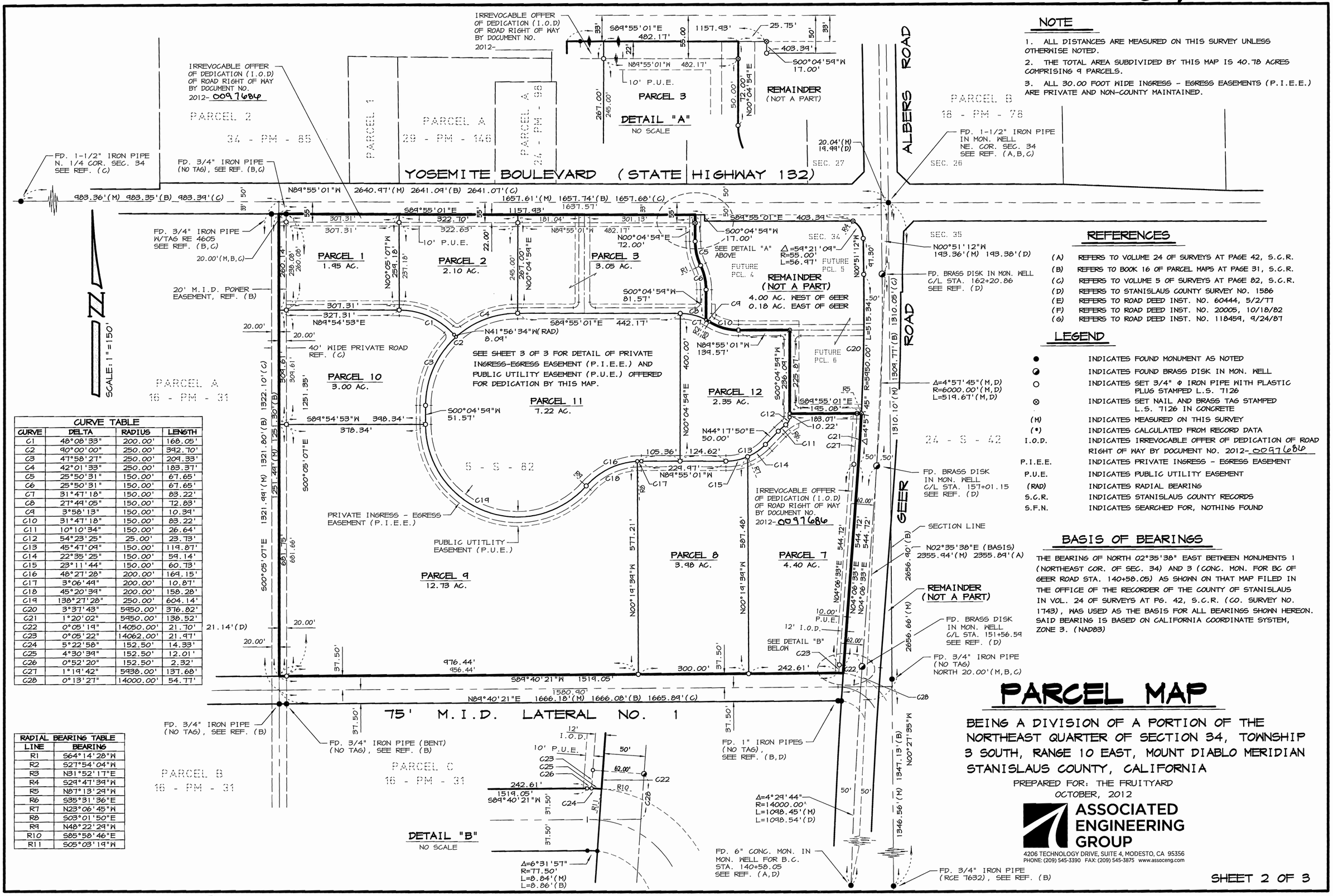
FILED THIS 31th DAY OF October, 2012 AT 15.04.23 O'CLOCK P.M.
IN BOOK 56 OF PARCEL MAPS, AT PAGE 83, STANISLAUS COUNTY RECORDS, AT THE REQUEST OF ASSOCIATED ENGINEERING GROUP, INC.
INSTRUMENT NO. 2012-97688
FEE $ 15.00 PAID

LEE LUNDRIGAN
CLERK RECORDER

BY: Manjit Kahlon, DEPUTY
Manjit Kahlon
PRINT NAME

STANISLAUS COUNTY PM APP. NO. 2009-08
ASSOCIATED ENGINEERING JOB NO. 496C-12

56 PM 83



NOTE

1. ALL DISTANCES ARE MEASURED ON THIS SURVEY UNLESS OTHERWISE NOTED.
2. THE TOTAL AREA SUBDIVIDED BY THIS MAP IS 40.78 ACRES COMPRISING 9 PARCELS.
3. ALL 30.00 FOOT WIDE INGRESS - EGRESS EASEMENTS (P.I.E.E.) ARE PRIVATE AND NON-COUNTY MAINTAINED.

REFERENCES

(A) REFERS TO VOLUME 24 OF SURVEYS AT PAGE 42, S.C.R.
(B) REFERS TO BOOK 16 OF PARCEL MAPS AT PAGE 31, S.C.R.
(C) REFERS TO VOLUME 5 OF SURVEYS AT PAGE 82, S.C.R.
(D) REFERS TO STANISLAUS COUNTY SURVEY NO. 1586
(E) REFERS TO ROAD DEED INST. NO. 60444, 5/2/77
(F) REFERS TO ROAD DEED INST. NO. 20005, 10/18/82
(G) REFERS TO ROAD DEED INST. NO. 118459, 9/24/87

LEGEND

●	INDICATES FOUND MONUMENT AS NOTED
◪	INDICATES FOUND BRASS DISK IN MON. WELL
○	INDICATES SET 3/4" Φ IRON PIPE WITH PLASTIC PLUG STAMPED L.S. 7126
⊗	INDICATES SET NAIL AND BRASS TAG STAMPED L.S. 7126 IN CONCRETE
(M)	INDICATES MEASURED ON THIS SURVEY
(•)	INDICATES CALCULATED FROM RECORD DATA
I.O.D.	INDICATES IRREVOCABLE OFFER OF DEDICATION OF ROAD RIGHT OF WAY BY DOCUMENT NO. 2012-0097686
P.I.E.E.	INDICATES PRIVATE INGRESS - EGRESS EASEMENT
P.U.E.	INDICATES PUBLIC UTILITY EASEMENT
(RAD)	INDICATES RADIAL BEARING
S.C.R.	INDICATES STANISLAUS COUNTY RECORDS
S.F.N.	INDICATES SEARCHED FOR, NOTHING FOUND

BASIS OF BEARINGS

THE BEARING OF NORTH 02°35'38" EAST BETWEEN MONUMENTS 1 (NORTHEAST COR. OF SEC. 34) AND 3 (CONG. MON. FOR BC OF GEER ROAD STA. 140+58.05) AS SHOWN ON THAT MAP FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF STANISLAUS IN VOL. 24 OF SURVEYS AT PG. 42, S.C.R. (CO. SURVEY NO. 1743), WAS USED AS THE BASIS FOR ALL BEARINGS SHOWN HEREON. SAID BEARING IS BASED ON CALIFORNIA COORDINATE SYSTEM, ZONE 3. (NAD83)

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	48°08'33"	200.00'	168.05'
C2	90°00'00"	250.00'	342.70'
C3	47°58'27"	250.00'	209.33'
C4	42°01'33"	250.00'	183.37'
C5	25°50'31"	150.00'	67.65'
C6	25°50'31"	150.00'	67.65'
C7	31°47'18"	150.00'	83.22'
C8	27°44'05"	150.00'	72.83'
C9	3°58'13"	150.00'	10.39'
C10	31°47'18"	150.00'	83.22'
C11	10°10'34"	150.00'	26.64'
C12	54°23'25"	25.00'	23.73'
C13	45°47'09"	150.00'	119.87'
C14	22°35'25"	150.00'	59.14'
C15	23°11'44"	150.00'	60.73'
C16	48°27'28"	200.00'	169.15'
C17	3°06'49"	200.00'	10.87'
C18	45°20'39"	200.00'	158.28'
C19	138°27'28"	250.00'	604.14'
C20	3°37'43"	5450.00'	376.82'
C21	1°20'02"	5450.00'	130.52'
C22	0°05'19"	14050.00'	21.70'
C23	0°05'22"	14062.00'	21.97'
C24	5°22'58"	152.50'	14.33'
C25	4°30'39"	152.50'	12.01'
C26	0°52'20"	152.50'	2.32'
C27	1°19'42"	5938.00'	137.68'
C28	0°13'27"	14000.00'	54.77'

RADIAL BEARING TABLE	
LINE	BEARING
R1	S64°14'28"W
R2	S27°54'04"W
R3	N31°52'17"E
R4	S29°47'39"W
R5	N87°13'29"W
R6	S35°31'36"E
R7	N23°06'45"W
R8	S03°01'50"E
R9	N48°22'29"W
R10	S85°58'46"E
R11	S05°03'19"W

PARCEL MAP

BEING A DIVISION OF A PORTION OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN STANISLAUS COUNTY, CALIFORNIA

PREPARED FOR: THE FRUITYARD
OCTOBER, 2012

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE: (209) 545-3390 FAX: (209) 545-3875 www.assoceng.com

56 PM 83

E8WD95

56PM83

M.I.D. EASEMENT (GUY WIRES) 5' X 10'
INST. NO. 2007-0075715, 6/06/07

ROAD DEED TO STANISLAUS CO.
INST. NO. 60444, 5/2/77

ROAD DEED TO STANISLAUS CO.
INST. NO. 20005, 10/18/82

ROAD DEED TO STANISLAUS CO.
INST. NO. 118459, 9/24/87

SEC. 27

SEC. 26

SEC. 34

SEC. 35

SECTION LINE

YOSEMITE BOULEVARD (STATE HIGHWAY 132)

N89°55'01"W 1157.93'

322.70'

482.17'

181.04'

301.13'

322.63'

S89°55'01"E 1132.11'

482.17'

129.98'(G) 100.00'(F) 173.48'(E)

S89°55'01"E 403.39'(M) 403.46'(*E,F,G)

IRREVOCABLE OFFER OF DEDICATION (I.O.D) OF ROAD RIGHT OF WAY BY DOCUMENT NO. 12-0097686

PARCEL 1

PARCEL 2

PARCEL 3

REMAINDER (NOT A PART)

PARCEL LINE & CENTER LINE PRIVATE INGRESS - EGRESS EASE.

20' M.I.D. POWER EASEMENT, REF. (B)

40' WIDE PRIVATE ROAD REF. (C)

PARCEL 10

PARCEL 11

PARCEL 12

PARCEL 8

PARCEL 9

PARCEL 7

THE SIDE LINES OF 30.00' WIDE PRIVATE INGRESS - EGRESS EASEMENT & 40.00 FOOT WIDE PUBLIC UTILITY EASEMENT ARE CONCENTRIC WITH THE CENTER LINE AND PARCEL LINE UNLESS SHOWN OTHERWISE

PARCEL LINE & CENTER LINE PRIVATE INGRESS - EGRESS EASEMENT SEE SHEET 2 OF 3 FOR CURVE DATA, BEARINGS AND DISTANCES.

IRREVOCABLE OFFER OF DEDICATION (I.O.D) OF ROAD RIGHT OF WAY BY DOCUMENT NO. 12-0097686

CENTER LINE

SECTION LINE

ROAD

SCALE: 1" = 80'

NOTES:

1. ALL 30.00 FOOT WIDE INGRESS - EGRESS EASEMENT (P.I.E.E.) ARE PRIVATE AND NON-COUNTY MAINTAINED.
2. THE 30.00 FOOT WIDE PRIVATE INGRESS - EGRESS EASEMENT (P.I.E.E.) OFFERED FOR DEDICATION BY THIS MAP IS FOR THE MUTUAL BENEFIT OF THE PARCELS SHOWN ON THIS MAP.
3. A MAINTENANCE AGREEMENT FOR THE 30.00 FOOT WIDE PRIVATE INGRESS - EGRESS EASEMENT (P.I.E.E.) OFFERED FOR DEDICATION BY THIS MAP IS RECORDED CONCURRENTLY WITH THIS MAP AS DOC. NO. 2012-0097687.

PARCEL MAP

BEING A DIVISION OF A PORTION OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN STANISLAUS COUNTY, CALIFORNIA

PREPARED FOR: THE FRUITYARD

OCTOBER, 2012

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE: (209) 545-3390 FAX: (209) 545-3875 www.assoceng.com

E8WD95

56PM83

PARCEL 1
34-PM-85

PARCEL A
29-PM-146

PARCEL A
24-PM-98

APN 09-13-21

APN 09-13-07

APN 09-13-06

PARCEL B
18-PM-78

EXTEND EXISTING TURN LANE
TO ACCOMMODATE EXISTING DRIVEWAY

EXISTING PYLON
SIGN TO BE UPDATED
AND PROPOSED ELECTRONIC
READER SIGNED TO BE ADDED

ALBERS
ROAD

YOSEMITE BOULEVARD (STATE HIGHWAY 132)

SEC. 27 SEC. 26
SEC. 34 SEC. 35

88'
50'
33'
55'
22'

EXISTING IRREVOCABLE
OFFER DEDICATION

PARCEL LINE

PARCEL 1
56-PM-83

FUTURE TRACTOR SALES
PER APPROVED PD 317

FUTURE FUELING STATION
PER APPROVED PD 317

PARCEL 2
56-PM-83

PROPOSED TEMPORARY EVENT
PARKING AREA

20'
30'

PROPOSED TEMPORARY EVENT
PARKING AREA

PARCEL 3
56-PM-83

PROPOSED PAVED ACCESS
LANE PER PREVIOUSLY
APPROVED PD 317

FUTURE BANQUET FACILITY
PER APPROVED PD 317

EXISTING
PARKING

THE FRUIT YARD
EX. RESTAURANT

EXISTING
FUEL ISLAND
& CANOPY

EXIST. STORE

PARCEL LINE
FUTURE ACCESS LANE

30'
20'

PARCEL LINE

FUTURE FRUIT PACKING
PER APPROVED PD 317

SECURITY FENCING
TYP.

MAIN ENTRANCE

MAINT.
BLDG.

PROP.
GAZEBO

PARCEL 12
56-PM-83

EXIST. ORCHARD

PARCEL 10
56-PM-83

PROPOSED
100'
BUILDING
41,000 S.F.

PROPOSED
SINGLE ROOF ONLY
5,000 S.F.
FF=134.0

CATCH POINT

BENCH = 131.5

BENCH = 140.7

TOP = 140.8

EX. POND

PROPOSED COVERED
SEATING AREA

PROPOSED TEMPORARY EVENT
PARKING AREA

EXISTING
FUEL ISLAND
& CANOPY

PARCEL LINE

GEER ROAD

SCALE: 1"=40'

EXISTING
STORM DRAIN
BASIN

PROPOSED OVERFLOW
PARKING
135 STALLS

CATCH POINT

EXTEND EXISTING TURN
LANE TO ACCOMMODATE
EXISTING DRIVEWAY

24-5-42

PARCEL LINE

PARCEL 7
56-PM-83

EXISTING IRREVOCABLE
OFFER DEDICATION

PROPOSED AREA OF OVERFLOW
PARKING PER APPROVED PD 317

NOTE: AS FUTURE OUTPARCELS ARE
DEVELOPED AND EVENT PARKING
IS DISPLACED ADDITIONAL PARKING
AREA WILL BE MADE AVAILABLE WITHIN
THIS PARCEL.

EXIST. ORCHARD

PROPOSED TEMPORARY EVENT
PARKING AREA

FUTURE RV / CAMPGROUND
PER APPROVED PD 317

FUTURE STORAGE FACILITY
PER APPROVED PD 317

EXIST. ORCHARD

EXIST.
MAINT.
BLDG.

PARCEL 9
56-PM-83

5-5-82

PARCEL 8
56-PM-83

62'
50'
112'

PARKING SUMMARY:

PROPOSED AMPHITHEATER MAXIMUM CAPACITY 3,500 PEOPLE

REQUIRED:
1/3 PEOPLE 1,167

PROVIDED:
SPECIAL EVENT PARKING 1,167
OVERFLOW PARKING 135
TOTAL: 1,302

NOTE:
THIS DRAWING IS DIAGRAMMATIC TO DEPICT POSSIBLE IMPROVEMENTS AND IS FOR ILLUSTRATIVE PURPOSES ONLY. THIS DRAWING IS NOT BINDING AND DOES NOT REPRESENT ANY REQUIRED IMPROVEMENTS.

REVISION	DATE	DESCRIPTION	BY

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE (209) 545-3390 FAX (209) 545-3875 www.assceng.com

SITE PLAN TO ACCOMPANY USE PERMIT

PARK SITE DEVELOPMENT PLAN

THE FRUIT YARD

STANISLAUS COUNTY CALIFORNIA

RYAN CARREL, R.C.E. 61619
DAVE SKIDMORE, L.S. 7126

DRAWN BY: J.F.
DATE: 1/20/17 7:54
SCALE: 1"=40'
DWG: 496A UP_SITE
CHECKED:
JOB #: 496A-15

SHEET 1
OF 1

Kristin:

Thank you for coordinating the Caltrans meeting.

We have had a chance to review what we discussed at the meeting, and can accept a condition to extend the westbound left turn lane in front of the project site on Highway 132 to the second main driveway accessing the amphitheater.

This is consistent with the request from Caltrans operations.

As Caltrans also said at the meeting, this is not a level of service issue, but just a safety issue for left turns into that driveway.

As such, all traffic concerns related to the project should now be resolved we are ready to proceed with the project.

Please make sure Caltrans is aware of this resolution.

Dave

DEPARTMENT OF TRANSPORTATION
P.O. BOX 2048 STOCKTON, CA 95201
(1976 E. CHARTER WAY/1976 E. DR. MARTIN
LUTHER KING JR. BLVD. 95205)
TTY: California Relay Service (800) 735-2929
PHONE (209) 941-1921
FAX (209) 948-7194

Flex your power!
Be energy efficient!

September 14, 2016

10-STA-132 PM 22.83
The Fruit Yard Project
Supplemental Traffic Analysis
PLN2015-0130
SCH#20160072019

Mr. Miguel A. Gálvez
Planning and Community Development
1010 10th Street, Suite 3400
Modesto, CA 95354

Dear Mr. Gálvez:

The California Department of Transportation (Department) appreciates the opportunity to comment on the Supplemental Traffic Analysis for The Fruit Yard Project. This project proposes to develop a 9,000 square feet banquet facility, relocate existing gas station and convenience market, relocate existing "card lock" fueling facility, and construct a 3,000 square feet retail shell building which includes a drive-thru establishment. The owner also requested authorization for 322-space vehicle/RV storage and 66-space travel trailer park for short term and a 2.0-acre site for retail tractor. Also the requests include a new packing facility for fruit packing and warehousing. This is a review of a supplemental traffic impact assessment dated August 23, 2016 from Larry Hail at Pinnacle Traffic Engineering. The project is located at 7954 Yosemite Blvd., at the southwest corner of Yosemite Blvd. and Geer Road.

The following comments need to be addressed for the STIA dated August 23, 2016 since they may require additional mitigations from the applicant:

1. The Traffic Study count data was taken in December 2015. When going in the Caltrans Traffic Data Branch Volumes for 2014, the numbers counted and provided were much less. Seasonal variation factor should be applied to the December count data based on the Highway Capacity Manual Section 3-3. The changing of the data trips will need to be applied to all the tables and figures plus analyzed in Synchro as well.
2. Table 4 ITE Trip Generation rates and Table 5 Project Site Uses Trip Generations Estimates should have the amphitheater trips included.
3. Figure 4A and Figure 4B say they are existing but this appears to only be the existing fruit yard trips and proposed fruit yard trips. When the figure refers to existing it should have

the background existing trips which will make the trips higher. Therefore, there should be figures for the scenarios that include existing background data in order to have scenarios that have existing plus project. Also the existing plus project (existing Fruit Yard traffic plus new proposed trips) and approved projects will include any project trips within the area that are approved.

4. Figure 5 appears to include background plus project. This figure should also include the other proposed project driveways with the background data.
5. There should be another Figure to include existing background data plus project with approved projects that also includes the amphitheater. Figure 6 only has the amphitheater traffic volumes.
6. The two-way left turn-lane appears to end right after proposed project driveway 3 ("B"). This will need to be extended further past driveway #6 (Triangle Ranch Road) in order to accommodate the westbound left turns that will be turning into the proposed driveways so that they are not blocking the thru SR-132 highway traffic.
7. There will also need to be eastbound right-turn lanes into the proposed project driveways 4 ("A"), driveway 3 ("B"), driveway 6 (Triangle Ranch Road), driveway 5 (into the RV fuel to the east of Triangle Ranch Road), and the intersection of SR 132/Geer Road eastbound right onto Geer Road from SR 132.
8. **Depending on the analysis with the revised data there may be additional mitigations required for "Opening Day" from the proposed project. Paying fair share to the RTIF program does not reduce or supersede the potential impact to a level of less than significant. At a minimum the extension of the Two-way left turn lane along SR 132** needs to be **extended further past driveway #6 (Triangle Ranch Road) and the right turns into the driveways along SR 132 will be needed to mitigated.**
9. An encroachment permit will be required for any work within state right-of-way.

If you have any questions, please contact Eduardo Fuentes at (209) 948-7783 (e-mail: Eduardo.Fuentes@dot.ca.gov) or myself at (209) 941-1921.

Sincerely,

E Fuentes
for

TOM DUMAS, CHIEF
OFFICE OF METROPOLITAN PLANNING

PINNACLE TRAFFIC ENGINEERING
831 C Street
Hollister, California 95023
(831) 638-9260 • (805) 644-9260
PinnacleTE.com

August 23, 2016

Miguel Galvez, Deputy Director
Stanislaus County
Planning and Community Development
1010 10th Street, Suite 3400
Modesto, CA 95354

RE: The Fruit Yard Project (PLN2015-0130 / SCH#20160072019); Stanislaus County, CA
Supplemental Traffic Analysis Material (STIA) and Response to Comment Letters
Submittal for Caltrans Office of Metropolitan Planning

Dear Mr. Galvez,

Enclosed are two (2) copies of the STIA (Feb 5, 2016) and response to comment letters. The hard copies of the traffic analysis material are provided in response to comments (letter dated July 25, 2016) and direction received from Caltrans staff (Tom Dumas and Eduardo Fuentes). Caltrans requires that any related project material be routed through the County. Please forward the enclosed traffic analysis material to the following address as soon as possible:

Tom Dumas, Chief
Caltrans Office of Metropolitan Planning
P.O. Box 2048
Stockton, CA 95021
(209) 941-1921

Please contact my office or Jim P. Freitas at Associated Engineering Group (209-545-3390) with any questions regarding the Caltrans request.

Pinnacle Traffic Engineering

Larry D. Hail, CE, TE, PTOE
President

ldh:msw
enclosures - STIA and Response to Comment Letters

cc: Jim P. Freitas - Associated Engineering Group, Inc.

The Fruit Yard L03

PINNACLE TRAFFIC ENGINEERING
831 C Street
Hollister, California 95023
(831) 638-9260 • (805) 644-9260
PinnacleTE.com

August 13, 2016

Mr. Jim P. Freitas
Associated Engineering Group, Inc.
4206 Technology Drive, Ste. 4
Modesto, CA 95356

RE: The Fruit Yard Project (PLN2015-0130); Stanislaus County, California
Response to Caltrans Comments

Dear Mr. Freitas,
Pinnacle Traffic Engineering (PTE) has reviewed the comments provided by Caltrans (letter from the Office of Metropolitan Planning dated July 25, 2016). Based on our discussions, the project description should be modified to include the hours of operation and frequency of events at the Amphitheater site. The project description in the Supplemental Traffic Impact Analysis (STIA) prepared by PTE (Feb. 5, 2016) indicates the project includes hosting events or concerts at the outside amphitheater within the existing park site. The majority of events will occur on a weekend day or Holiday, during the months between May and September. Events on weekdays (Monday-Friday) will begin after 7:00 PM and end by 10:30 PM. The STIA provides an evaluation of the potential impacts associated with the Amphitheater project. Comments on the STIA were received from Stanislaus County (Andrew Malizia) and addressed in a "response to comment" letter (April 28, 2016). The Caltrans comments are addressed in the existing traffic analysis material. A copy of the STIA, County comments, and "response to comment" letter are attached. The following is a brief response to the Caltrans comments:

1. Associated Engineering Group (AEG) should address the comments regarding the site design, and construction/closure of driveways on Yosemite Boulevard (SR 132) and Geer Road.

2. a. The STIA provides an evaluation of access at the project site driveways.
   b. A-Drive and B- Drive are existing (there is +/-300 feet between the driveways).
   c. The 2007 TIA identified the potential impacts associated with the Project Development Plan. The project's contribution to the County's Regional Transportation Impact Fee (RTIF) program served as mitigation to reduce the potential impacts to a level of "less than significant." The STIA concluded that events at the amphitheater will not significantly impact operations at the Yosemite Boulevard (SR 132) / Geer Road intersection. However, the amphitheater project could potentially impact operations on segments of Yosemite

Boulevard (SR 132) and Geer Road - Albers Road. Therefore, the project's contribution to the RTIF program will serve as mitigation to reduce the potential impact to a level of "less than significant," which is consistent with the mitigations approved for the Project Development Plan. Information regarding the construction of future roadway widening projects included in the RTIF should be requested from the County.

3. a. An analysis of LOS, vehicle queues, and delay are presented in the STIA and subsequent "response to comment" material prepared for the project.
   b. The Yosemite Boulevard (SR 132) / Geer Road intersection is already signalized.
   c. A SimTraffic micro-simulation model was prepared for the STIA (copy of files and/or the video are available upon request).
   d. The STIA provides an evaluation of access at the project site driveways, including stopping and corner sight distance.
   e. References to the length of left- and right-turns lanes is provided in the STIA.

It is my understanding that the County has completed a review of the project application and does not have any additional questions regarding the Amphitheater event traffic.

Please contact my office with any questions regarding the response to comment material.

Pinnacle Traffic Engineering

Larry D. Hail, CE, TE, PTOE
President

ldh:msw

attachments: Supplemental Traffic Impact Analysis (STIA; Feb. 5, 2016)
County Comments on STIA (April 28, 2016)
Response to Comment Letter (April 14, 2016)

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April 28, 2016

Mr. Jim P. Freitas
Associated Engineering Group, Inc.
4206 Technology Drive, Ste. 4
Modesto, CA 95356

RE: The Fruit Yard Project; Stanislaus County, California
Supplemental Traffic Impact Analysis (TIA) - Response to County Comments

Dear Mr. Freitas,

Pinnacle Traffic Engineering (PTE) has reviewed the comments provided by Andrew Malizia at Stanislaus County (email dated April 14, 2016). The Supplemental Traffic Impact Analysis (TIA) was reviewed and the specific comments were discussed with Andrew. The following is a brief response for each comment received from Stanislaus County:

1. The Supplemental TIA presents a focused analysis of the existing plus approved uses plus the amphitheater project conditions at Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. As stated in the report (Page 19), the analysis presents a "worst" case scenario assuming that the amphitheater traffic could arrive before 6:00 PM. However, the proposed Transportation Demand Management (TDM) measures are designed to avoid generating any amphitheater traffic before 6:00 PM (e.g. a concert on a Friday would start at 7:00 PM or later). Based on my discussion with Andrew, I took a quick look at the "levels of service" (LOS) for the Geer Road / "D" Driveway intersection. I also added the traffic associated with the existing and approved project site uses. The analysis shows that average delays at the "D" Driveway intersection would be in the LOS A range, while delays on the "D" Driveway approach (traffic exiting the site) would be in the LOS D range (26.5 seconds). The delay is only slightly over the LOS C threshold (25.0 seconds). If County staff could provide the hourly directional volumes associated with the average daily traffic (ADT) data used for the initial analysis the peak period volumes could be adjusted to reflect the 6:00 to 7:00 PM period.

2. As indicated in the Supplemental TIA report (Page 24), the existing pavement width on Geer Road adjacent to "D" Driveway is sufficient to stripe a short northbound left turn lane. Therefore, the SimTraffic modeling included a short left turn lane on the approach to the "D" Driveway. The 95th percentile queue for the northbound left turn is estimated at 2.6 vehicles (approximately 65').

3. The peak hour factor (PHF) for the amphitheater traffic movements at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road and Geer Road / "D" Driveway intersections were reduced to 0.75, which means all arriving traffic would enter within 45-minute period. Average delays at both intersections would still be within the LOS C range (see attached LOS worksheets). The percent heavy vehicles were also increased to 10% for the N-S and E-W movements along Geer Road and Yosemite Boulevard (SR 132), respectively. The LOS analysis referred under the previous responses was performed using the adjusted PHF and percent heavy vehicles. I've uploaded a new SimTraffic video to my DropBox folder (link provided below):

   (https://www.dropbox.com/s/3i7oounbiounsr1/Ex%20%2B%20App%20%2B%20Amph%20%28Inbound%29%20PM%20-%20Friday%20-%20SimTraffic%20-%20PTE%204-28-16%20Adjusted%20PHF.wmv?dl=0)

4. Input signal timing parameters for the Synchro 8 software include a 4 second "minimum initial", 3.5 second "yellow" clearance, and a 0.5 second "on-red" clearance. The "Phase Duration" (G + Y + Rc) is a calculated value produced by the software.

It is my understanding that Associated Engineering Group will investigate the possibilities of striping an exclusive left turn lane on the northbound approach of Geer Road at the "D" Driveway. In addition, the remaining County comments are to be addressed by the project team.

Please contact my office with any questions regarding the response to comment material.

Pinnacle Traffic Engineering

Larry D. Hail, CE, TE, PTOE
President

ldh:msw

attachments - Synchro 8 LOS Worksheets

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	8	21	313	636	689	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	75	92	92	75
Heavy Vehicles, %	0	0	0	10	10	0
Mvmt Flow	9	23	417	691	749	296

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2275	749	749	0	-	0
Stage 1	749	-	-	-	-	-
Stage 2	1526	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	45	415	869	-	-	-
Stage 1	471	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	23	415	869	-	-	-
Mov Cap-2 Maneuver	84	-	-	-	-	-
Stage 1	471	-	-	-	-	-
Stage 2	104	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26.5	4.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	869	-	199	-	-
HCM Lane V/C Ratio	0.48	-	0.158	-	-
HCM Control Delay (s)	12.9	-	26.5	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	2.6	-	0.6	-	-

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

4/28/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	266	78	207	328	64	55	423	166	101	626	134
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1756	1900	1863	1745	1900	1863	1727	1863	1863	1750	1900
Adj Flow Rate, veh/h	75	289	85	276	437	70	60	460	180	110	835	179
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.75	0.75	0.92	0.92	0.92	0.92	0.92	0.75	0.75
Percent Heavy Veh, %	2	10	10	2	10	10	2	10	2	2	10	10
Cap, veh/h	97	405	117	319	813	129	77	1301	627	140	1177	252
Arrive On Green	0.05	0.16	0.16	0.18	0.28	0.28	0.04	0.40	0.40	0.08	0.43	0.43
Sat Flow, veh/h	1774	2556	738	1774	2866	456	1774	3282	1583	1774	2725	584
Grp Volume(v), veh/h	75	187	187	276	252	255	60	460	180	110	509	505
Grp Sat Flow(s),veh/h/ln	1774	1668	1626	1774	1658	1664	1774	1641	1583	1774	1662	1647
Q Serve(g_s), s	3.6	9.1	9.4	13.0	11.0	11.1	2.9	8.4	6.6	5.2	21.5	21.5
Cycle Q Clear(g_c), s	3.6	9.1	9.4	13.0	11.0	11.1	2.9	8.4	6.6	5.2	21.5	21.5
Prop In Lane	1.00		0.45	1.00		0.27	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	97	264	258	319	470	472	77	1301	627	140	718	711
V/C Ratio(X)	0.78	0.71	0.73	0.87	0.54	0.54	0.78	0.35	0.29	0.78	0.71	0.71
Avail Cap(c_a), veh/h	186	311	303	455	560	563	186	1301	627	248	718	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	34.2	34.3	34.2	26.0	26.0	40.6	18.2	17.6	38.8	20.0	20.0
Incr Delay (d2), s/veh	12.4	5.9	7.0	11.7	0.9	1.0	15.3	0.8	1.1	9.2	5.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.6	4.7	7.4	5.2	5.2	1.7	4.0	3.1	2.9	10.9	10.8
LnGrp Delay(d),s/veh	52.4	40.1	41.4	45.9	26.9	27.0	55.9	18.9	18.8	48.0	25.8	25.9
LnGrp LOS	D	D	D	D	C	C	E	B	B	D	C	C
Approach Vol, veh/h		449			783			700			1124	
Approach Delay, s/veh		42.7			33.6			22.1			28.0	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	38.0	19.4	17.6	7.7	41.1	8.7	28.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	34.0	22.0	16.0	9.0	37.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	7.2	10.4	15.0	11.4	4.9	23.5	5.6	13.1
Green Ext Time (p_c), s	0.1	12.0	0.5	2.2	0.0	8.4	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

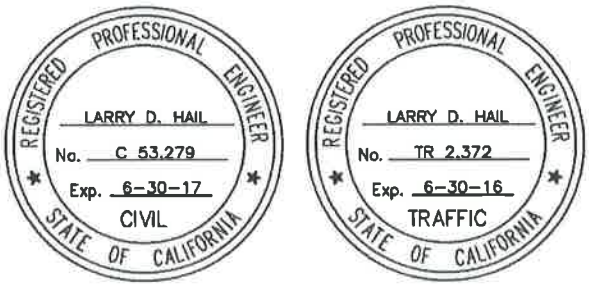
THE FRUIT YARD PROJECT

- Stanislaus County -

- Supplemental - Traffic Impact Analysis

Prepared for:

ASSOCIATED ENGINEERING GROUP, INC.
4206 Technology Drive, Suite 4
Modesto, CA 95356



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February 5, 2016

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APPENDIX MATERIAL

1.0 INTRODUCTION

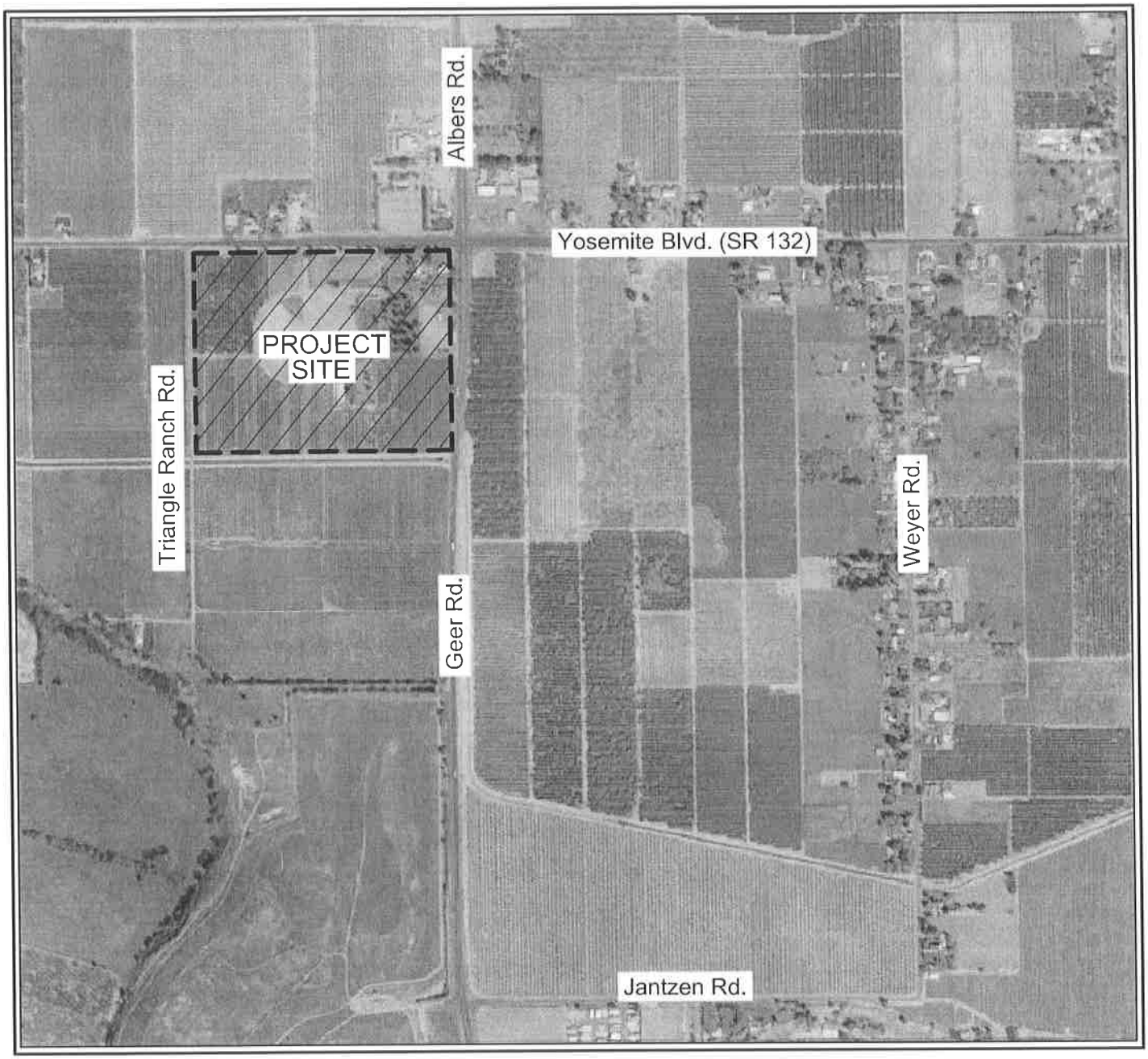
The Supplemental Traffic Impact Analysis (TIA) presents an evaluation of the potential impacts associated with the proposed modification (by Use Permit) to the previously approved General Plan Amendment (No. 2007-03) and Rezoning Application (No. 2007-03). The existing project site is located in the unincorporated area about 4 miles east of the City of Modesto (7948 Yosemite Boulevard). The site is comprised of approximately 45 acres and includes various commercial related uses (i.e. restaurant and lounge, produce market, service station facilities, park site, etc). Project access is currently provided via multiple driveways on the south side of Yosemite Boulevard (State Route 132) and west side of Geer Road. The general location of the project site is shown on Figure 1.

The General Plan Amendment and Rezoning Application were approved in 2008 (Mitigated Negative Declaration). The Project Development Plan approved in 2008 included a new banquet center, a recreational vehicle (RV) / boat storage facility, a RV park, a fruit packing / warehouse facility, a site for retail tractor sales, and additional retail space. In addition, the plan included relocating the existing service station facilities to accommodate the new development components. Hosting outdoor events at the existing park site was also approved. An evaluation of the potential impacts associated with the General Plan Amendment and Rezoning Application project was presented in the TIA prepared by KD Anderson & Associates (Dec. 6, 2007).

The proposed modification to the approved development plan includes the addition of an outside amphitheater within the existing park site. The amphitheater will host events or concerts and have a capacity to accommodate a maximum of 3,500 guests. The majority of events will occur on a weekend or Holiday. All parking associated with the amphitheater operations will be accommodated on-site. On-site circulation will be provided via a paved road, with access to Yosemite Boulevard (State Route 132) and Geer Road provided via existing and/or future driveway connections.

The scope of the Supplemental TIA was based on a review of the project material and subsequent discussions with the project team. The analysis presents an evaluation of the potential impacts associated with a capacity size event at the amphitheater (3,500 guests). An evaluation of traffic operations at the Yosemite Boulevard (State Route 132) / Geer Road intersection is presented for the following study periods:

- Average Weekday Afternoon (PM) Peak Commuter Period (4:00-6:00 PM)
- Average Weekday Evening Period (10:00-11:00 PM)
- Friday Afternoon (PM) Peak Commuter Period (4:00-6:00 PM)
- Friday Evening Period (10:00-11:00 PM)
- Saturday Mid-Day (MD) Peak Period (1:00-3:00 PM)
- Saturday Evening Period (10:00-11:00 PM)



LEGEND

= Project Site

NORTH

PINNACLE TRAFFIC ENGINEERING

The Fruit Yard
- Supplemental TIA -

FIGURE 1
PROJECT LOCATION MAP

The evaluation of potential project impacts on near-term traffic operations focuses on the analysis of the following scenarios:

- Existing Traffic Conditions
- Existing Plus Approved Project Site Uses Traffic Conditions
- Existing Plus Approved Project Site Uses Plus Amphitheater Event Traffic Conditions

The Supplemental TIA also presents a review of project access and addresses concerns raised by residences regarding additional traffic on Weyer Road. Information in the following reference documents was reviewed during the course of conducting the supplemental analysis:

- Stanislaus County Regional Transportation Plan (RTP) - StanCOG (2014)
- Stanislaus County Recommended Final Capital Improvement Plan (2013)
- Stanislaus County Congestion Management Plan (CMP) - StanCOG (2009)
- The Fruit Yard Traffic Impact Analysis- KD Anderson & Associates (2007)
- Stanislaus County General Plan Circulation Element (2006)
- Stanislaus County General Plan Circulation Support Documentation

2.0 EXISTING CONDITIONS

The roadway network serving the project site includes Yosemite Boulevard (State Route 132), Geer Road and Albers Road. The following is a brief description of the network and an evaluation of existing traffic operations.

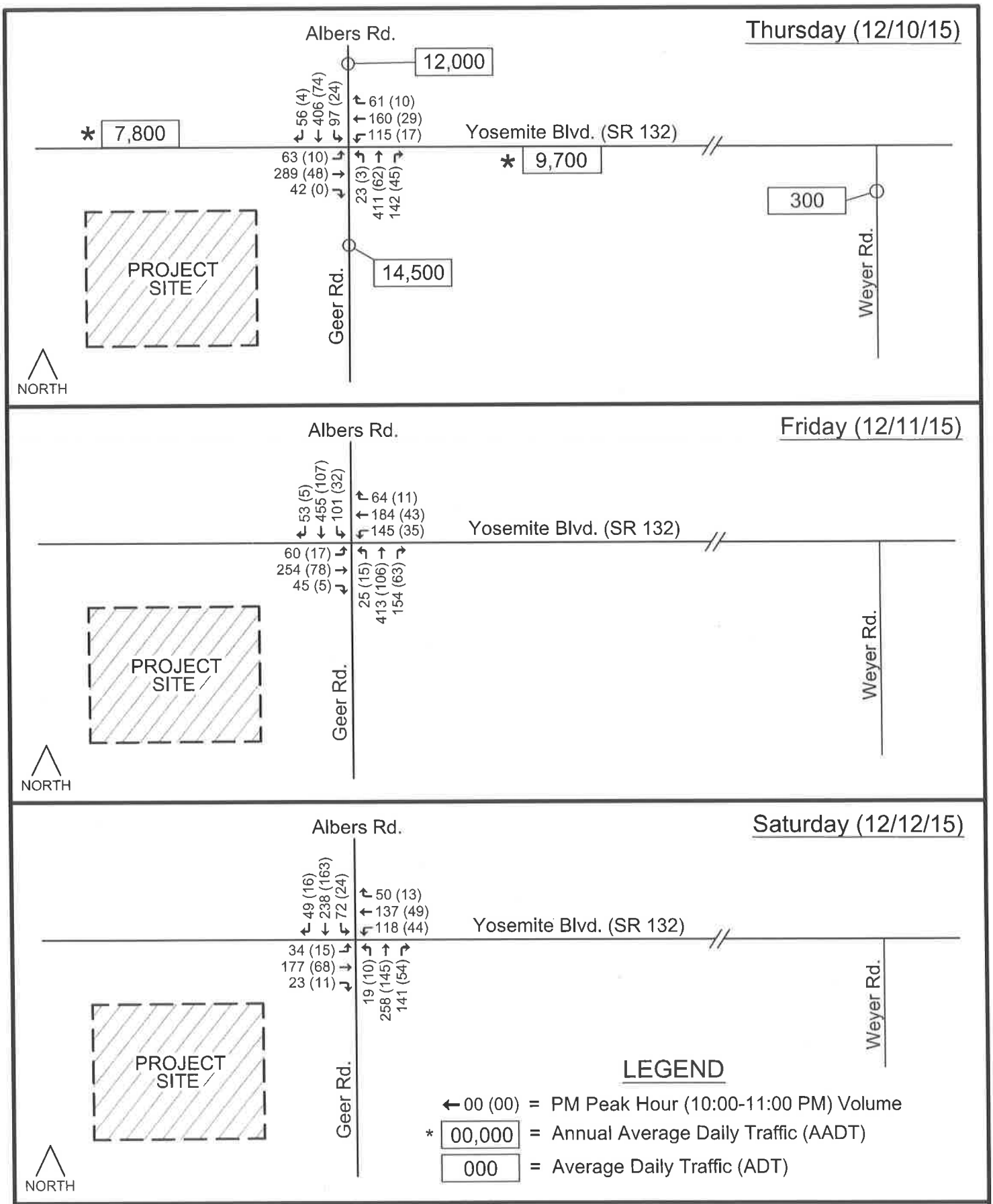
Network Description

Yosemite Boulevard (State Route 132) is a principal east-west route extending east from the City of Modesto and passing through Empire, Waterford and La Grange. State Route (SR) 132 also serves as a principal east-west route between I-580 and SR 99 in the City of Modesto. Yosemite Boulevard (SR 132) between Modesto and Waterford is classified as a Class C Expressway. The majority of Yosemite Boulevard (SR 132) east of Modesto has a single lane in each direction, with a 55 miles per hour (mph) speed limit. The Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection is signalized. The sections (+/-500') of Yosemite Boulevard (SR 132) east and west of Geer Road - Albers Road have been improved, and have 2 lanes in each direction with left turn lane channelization. Two-to-one lane transition tapers are provided for east and westbound traffic adjacent to the project site.

Geer Road and Albers Road is a principal north-south route between the City of Turlock and City of Oakdale. Geer Road and Albers Road are both classified as a Class C Expressway. The majority of Geer Road and Albers Road between Turlock and Oakdale have a single lane in each direction, with a 55 mph speed limit. The sections (+/-400') of Geer Road and Albers Road north and south of Yosemite Boulevard (SR 132) have been improved, and have 2 lanes in each direction with left turn lane channelization. Two-to-one lane transition tapers are provided for north and southbound traffic adjacent to the project site.

Traffic Volumes

To document existing conditions at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection, new turning movement traffic count data was collected for the six (6) study periods. Daily traffic volume data was referenced from the Caltrans website and obtained from Stanislaus County. At the request of the project applicant, new 24-hour traffic count data was also collected for a 7-day period on Weyer Road south of Yosemite Boulevard (SR 132). The existing traffic volumes are illustrated on Figure 2. A summary of the new traffic count data and a comparison of the hourly volumes (PM peak hour vs. 10:00-11:00 PM) is provided in the Appendix. Copies of the new traffic count data are also included in the Appendix.



PINNACLE TRAFFIC ENGINEERING

The Fruit Yard
- Supplemental TIA -

FIGURE 2
EXISTING
TRAFFIC VOLUMES

Level of Service Operational Analysis

Various "level of service" (LOS) methodologies are used to evaluate traffic operations. Operating conditions range from LOS "A" (free-flowing) to LOS "F" (forced-flow). Overall daily operations and LOS values for roadway segments can be estimated by comparing average daily traffic (ADT) volume data with standard or accepted twenty-four (24) hour ADT threshold criteria. Stanislaus County has established the LOS C threshold as the lower limit for acceptable traffic operations. The Caltrans traffic study guidelines (Guide for the Preparation of Traffic Impact Studies, Dec. 2002) state, Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities. A brief description of the LOS values is included in the Appendix.

The analysis presented in the 2007 TIA for the project site (KD Anderson & Associates) indicated that existing daily volumes on Yosemite Boulevard (adjacent to the project) were in LOS C range, while daily volumes on Geer Road (adjacent to the project site) were in the LOS E range. Daily traffic volumes on Yosemite Boulevard (SR 132) and Geer Road have remained relatively stable since 2007. The traffic analysis prepared for the County's General Plan Circulation Element utilized a "vehicle per lane per hour" (vplph) capacity to evaluate roadway segment LOS (1,000 vplph). The volume-to-capacity (V/C) ratios were then equated to LOS. The peak hour data on Figure 2 (average weekday) was used to estimate the roadway segment LOS adjacent to the project site. The existing roadway segment analysis is presented in Table 1.

Table 1 - Existing Roadway Segment Analysis (Average Weekday)

Roadway Segment	Direction	Volume	V/C Ratio	LOS (a)
Yosemite Blvd. (SR 132) w/o Geer Rd. - Albers Rd.	EB WB	394 239	0.39 0.24	D (B) C (A)
Yosemite Blvd. (SR 132) e/o Geer Rd. - Albers Rd.	EB WB	528 336	0.53 0.34	D (C) C (B)
Geer Rd. s/o Yosemite Blvd (SR 132)	NB SB	576 563	0.58 0.56	D (C) D (C)
Albers Rd. n/o Yosemite Blvd (SR 132)	NB SB	535 559	0.54 0.56	D (C) D (C)

(a) LOS for a 2-lane major roadway (LOS for 4-lane major roadway in parenthesis)

The roadway segment analysis indicates that existing segment volumes on Yosemite Boulevard (SR 132) are within acceptable limits as defined by Caltrans (LOS D or better). However, hourly directional volumes on the 2-lane segments of Geer Road and Albers Road exceed the County's defined threshold (LOS C or better). It is noted that the hourly volumes on the 4-lane segments of Geer Road (adjacent to the project site) and Albers Road (north of Yosemite Boulevard) are within the County's LOS C standard. It should also be noted that average daily traffic volumes on Weyer Road south of Yosemite Boulevard (300 ADT) are well within acceptable limits.

The LOS values for intersection operations are evaluated using estimated vehicle "control" delay (number of seconds per vehicle). Vehicle delays and LOS are reported for the overall intersection operations as an "average." During peak commuter periods, operations can be constrained at local intersections. Therefore, an analysis of peak hour operations is a good method for evaluating existing and/or future conditions, and the potential impact associated with a specific project. A copy of the vehicle delay-to-LOS relationship data is included with the Appendix Material.

The Synchro 8 software was used to evaluate the peak hour operations at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. Methodologies in the 2010 Highway Capacity Manual (HCM) were used for the peak hour intersection LOS analysis. It is noted that since the amphitheater will have some events or concerts that will end after 10:00 PM the analysis of existing conditions includes an evaluation of the 10:00 to 11:00 PM period. The results of the existing intersection LOS analysis are presented in Table 2. Copies of the LOS worksheets are included in the Appendix Material.

Table 2 - Existing Intersection LOS Analysis

Study Period	Average Delay - LOS Value
Thursday:	
PM Peak Hour -	21.9 - C
10:00 to 11:00 PM -	16.6 - B
Friday:	
PM Peak Hour -	21.7 - C
10:00 to 11:00 PM -	18.2 - B
Saturday:	
Mid-Day Peak Hour -	19.4 - B
10:00 to 11:00 PM -	15.3 - B

The data in Table 2 indicates that average vehicle delays during the six (6) study periods are within acceptable limits as defined by the County (LOS C or better) and Caltrans (LOS C/D).

Vehicle Speeds

A sampling of vehicle speeds was recorded on Yosemite Boulevard (SR 132) and Geer Road adjacent to the project site. Eastbound speeds on Yosemite Boulevard (SR 132) and northbound speeds on Geer Road were approximately 56-58 mph. Westbound speeds on Yosemite Boulevard (SR 132) and southbound speeds on Geer Road were slightly less since vehicles were coming from the signalized Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection.

3.0 PROJECT CONDITIONS

The following is a description of the project and proposed modification, an estimate of the project site trip generation quantities for the approved uses and amphitheater component, an assignment of the project site trips to the adjacent street system, and an evaluation of the potential project (amphitheater) impacts on existing operations. The analysis of potential project (amphitheater) impacts assumes the development of all approved uses on the project site.

Description

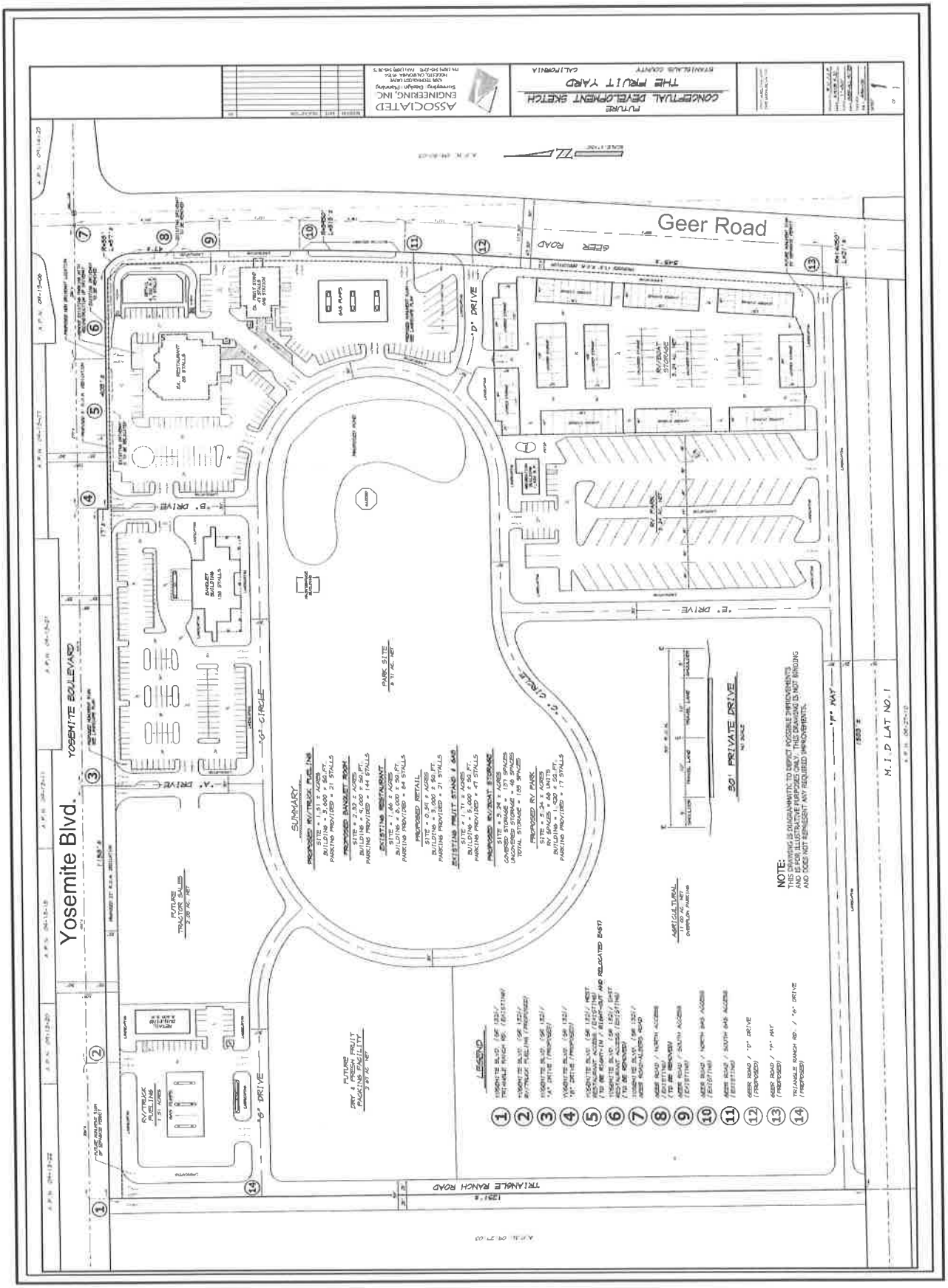
As previously stated, a General Plan Amendment and Rezoning Application were approved in 2008. The approved development plan included a relocation of the existing service and card-lock service station facilities and the construction of various new commercial related uses (i.e. new banquet center, a RV / boat storage facility, a RV park, a fruit packing / warehouse facility, a site for retail tractor sales, and additional retail space). A summary of the existing and approved project site uses is presented in Table 3. It is noted that the floor areas for the retail tractor sales site and fruit packing / warehouse facility are based on the square footages analyzed in the 2007 TIA (KD Anderson & Associates). A copy of the 2008 Project Development Plan is provided on Figure 3A.

Table 3 - Existing and Approved Project Site Uses

Existing Uses		Approved Uses	
Restaurant (a)	8,000 SF	Banquet Center	9,000 SF
Produce / Fruit Market (a)	5,000 SF	New Retail Space	3,000 SF
Service Station (b)	4 Pumps	RV / Boat Storage	322 Spaces
	(8 Fueling Pos.)	RV Camping Park	66 Sites
Card-Lock Service Station (c)	3 Pumps	Retail Tractor Sales	10,000 SF
	(6 Fueling Pos.)	Fruit Packing / Warehouse	35,000 SF

(a) Existing project site use to remain
(b) Existing service sta. to be relocated (new site will have 6 pumps with 12 fueling positions)
(c) Exist. card-lock station to be relocated (new site will have 3 pumps & conv. market)

The proposed project site modification includes the addition of an outside amphitheater within the existing park site (west of the pond). The amphitheater will host events or concerts and have a capacity to accommodate a maximum of 3,500 guests. The majority of events will occur on a weekend or Holiday, between May and September (especially capacity size events or concerts). Events on weekdays (Monday-Friday) will begin after 7:00 PM and end by 10:30 PM. Parking for amphitheater guests will be accommodated on-site in various surface lots. On-site parking will be provided for 1,167 vehicles (plus 135 overflow spaces). On-site circulation will be provided via a paved road (covered under previous approval), with initial access provided via two (2) driveways on Yosemite Boulevard ("A" Drive and "B" Drive) and one (1) driveway on Geer Road ("D" Drive). Future access may also be provided via Triangle Ranch Road and "F" Way. A copy of the Park Site Development Plan (Amphitheater) is provided on Figure 3B.



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The Fruit Yard
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FIGURE 3A
APPROVED
DEVELOPMENT PLAN

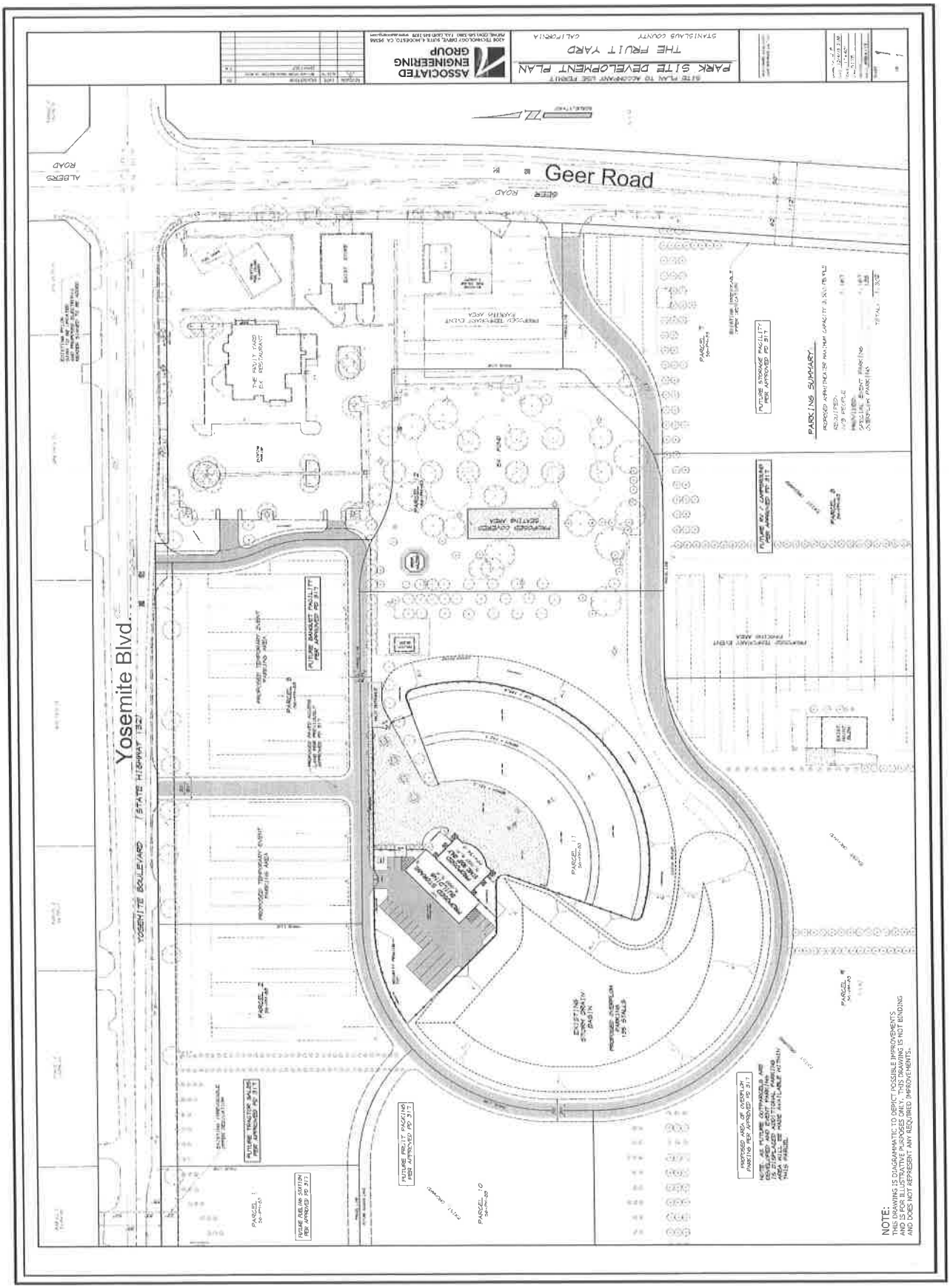

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FIGURE 3B
PARK SITE
DEVELOPMENT PLAN

Project Site Trip Generation Estimates

Trip generation rate data in the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition) and a Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (San Diego Association of Governments, SANDAG) was used to estimate the number of vehicle trips associated with the existing and approved project site uses. The applicable trip generation rates are presented in Table 4.

Table 4 - Applicable ITE Trip Generation Rates

Land Use Category	Trip Generation Rate					
	Weekday			Weekend Day		
	PM Peak Hour		Daily	Mid-Day Peak Hour		Daily
	In	Out		In	Out	
ITE #150 - Warehousing (a)	0.08	0.24	3.56	0.08	0.05	1.23
ITE #151 - Mini Warehouse Storage (b)	0.01	0.01	0.25	0.02	0.02	0.22
ITE #416 - Campground / RV Park (c & e)	0.18	0.09	4.00	0.27	0.14	6.00
ITE #826 - Specialty Retail Uses (a & f)	1.19	1.52	44.32	1.36	1.36	42.04
ITE #841 - Automobile Sales (a)	1.05	1.57	32.30	2.01	2.01	29.74
ITE #931 - Quality Restaurant (a)	5.02	2.47	89.95	6.38	4.44	94.36
ITE #944 - Service Station (d & g)	6.94	6.93	168.56	6.94	6.93	168.56
ITE #945 - Serv. Sta. w/ Conv. Market (d & g)	6.76	6.75	162.78	6.76	6.75	162.78

(a) Number of vehicle trips per 1,000 SF
(b) Number of vehicle trips per storage unit / space
(c) Number of vehicle trips per camping (RV) site - weekday daily rate based on SANDAG rates
(d) Number of vehicle trips per fueling position (2 fueling positions per pump)
(e) Weekend day rates assumed to be 1.5 times weekday rates
(f) Weekend mid-day peak rate assumed to be same as weekday PM peak rate (50% in / 50% out)
(g) Weekend day rates assumed to be same as weekday rates (daily and peak hour)

To the quantify the trips associated with the project site, the trip generation estimates were derived for both the existing and approved project site uses (to represent base-line existing conditions). The "specialty retail" category (ITE #826) rates were used to estimate the number of trips associated with the existing produce market / fruit stand. It is noted that the trip rates associated with the "service station with convenience market" category (ITE #945) are slightly lower than the standard "service station" (ITE #944) rates. Therefore, the standard service station rates were used to estimate the trip generation associated with the existing card-lock service station (relocated facility will also have a convenience market). As previously noted, the floor areas associated with the retail tractor sales site and fruit packing / warehouse facility are based on the square footages analyzed in the 2007 TIA. In a similar manner, the trip generation estimates associated with the banquet center are also based on the estimates analyzed in the 2007 TIA (number of trips based on number of parking spaces). It was assumed that an event at the banquet center could start around

6:00 PM on an average weekday, and therefore, guests would arrive during the PM peak hour. Guests attending a banquet would then exit the project site between 10:00 PM and 12:00 Midnight.

Information in the ITE Trip Generation Handbook demonstrates that a significant portion of the retail related trips will be pass-by and/or diverted link type trips coming from traffic already on the adjacent street system. The Caltrans traffic study methodologies allow a 15% trip reduction for pass-by traffic and a 5% reduction for captured trips (typically internal trips between uses). The trip generation estimates associated with the existing and approved project site uses are presented in Table 5.

Table 5 - Project Site Uses Trip Generation Estimates

Project Site Component	Number of Vehicle Trips					
	Weekday			Weekend Day		
	PM Peak Hour		Daily	Mid-Day Peak Hour		Daily
	In	Out		In	Out	
Existing Project Site Uses:						
Restaurant - 8,000 SF	40	20	720	51	36	754
Produce Market / Fruit Stand - 5,000 SF	6	8	222	7	7	210
Service Station - 8 Fueling Positions	56	55	1,348	56	55	1,348
Card-Lock Service Sta. - 6 Fueling Pos. (a)	42	42	1,012	42	42	1,012
Existing Uses Sub-Totals:	144	125	3,302	156	140	3,324
(-20% Pass-by & Internal Trip Reduction)	(-21)	(-21)	(-516)	(-21)	(-21)	(-514)
Approved Project Site Uses:						
Banquet Facility - 9,000 SF (b)	144	0	288	72	72	144
New Retail Space - 3,000 SF	4	5	134	4	4	126
RV / Boat Storage - 322 Spaces	3	3	80	6	6	70
RV Camping Park - 66 Site / Spaces	12	6	264	18	9	396
Retail Tractor Sales - 10,000 SF	11	16	324	20	20	298
Fruit Packing / Warehouse - 35,000 SF	3	8	124	3	2	44
Relocated Service Sta. (c)	28	28	674	28	28	674
Approved Uses Sub-Totals:	205	66	1,888	151	141	1,752
(20% Pass-by & Internal Trip Reduction)	(-6)	(-7)	(-162)	(-6)	(-6)	(-160)
Total Project Site Trip Generation:	349	191	5,190	307	281	5,076
External Traffic Demands:	322	163	4,512	280	254	4,402

(a) Relocated card-lock service station will have same number of pump (fueling positions), with a convenience market
(b) Trip generation based on number of parking stalls (referenced from 2007 TIA)
(c) Relocated service station will have 2 additional pumps, with 4 new fueling positions

The data in Table 5 indicates that the existing site uses generate a total of approximately 3,300 vehicle trips on an average weekday and weekend day (two-way trip ends). Development of the approved site will increase the total daily trip generation to approximately 5,100-5,200 ADT. On an average weekday the existing and approved uses are estimated to generate approximately 540 trips during the PM peak hour (349 inbound and 191 outbound). On a typical weekend day, the project site uses (exiting and approved) are estimated to generate 588 trips during the mid-day (MD) peak hour (307 inbound and 281 outbound). It is noted that the mid-day peak hour trip generation estimates for a weekend day represent the "peak hour of generation," which may not be the same period for each project site use. Therefore, the project site trip generation estimates presented in Table 5 may slightly overestimate the actual trip generation.

Information in the Urban Land Institute (ULI) Shared Parking publication indicates that parking demands associated with typical retail uses are about 30% of the peak demand (100%) during the 10:00-11:00 PM period. Therefore, to derive the trip generation estimates for the 10:00-11:00 PM period the peak period demands for the retail uses (restaurant and services station) were multiplied by 0.30 (weekday and weekend day). Though it is not anticipated that the RV / boat storage, RV park or fruit packing / warehouse uses will generate much traffic during the 10:00-11:00 PM period, the peak period demands in Table 5 were also multiplied by 0.30 to present a conservative analysis for the 10:00-11:00 PM period. As previously stated, it was assumed that traffic associated with the banquet center could be exiting the site between 10:00 PM and Midnight. Therefore, on a typical weekday 144 trips could be exiting the site during the 10:00-11:00 PM period (72 trips exiting the site on a weekend day). It is estimated that on an average weekday the existing and approved uses generate approximately 264 trips during the 10:00-11:00 PM period (62 inbound and 202 outbound). On a typical weekend day, the existing and approved project site uses are estimated to generate 207 trips during the 10:00-11:00 PM period (71 inbound and 136 outbound).

The "Approved Project Site Uses" trip generation estimates in Table 5 were based on the 2008 Project Development Plan. The trip generation estimates for the "Approved Project Site Uses" are slightly higher than the trip generation estimates analyzed in the 2007 TIA. Several differences were identified, which included that the 2007 trip generation estimates did not account for the additional fuel pumps associated with one of the relocated service stations.

Existing and Approved Site Uses Traffic Volumes

The trip generation estimates for the existing and approved site uses were assigned to the local street system based a review of existing travel patterns and the distribution percentages used in the 2007 TIA. The distribution of trips associated with the existing uses "to be relocated" (i.e. service station facilities) was performed based on the new locations (refer to the Approved Development Plan - Figure 3A). The trips for each use were assigned to the appropriate driveway(s). The driveways immediately adjacent to the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection were combined with the appropriate left turn restrictions. Approximately 50% of the project site trips were assigned to Yosemite Boulevard (25% west and east of the project site), 30%

were assigned to Geer Road (south of project site) and 20% were assigned to Albers Road (north of Yosemite Boulevard). The project site traffic volumes associated with the existing and approved uses are illustrated on Figures 4A (Weekday) and 4B (Weekend Day). It again is noted that the trips associated with the existing uses to be relocated were assigned to the street system based on the new locations as shown on the approved Project Development Plan.

Existing Traffic Volumes Plus Project Site (Existing and Approved Uses) Traffic Volumes

The project site traffic volumes associated with the existing and approved uses were combined with the existing traffic volumes on Figure 2. The existing traffic volumes on Figure 2 were first adjusted the reflect the relocation of the existing site uses "to be relocated" (existing volumes minus the existing service station uses), since the relocated service station and card-lock service station volumes are included in the volumes on Figures 4A and 4B. The existing traffic volumes plus the project site traffic volumes (existing and approved uses) are illustrated on Figure 5.

Amphitheater Trip Generation and Traffic Volumes

As previously described, the proposed project site modification includes the addition of an outside amphitheater with a maximum seating capacity for 3,500 guests. The amphitheater will host events or concerts, with the majority occurring on a weekend or Holiday. Event parking for the amphitheater will be provided on-site for 1,167 vehicles; which is a vehicle occupancy of 3 guest per vehicle (3,500/3). For study purposes, it was assumed that a capacity size event (or concert) at the amphitheater will generate approximately 1,170 vehicles (inbound and outbound). A total of 2,340 vehicle trips (two-way trip ends) will be generated by a capacity size event at the amphitheater. The distribution of trips associated with a capacity size event were assigned to the adjacent street system based on the populations of local communities (Modesto, Empire, Waterford, La Grange, Turlock and Oakdale). Approximately 55% of the amphitheater event trips were assigned to Yosemite Boulevard (40% west of the project site and 15% east of the project site), 25% were assigned to Geer Road (south of project site) and 20% were assigned to Albers Road (north of Yosemite Boulevard). As previously stated, initial access will be provided via "A" Drive and "B" Drive (driveways on Yosemite Boulevard) and "D" Drive (driveway on Geer Road). Future access may also eventually be provided via Triangle Ranch Road and "F" Way. The total amphitheater event traffic volumes are illustrated on Figure 6. It is noted that all inbound trips will occur prior to (before) an event and all outbound trips will occur after an event has concluded, and therefore, inbound and outbound trips will not occur within the same 2-3 hour period.

It is anticipated that 90-95% of all guests will be on-site within 15-30 minutes prior to the start of an event. Transportation Demand Management (TDM) strategies will be used in the scheduling of events as required to avoid generating any guest traffic during typical weekday (between 4:00-6:00 PM) and weekend day (between 1:00-3:00 PM) peak periods. In addition, no activities will occur at the new banquet center on the same day as an event at the amphitheater.

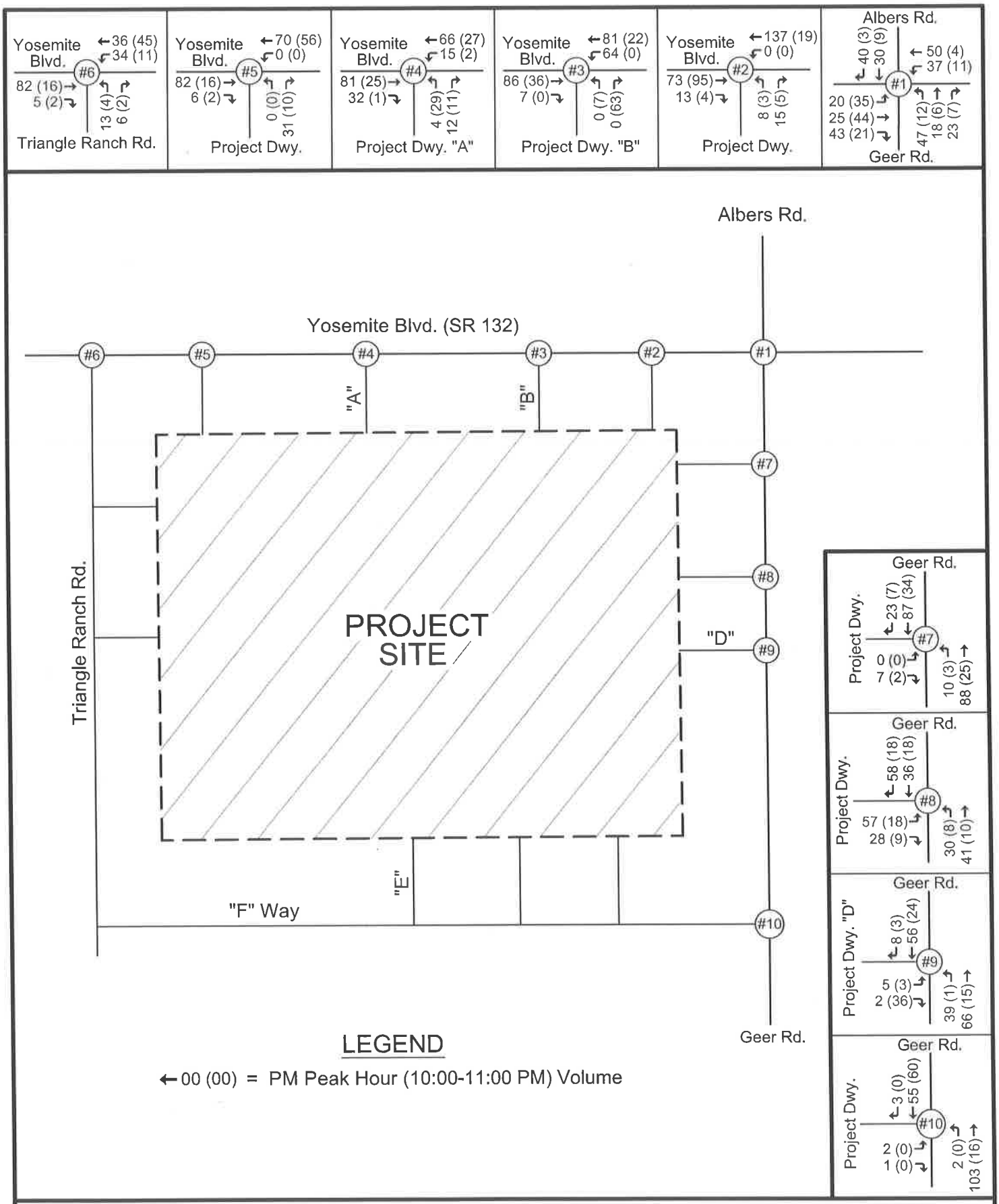

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FIGURE 4A
EXISTING AND APPROVED USES WEEKDAY VOLUMES

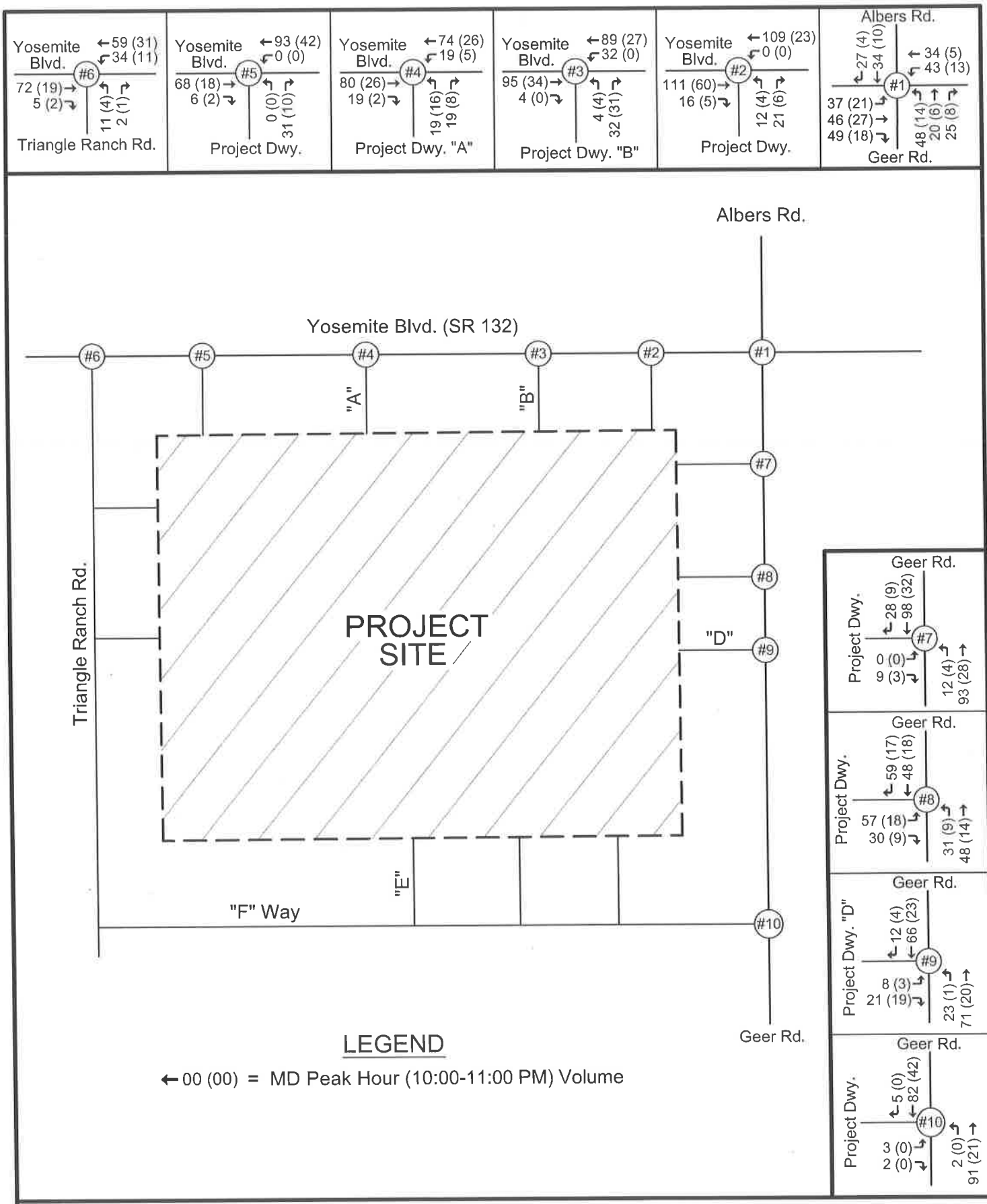

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FIGURE 4B
EXISTING AND APPROVED USES
WEEKEND DAY VOLUMES

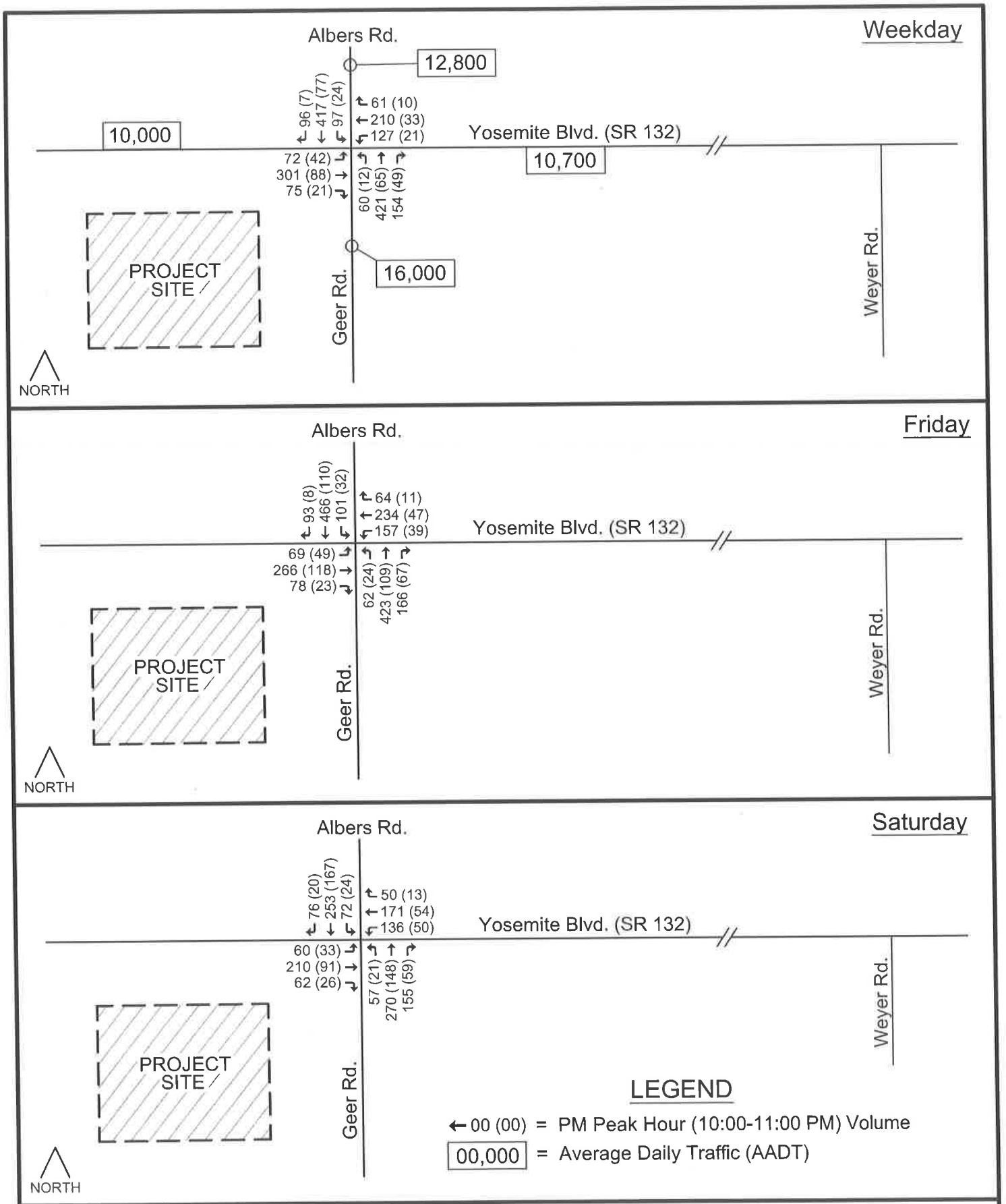

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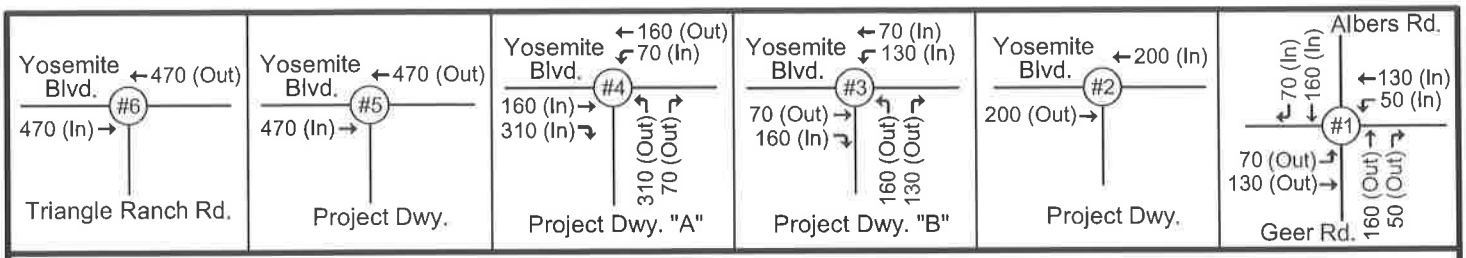
FIGURE 5
EXISTING VOLUMES PLUS PROJECT SITE USES TRAFFIC VOLUMES



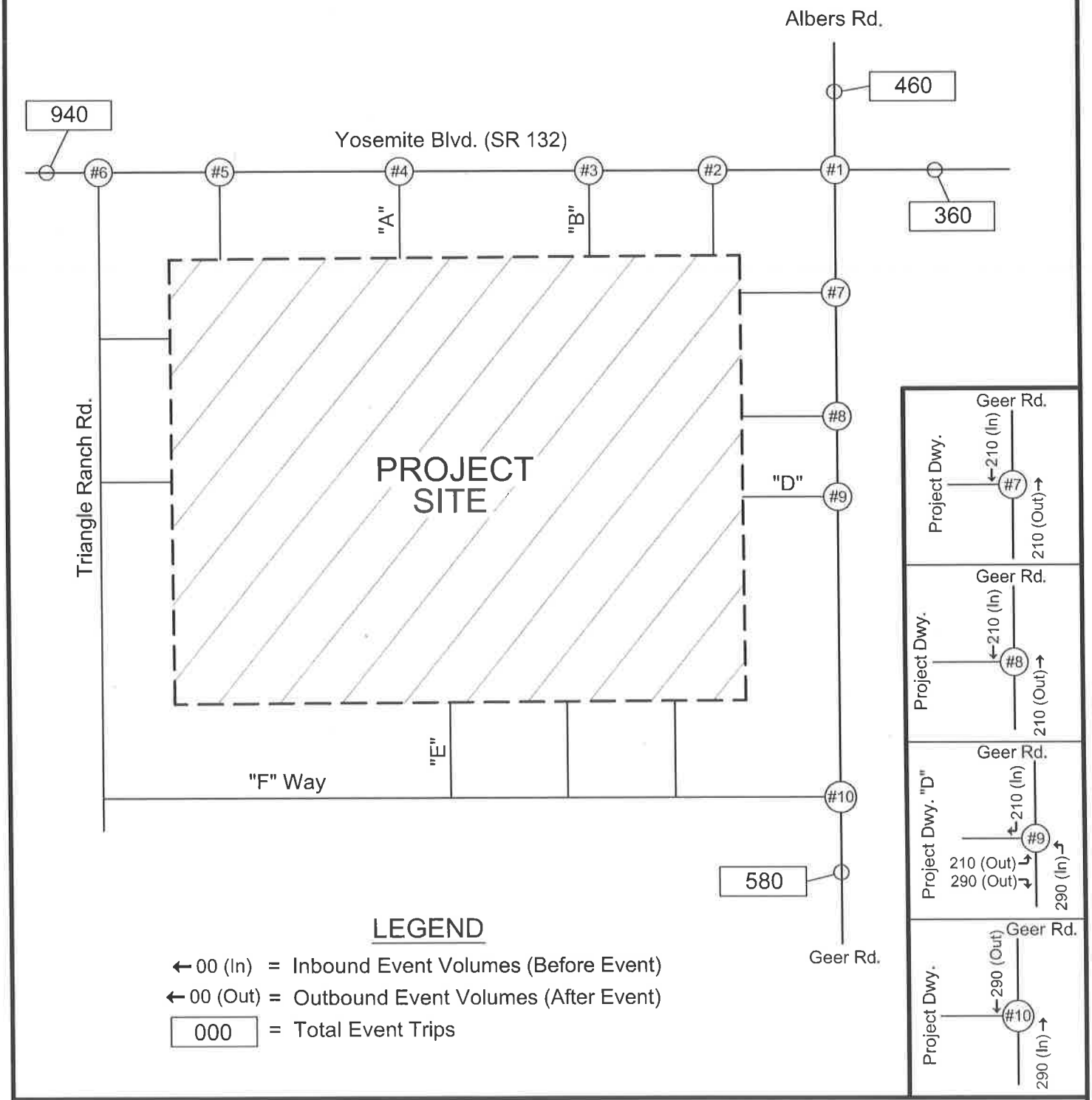


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FIGURE 6
TOTAL AMPHITHEATER TRAFFIC VOLUMES

Existing Volumes Plus Project Site Volumes Plus Amphitheater Traffic Volumes

The amphitheater event traffic volumes on Figure 6 were combined with the existing volumes on Figure 2 (adjusted to reflect new service station and card-lock service station locations) and the project site volumes (existing and approved uses) on Figures 4A and 4B. The project site volumes were first adjusted to reflect no activity at the banquet center, since the TDM measures require that no activity occur on the same day as an event at the amphitheater. Though the amphitheater TDM measures are designed to avoid generating any guest traffic during typical weekday or weekend day peak periods, it was deemed appropriate to analyze a "worst case" scenario for study purposes. Therefore, the "worst case" scenario assumes that traffic arriving at an amphitheater event could coincide with the peak hour period on the adjacent street system (between 5:00-6:00 PM on a weekday and 1:00-3:00 PM on a weekend day). All event exiting traffic would occur during the 10:00-11:00 PM period (on weekdays and weekend days). The existing traffic volumes (adjusted) plus the project site traffic volumes (existing and approved uses with no banquet center activity) plus the amphitheater traffic volumes (worst case) are illustrated on Figure 7.

Level of Service Operational Analysis

Similar to the existing conditions analysis, the existing traffic volumes plus the project site traffic volumes (existing and approved uses) on Figure 5 were compared to the ADT thresholds used in the 2007 TIA. The comparison indicated that daily volumes on Yosemite Boulevard (SR 132) will be in the LOS D range, while the daily volumes on the 2-lane segments of Geer Road south of the project site will be in the LOS E-F range. However, it is noted that daily traffic volumes on the 4-lane segments of Geer Road (adjacent to the project site) and Albers Road (north of Yosemite Boulevard) will be within the County's LOS C standard (<20,100 ADT). The peak hour data on Figure 5 (average weekday) was again used to evaluate the roadway segment LOS associated with the existing volumes plus the project site volumes (existing and approved uses) scenario. The existing plus project site uses segment analysis is presented in Table 6.

Table 6 - Existing Plus Project Site Uses Roadway Segment Analysis (Average Weekday)

Roadway Segment	Direction	Volume	V/C Ratio	LOS (a)
Yosemite Blvd. (SR 132) w/o Geer Rd. - Albers Rd.	EB WB	448 366	0.45 0.37	D (B) D (B)
Yosemite Blvd. (SR 132) e/o Geer Rd. - Albers Rd.	EB WB	552 398	0.55 0.40	D (C) D (B)
Geer Rd. s/o Yosemite Blvd (SR 132)	NB SB	635 619	0.64 0.62	E (C) E (C)
Albers Rd. n/o Yosemite Blvd (SR 132)	NB SB	554 610	0.55 0.61	D (C) E (C)

(a) LOS report for a 2-lane major roadway (4-lane major roadway LOS in parenthesis)

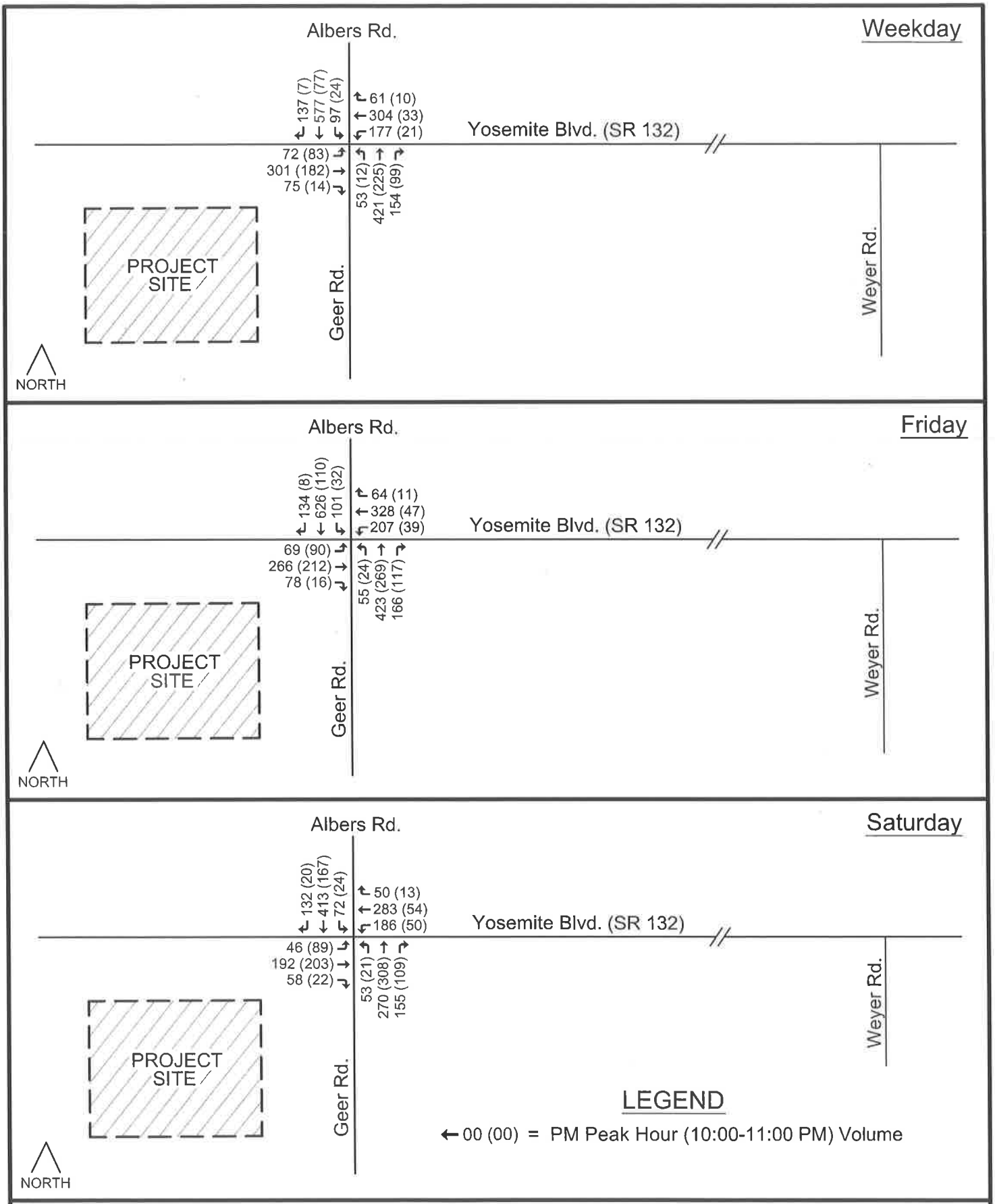

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FIGURE 7
EXISTING VOLUMES PLUS PROJECT SITE USES PLUS AMPHITHEATER VOLUMES

The roadway segment analysis indicates that the existing plus project site (existing and approved uses) hourly segment volumes on Yosemite Boulevard (SR 132) will remain within acceptable limits as defined by Caltrans (LOS D or better). However, hourly directional volumes on the 2-lane segments of Geer Road and Albers Road will continue to exceed the County's LOS C standard. It is noted that the hourly volumes on the 4-lane segments of Geer Road (adjacent to the project site) and Albers Road (north of Yosemite Boulevard) will remain within the County's LOS C standard.

Information in the County's General Plan Circulation Element and StanCOG's RTP has identified the future need to widen both Yosemite Boulevard (4-lane) and Geer Road - Albers Road (6-lane) to expressway standards. The future widening improvements have been incorporated into the RTP and will be partially funded by developer contributions to the County's Regional Transportation Impact Fee (RTIF) program. The analysis presented in the 2007 TIA identified the potential impacts to existing facilities that would be associated with the approved Project Development Plan. The project's contribution to the RTIF program served as mitigation to reduce the potential impacts to a level of "less than significant." As previously stated, the 2008 General Plan Amendment and Rezoning Application were approved with a Mitigated Negative Declaration.

The proposed amphitheater will host events or concerts, with a majority of the events occurring on a weekend or holiday (only 5-6 events will be held on a weekday). However, traffic associated with the amphitheater operations will increase traffic demands on Yosemite Boulevard and Geer Road - Albers Road on selected weekdays. Therefore, it is concluded that the amphitheater project will potentially impact operations on the local street system. Similar to the mitigation measure recommended for the approved 2008 Project Development Plan, the project shall contribute it's fair-share towards the cost of future regional circulation system improvements. Contribution to the RTIF program shall serve as mitigation to reduce the potential impact to a level of "less than significant." The proposed mitigation is consistent with the mitigations approved for the 2008 Project Development Plan (analyzed in the 2007 TIA).

At the applicant's request, new 24-hour traffic count data was collected on Weyer Road. The existing conditions analysis documented that average daily traffic volumes on Weyer Road south of Yosemite Boulevard (300 ADT) are well within the acceptable capacity for a rural roadway (<1,200 ADT). A review of the local roadway system was conducted to address concerns raised by local residences regarding the use of Weyer Road for access to and/or from the amphitheater site. Weyer Road is a narrow rural 2-lane rural roadway with no shoulders or lighting. There are 15 mph curve advisory signs posted on Weyer Road (for southbound traffic) and Jantzen Road (for eastbound traffic). Due to the populations of Waterford, Hickman and La Grange, it is anticipated that only 15-20% of the amphitheater traffic would have an origin or destination east of Geer Road - Albers Road. A review of the potential alternative route between Yosemite Boulevard and the amphitheater site indicates that using Weyer Road and Jantzen Road would be at least 3 times the distance as compared to using Yosemite Boulevard west of Weyer Road and Geer Road south of Yosemite Boulevard (3,200' vs. 10,500'). In addition, since the traffic signal

at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection operates well within acceptable limits it is concluded that little-to-no traffic would use Weyer Road and Jantzen Road route for access to and/or from the amphitheater site. Therefore, the amphitheater traffic will not impact operations along Weyer Road.

The Synchro 8 software was again used to evaluate the peak hour traffic operations at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. The analysis was concluded for the "existing traffic plus the project site traffic (existing and approved uses)" and the "existing traffic plus the project site traffic (existing and approved uses) plus the amphitheater traffic" scenarios. The "existing traffic plus the project site traffic (existing and approved uses)" scenario represents the base-line conditions for the analysis of potential impacts associated with the amphitheater project. The results of the intersection LOS analysis are presented in Table 7. Copies of the LOS worksheets are included in the Appendix Material.

Table 7 - Existing Plus Project Site Uses Plus Amphitheater
Intersection LOS Analysis

Study Scenario	Average Vehicle Delay - LOS Value		
	Existing Conditions	Existing Plus Approved Uses Conditions	Existing Plus Approved Uses Plus Amphitheater Conditions
Thursday:			
PM Peak Hour -	21.9 - C	24.2 - C	24.8 - C
10:00-11:00 PM -	16.6 - B	20.2 - C	17.9 - B
Friday:			
PM Peak Hour -	21.7 - C	23.2 - C	25.4 - C
10:00-11:00 PM -	18.2 - B	19.7 - B	18.1 - B
Saturday:			
Mid-Day Peak Hour -	19.4 - B	21.1 - C	22.3 - C
10:00-11:00 PM -	15.3 - B	17.0 - B	17.8 - B

The data in Table 7 indicates that average vehicle delays during the six (6) study periods will remain within acceptable limits as defined by Stanislaus County (LOS C or better) and Caltrans (LOS C/D). Therefore, it is concluded that the amphitheater project will not significantly impact peak period operations at the Yosemite Boulevard (SR 132) / Geer Road intersection.

Amphitheater Site Access

As previously described, initial access for the amphitheater traffic will be provided via two (2) driveways on Yosemite Boulevard ("A" Drive and "B" Drive) and one (1) driveway on Geer Road ("D" Drive). The total event traffic volumes on Figure 6 illustrate the turning movements at each driveway. It is again noted that the inbound and outbound trips will not occur within the same 2-3 hour period. The evaluation of site access includes a review of sight distance along Yosemite

Boulevard (SR 132) and Geer Road. In addition, a micro-simulation model was developed using the Synchro / SimTraffic 8 software to identify any potential access issues.

A review of sight distance was conducted using criteria in the Caltrans Highway Design Manual (HDM, Chapters 200 and 400). Stopping sight distance is the minimum distance required by a driver to bring a vehicle to a complete stop after an object has become visible on the roadway. Corner sight distance is the minimum time required for a waiting vehicle to either cross all lanes of through traffic, or cross the near lanes and turn left or right, without requiring through traffic to radically alter their speed. Caltrans uses a minimum time of 7.5 seconds to evaluate the adequacy of corner sight distance for highway and public road intersections (Table 405.1A). The Caltrans HDM states that at private road intersections and rural driveways the minimum corner sight distance shall be equal to the stopping sight distance (Topic 405.1-2c).

Yosemite Boulevard (SR 132) and Geer Road have a relative straight horizontal and level vertical alignment adjacent to the project site. Stopping sight distance for traffic on both roadways was measured by placing a portable delineator near the shoulder line stripe. The delineator was visible from at least 750' in both directions on Yosemite Boulevard (SR 132) and Geer Road. As documented under existing conditions, eastbound speeds on Yosemite Boulevard (SR 132) and northbound speeds on Geer Road were approximately 56-58 mph. Westbound speeds on Yosemite Boulevard (SR 132) and southbound speeds on Geer Road were slightly less since vehicles were coming from the signalized Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. Therefore, it is concluded that there is adequate stopping sight distance for vehicles traveling on Yosemite Boulevard (SR 132) and Geer Road approaching the project site driveway locations.

Corner sight distance at the project driveways was measured using a +/-15' setback from the shoulder line striping on both Yosemite Boulevard (SR 132) and Geer Road. A sampling of corner sight distance at each driveway location indicated that there was at least twice the minimum as required by Caltrans looking in both directions. Therefore, it is concluded that there is adequate corner sight distance for vehicles exiting the project site driveway locations.

The Synchro / SimTraffic 8 software is an industry standard that can be used to simulate peak period operations. SimTraffic uses the Synchro 8 output data to produce a micro-simulation model, which is based on the actual volumes, signal phasing and timing. The SimTraffic model can demonstrate how an intersection or network operates. Though the SimTraffic software may have some limitations, it is a good tool for presenting visual data to decision makers. The SimTraffic model was developed for the local roadway network using the volume data on Figure 7 (Friday PM peak hour). Again, this period represents a worst case scenario assuming that traffic arriving for an amphitheater event could coincide with the peak hour period on the adjacent street system (between 5:00-6:00 PM). It should be noted that the amphitheater TDM measures are designed to avoid generating any guest traffic during typical weekday or weekend day peak periods.

The network developed for the SimTraffic model was based on aerial photography (Google Earth), which represents that the actual spacing of intersections and driveways. The actual turn lane and transition taper lengths at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection were input in the SimTraffic Model. As described under the existing conditions, there are two-to-one lane transition tapers for westbound traffic on Yosemite Boulevard (SR 132) and northbound traffic on Geer Road. Near the project driveways the pavement widths on Yosemite Boulevard (westbound) and Geer Road (northbound) exceed 24'. Therefore, short turn lanes were modeled for the left turn movements from both roadways. Though exclusive left turn lanes are not striped at the driveway locations the roadway widths (+24') will function as there are approach 2 lanes.

The SimTraffic models were developed for the Friday PM peak hour and 10:00-11:00 PM periods. Videos of the peak period operations were recorded using a faster play back setting (8x) to enable viewing of the entire hour in a relatively short period (7-8 minutes). A copy of the SimTraffic model video files is provided on a DVD included with the Attachment Material. The SimTraffic model video files can also be downloaded from the following Dropbox link (The Fruit Yard folder):

https://www.dropbox.com/home/The%20Fruit%20Yard

The SimTraffic model videos demonstrate that the peak period operations associated with an amphitheater event will not significantly impact operations on Yosemite Boulevard (SR 132) or Geer Road, or at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. During arrival periods westbound vehicle queues at the Yosemite Boulevard (SR 132) driveways were not observed backing up to the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. In addition, no significant queuing was observed on either Yosemite Boulevard (SR 132) or Geer Road. A review of the video for the 10:00-11:00 PM period indicated that vehicles could exit the site at a rate of approximately 20-25 vehicles per minute. This would require at least 45 minutes for all vehicles to exit the site. It should be noted that the SimTraffic model assumes that vehicles will be able to enter and exit the site in an efficient manner. Therefore, it will be imperative that on-site parking operations be conducted effectively in order to avoid impacting operations on Yosemite Boulevard (SR 132) and Geer Road. In addition, the appropriate TDM measures should be implemented to avoid generating any guests traffic during peak periods on the adjacent street system (between 5:00-6:00 PM on a weekday and 1:00-3:00 PM on a weekend day).

4.0 SUMMARY

A General Plan Amendment and Rezoning Application were approved for the project site in 2008. The approved development plan included a relocation of existing facilities and the construction of various new commercial related uses. The proposed project site modification includes the addition of an outside amphitheater within the existing park site. The amphitheater will host events or concerts, and have a capacity to accommodate a maximum of 3,500 guests. The majority of events will occur on weekend or Holidays, between May and September. Events on weekdays will begin after 7:00 PM and end by 10:30 PM. Parking for amphitheater guests will be accommodated on-site. Initial access will be provided via two (2) driveways on Yosemite Boulevard ("A" Drive and "B" Drive) and one (1) driveway on Geer Road ("D" Drive).

The trip generation estimates for the existing and approved project site uses was based on data published in the ITE Trip Generation Manual and a Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region. The existing site uses (existing and approved) will generate a total of approximately 5,100-5,200 vehicle trips on an average weekday and weekend day. The existing and approved uses are estimated to generate approximately 540 trips during an average weekday PM peak hour and 588 trips during a typical Saturday mid-day peak hour. During the 10:00-11:00 PM peak period, the existing and approved site uses are estimated to generate 264 trips on a weekday and 207 trips on a weekend day. The project site trip generation estimates for the "Approved Project Site Uses" are slightly higher than the trip generation estimates analyzed in the 2007 TIA.

A capacity size event (or concert) at the amphitheater is estimated to generate approximately 2,340 vehicle trips (approximately 1,170 inbound and 1,170 outbound vehicles). Inbound trips will occur prior to (before) an event and outbound trips will occur after an event has concluded. Inbound and outbound vehicle trips will not occur within the same 2-3 hour period. Transportation Demand Management (TDM) strategies will be used in the scheduling of events as required to avoid generating any guest traffic during typical weekday and weekend day peak periods. In addition, no activities will occur at the new banquet center on the same day as an event at the amphitheater.

An evaluation of existing conditions was based on new traffic count data, and data obtained from the Caltrans and Stanislaus County. New traffic count data was also collected on Weyer Road. The 2007 Traffic Impact Analysis (TIA) prepared for the approved 2008 Project Development Plan indicated that existing daily volumes on Yosemite Boulevard (adjacent to the project site) were in "level of service" (LOS) C range, while daily volumes on Geer Road were in the LOS E range. An analysis of roadway segment LOS was also conducted using the new hourly volumes and the current methodology used in the County's General Plan Circulation Element. The analysis concluded that existing segment volumes on Yosemite Boulevard (SR 132) are within acceptable limits as defined by Caltrans (LOS D or better). However, hourly volumes on the 2-lane segments of Geer Road and Albers Road exceed the County's defined threshold (LOS C or better). It is noted that the hourly volumes on the 4-lane segments of Geer Road and Albers Road are within

the County's LOS C standard. Existing average daily traffic volumes on Weyer Road south of Yosemite Boulevard (300 ADT) are well within acceptable limits for a rural residential roadway.

An evaluation of existing peak period operations at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection was conducted using the methodologies outlined in the 2010 Highway Capacity Manual (HCM). Since an event at the amphitheater would typically end after 10:00 PM the analysis of existing conditions also includes an evaluation of the 10:00-11:00 PM period. The intersection LOS analysis indicates that average vehicle delays during the six (6) study periods are within acceptable limits as defined by the County (LOS C or better) and Caltrans (LOS C/D). The existing conditions analysis is consistent with the analysis presented in the 2007 TIA.

Similar to the existing conditions analysis, the roadway segment and intersection LOS analysis was concluded for the "existing traffic plus project site traffic (existing and approved uses)" and "existing traffic plus project site traffic (existing and approved uses) plus amphitheater traffic" scenarios. The roadway segment analysis concluded that daily and hourly traffic volumes on the 2-lane segments of Geer Road and Albers Road will continue to exceed the County's minimum acceptable threshold (LOS C or better). However, daily and directional hourly volumes on Yosemite Boulevard (SR 132) will remain within acceptable limits as defined by Caltrans. The analysis is consistent with the analysis presented in the 2007 TIA.

Information in the County's General Plan Circulation Element and StanCOG's RTP has identified the future need to widen both Yosemite Boulevard (4-lane) and Geer Road - Albers Road (6-lane) to expressway standards. The future widening improvements have been incorporated into the RTP and will be partially funded by developer contributions to the County's Regional Transportation Impact Fee (RTIF) program. The analysis in the 2007 TIA identified the potential impacts to existing facilities that would be associated with the Project Development Plan. The project's contribution to the RTIF program served as mitigation to reduce the potential impacts to a level of "less than significant."

The proposed amphitheater will host events or concerts, with a maximum seating capacity for 3,500 guests. The majority of events will occur on a weekend or Holiday. The amphitheater operations will increase traffic demands on Yosemite Boulevard (SR 132), Geer Road and Albers Road on selected weekdays. Therefore, the amphitheater will potentially impact operations on the local street system. Similar to the 2008 Project Development Plan mitigation, the project shall contribute it's fair-share towards the cost of future regional circulation system improvements. Contribution to the County's RTIF program shall serve as mitigation to reduce the potential impact to a level of "less than significant." The proposed mitigation is consistent with the mitigations approved for the 2008 Project Development Plan (analyzed in the 2007 TIA).

A review of the local roadway system was conducted to address concerns raised by local residences regarding the use of Weyer Road for access to and/or from the amphitheater site. Weyer Road is a narrow rural 2-lane rural roadway with no shoulders or lighting. There are 15 mph curve advisory

signs posted on Weyer Road (for southbound traffic) and Jantzen Road (for eastbound traffic). It is anticipated that only 15-20% of the amphitheater traffic would have an origin or destination east of Geer Road - Albers Road. A review of the potential alternative route between Yosemite Boulevard and the amphitheater site indicates that using Weyer Road and Jantzen Road would be at least 3 times the distance as compared to using Yosemite Boulevard west of Weyer Road and Geer Road south of Yosemite Boulevard. In addition, since the traffic signal at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection operates well within acceptable limits it is concluded that little-to-no traffic would use Weyer Road and Jantzen Road route for access to and/or from the amphitheater site. Therefore, the amphitheater traffic will not impact operations along Weyer Road.

The intersection LOS analysis was also concluded for the "existing traffic plus project site traffic (existing and approved uses)" and "existing traffic plus project site traffic (existing and approved uses) plus amphitheater traffic" scenarios. The analysis concluded that average vehicle delays during the six (6) study periods will remain within acceptable limits as defined by Stanislaus County (LOS C or better) and Caltrans (LOS C/D). Therefore, it is concluded that the amphitheater project will not significantly impact peak period operations at the Yosemite Boulevard (SR 132) / Geer Road intersection.

The evaluation of site access includes a review of sight distance along Yosemite Boulevard (SR 132) and Geer Road. A micro-simulation model was also developed using the Synchro / SimTraffic 8 software to identify any potential access issues. The evaluation of sight distance concluded that there is adequate stopping sight distance for vehicles traveling on Yosemite Boulevard (SR 132) and Geer Road approaching the project site driveway locations. In addition, the analysis concluded that there is also adequate corner sight distance for vehicles exiting the project site driveway locations.

The SimTraffic micro-simulation models were developed for the Friday PM peak hour and 10:00-11:00 PM periods. The SimTraffic models demonstrate that the peak period operations associated with an amphitheater event will not significantly impact operations on Yosemite Boulevard (SR 132) or Geer Road, or at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. During arrival periods westbound vehicle queues at the Yosemite Boulevard (SR 132) driveways were not observed backing up to the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. No significant queuing was observed on either Yosemite Boulevard (SR 132) or Geer Road. It should be noted that the SimTraffic model assumes that vehicles will be able to enter and exit the site in an efficient manner. Therefore, it will be imperative that on-site parking operations be conducted effectively in order to avoid impacting operations on Yosemite Boulevard (SR 132) and Geer Road. In addition, the appropriate TDM measures should be implemented to avoid generating any guests traffic during peak periods on the adjacent street system (between 5:00-6:00 PM on a weekday and 1:00-3:00 PM on a weekend day).

END

- Supplemental -
Traffic Impact Analysis

- APPENDIX MATERIAL -

THE FRUIT YARD PROJECT
- Stanislaus County -

CONTENTS:

- Summary of Traffic Count Data
- Level of Service (LOS) Descriptions
- Level of Service (LOS) to Vehicle Delays Relationship Data
- Level of Service (LOS) Worksheets

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February 5, 2016

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The Fruit Yard Project; Stanislaus County, California

Summary of ITM Count Data at Yosemite Blvd. (SR 132) / Geer Rd. - Albers Rd. - Dec. 10th (Thursday), 11th (Friday) and 12th (Saturday)

	Afternoon Peak Hour		Evening Period		% of
	Time	Volume	Time	Volume	PM Pk.
Dec. 10th (Thursday) -	4:30-5:30 PM	1,866	10:00-11:00 PM	326	17%
Dec. 11th (Friday) -	4:45-5:45 PM	1,953	10:00-11:00 PM	517	26%
Dec. 12th (Saturday) -	2:00-3:00 PM	1,316	10:00-11:00 PM	612	47%

Summary of 7-Day Traffic Count Data (Dec. 9th - 15th , 2015)

Weyer Road, South of Yosemite Boulevard (SR 132):

Date		Sun. Dec. 13th	Mon. Dec. 14th	Tue. Dec. 15th	Wed. Dec. 9th	Thur. Dec. 10th	Fri. Dec. 11th	Sat. Dec. 12th
ADT		**204**	**303**	**279**	**299**	**301**	**273**	**213**
24 Hr. Vol.	NB	97	138	122	136	141	120	95
	SB	107	165	157	163	160	153	118

November 2013 -

3-Day Avg. Weekday (Tuesday, Wednesday & Thursday): **293** ADT

5-Day Avg. Weekday (Monday - Friday): **291** ADT

7-Day Average (Sunday - Saturday): **267** ADT

Saturday: 73% 5-Day Weekday Average

Sunday: 70% 5-Day Weekday Average

ALL TRAFFIC DATA

City of Modesto
All Vehicles & Uturns On Unshifted
Nothing On Bank 1
Nothing On Bank 2

(916) 771-8700
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File Name : 15-7942-001 Albers Road/Geer Road & Yosemite Boulevard
Date : 12/10/2015

Unshifted Count = All Vehicles & Uturns

	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
16:00	28	99	10	0	137	43	53	16	0	112	6	83	41	0	130	17	56	13	0	86	465	0
16:15	18	113	12	0	143	26	36	7	0	69	6	94	53	0	153	20	71	14	0	105	470	0
16:30	23	84	13	0	120	28	49	18	0	95	3	96	38	0	137	12	64	9	0	85	437	0
16:45	24	117	15	0	156	35	27	14	0	76	8	99	30	0	137	14	85	8	0	107	476	0
Total	93	413	50	0	556	132	165	55	0	352	23	372	162	0	557	63	276	44	0	383	1848	0
17:00	23	91	20	0	134	30	46	11	1	88	5	101	38	0	144	17	70	14	0	101	467	1
17:15	27	114	8	0	149	22	38	18	0	78	7	115	36	0	158	20	70	11	0	101	486	0
17:30	30	87	7	0	124	38	42	15	0	95	8	80	43	0	131	17	52	16	0	85	435	0
17:45	22	79	14	0	115	24	27	10	0	61	6	70	37	0	113	13	38	8	0	59	348	0
Total	102	371	49	0	522	114	153	54	1	322	26	366	154	0	546	67	230	49	0	346	1736	1
22:00	7	22	1	0	30	6	4	5	0	15	1	13	15	0	29	2	14	0	0	16	90	0
22:15	5	12	1	0	18	4	8	1	0	13	0	18	11	0	29	2	11	0	0	13	73	0
22:30	6	22	1	0	29	3	10	1	0	14	1	17	8	0	26	4	12	0	0	16	85	0
22:45	6	18	1	0	25	4	7	3	0	14	1	14	11	0	26	2	11	0	0	13	78	0
Total	24	74	4	0	102	17	29	10	0	56	3	62	45	0	110	10	48	0	0	58	325	0
Grand Total	219	858	103	0	1180	263	347	119	1	730	52	800	361	0	1213	140	554	93	0	787	3910	1
Apprch %	18.6%	72.7%	8.7%	0.0%		36.0%	47.5%	16.3%	0.1%		4.3%	66.0%	29.8%	0.0%		17.8%	70.4%	11.8%	0.0%			
Total %	5.6%	21.9%	2.6%	0.0%	30.2%	6.7%	8.9%	3.0%	0.0%	18.7%	1.3%	20.5%	9.2%	0.0%	31.0%	3.6%	14.2%	2.4%	0.0%	20.1%	100.0%	

NOON PEAK	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	23	84	13	0	120	28	49	18	0	95	3	96	38	0	137	12	64	9	0	85	437
16:45	24	117	15	0	156	35	27	14	0	76	8	99	30	0	137	14	85	8	0	107	476
17:00	23	91	20	0	134	30	46	11	1	88	5	101	38	0	144	17	70	14	0	101	467
17:15	27	114	8	0	149	22	38	18	0	78	7	115	36	0	158	20	70	11	0	101	486
Total Volume	97	406	56	0	559	115	160	61	1	337	23	411	142	0	576	63	289	42	0	394	1866
% App Total	17.4%	72.6%	10.0%	0.0%		34.1%	47.5%	18.1%	0.3%		4.0%	71.4%	24.7%	0.0%		16.0%	73.4%	10.7%	0.0%		
PHF	.898	.858	.700	.000	.896	.821	.816	.847	.250	.887	.719	.893	.934	.000	.911	.788	.850	.750	.000	.921	.960

PM PEAK HOUR	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 22:00 to 23:00																					
Peak Hour For Entire Intersection Begins at 22:00																					
22:00	7	22	1	0	30	6	4	5	0	15	1	13	15	0	29	2	14	0	0	16	90
22:15	5	12	1	0	18	4	8	1	0	13	0	18	11	0	29	2	11	0	0	13	73
22:30	6	22	1	0	29	3	10	1	0	14	1	17	8	0	26	4	12	0	0	16	85
22:45	6	18	1	0	25	4	7	3	0	14	1	14	11	0	26	2	11	0	0	13	78
Total Volume	24	74	4	0	102	17	29	10	0	56	3	62	45	0	110	10	48	0	0	58	326
% App Total	23.5%	72.5%	3.9%	0.0%		30.4%	51.8%	17.9%	0.0%		2.7%	56.4%	40.9%	0.0%		17.2%	82.8%	0.0%	0.0%		
PHF	.857	.841	1.000	.000	.850	.708	.725	.500	.000	.933	.750	.861	.750	.000	.948	.625	.857	.000	.000	.906	.906

ALL TRAFFIC DATA

City of Modesto
All Vehicles & Uturns On Unshifted
Nothing On Bank 1
Nothing On Bank 2

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File Name : 15-7942-001 Albers Road/Geer Road & Yosemite Boulevard
Date : 12/11/2015

Unshifted Count = All Vehicles & Uturns

	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
16:00	17	101	8	0	126	41	45	15	0	101	4	83	45	0	132	10	63	11	0	84	443	0
16:15	18	117	25	0	160	40	57	15	0	112	9	104	38	0	151	19	64	5	0	88	511	0
16:30	24	94	10	0	128	36	42	16	0	94	5	95	30	0	130	23	53	9	0	85	437	0
16:45	31	116	22	0	169	35	46	14	0	95	4	99	25	0	128	14	66	10	0	90	482	0
Total	90	428	65	0	583	152	190	60	0	402	22	381	138	0	541	66	246	35	0	347	1873	0
17:00	26	130	9	0	165	43	50	17	0	110	10	81	52	0	143	21	57	9	0	87	505	0
17:15	22	97	9	0	128	27	45	16	0	88	6	131	37	0	174	14	66	17	0	97	487	0
17:30	22	112	13	0	147	40	43	17	0	100	5	102	40	0	147	11	65	9	0	85	479	0
17:45	18	94	14	0	126	44	45	11	0	100	8	102	44	0	154	10	58	8	0	76	456	0
Total	88	433	45	0	566	154	183	61	0	398	29	416	173	0	618	56	246	43	0	345	1927	0
22:00	6	29	1	0	36	9	6	1	0	16	4	39	20	0	63	6	22	0	0	28	143	0
22:15	11	33	1	0	45	9	13	3	0	25	3	19	18	0	40	3	19	2	0	24	134	0
22:30	3	26	0	0	29	11	8	4	0	23	6	30	9	0	45	4	19	3	0	26	123	0
22:45	12	19	3	0	34	6	16	3	0	25	2	18	16	0	36	4	18	0	0	22	117	0
Total	32	107	5	0	144	35	43	11	0	89	15	106	63	0	184	17	78	5	0	100	517	0
Grand Total	210	968	115	0	1293	341	416	132	0	889	66	903	374	0	1343	139	570	83	0	792	4317	0
Apprch %	16.2%	74.9%	8.9%	0.0%		38.4%	46.8%	14.8%	0.0%		4.9%	67.2%	27.8%	0.0%		17.6%	72.0%	10.5%	0.0%			
Total %	4.9%	22.4%	2.7%	0.0%	30.0%	7.9%	9.6%	3.1%	0.0%	20.6%	1.5%	20.9%	8.7%	0.0%	31.1%	3.2%	13.2%	1.9%	0.0%	18.3%	100.0%	

NOON PEAK	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	31	116	22	0	169	35	46	14	0	95	4	99	25	0	128	14	66	10	0	90	482
17:00	26	130	9	0	165	43	50	17	0	110	10	81	52	0	143	21	57	9	0	87	505
17:15	22	97	9	0	128	27	45	16	0	88	6	131	37	0	174	14	66	17	0	97	487
17:30	22	112	13	0	147	40	43	17	0	100	5	102	40	0	147	11	65	9	0	85	479
Total Volume	101	455	53	0	609	145	184	64	0	393	25	413	154	0	592	60	254	45	0	359	1953
% App Total	16.6%	74.7%	8.7%	0.0%		36.9%	46.8%	16.3%	0.0%		4.2%	69.8%	26.0%	0.0%		16.7%	70.8%	12.5%	0.0%		
PHF	.815	.875	.602	.000	.901	.843	.920	.941	.000	.893	.625	.788	.740	.000	.851	.714	.962	.662	.000	.925	.967

PM PEAK HOUR	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 22:00 to 23:00																					
Peak Hour For Entire Intersection Begins at 22:00																					
22:00	6	29	1	0	36	9	6	1	0	16	4	39	20	0	63	6	22	0	0	28	143
22:15	11	33	1	0	45	9	13	3	0	25	3	19	18	0	40	3	19	2	0	24	134
22:30	3	26	0	0	29	11	8	4	0	23	6	30	9	0	45	4	19	3	0	26	123
22:45	12	19	3	0	34	6	16	3	0	25	2	18	16	0	36	4	18	0	0	22	117
Total Volume	32	107	5	0	144	35	43	11	0	89	15	106	63	0	184	17	78	5	0	100	517
% App Total	22.2%	74.3%	3.5%	0.0%		39.3%	48.3%	12.4%	0.0%		8.2%	57.6%	34.2%	0.0%		17.0%	78.0%	5.0%	0.0%		
PHF	.667	.811	.417	.000	.800	.795	.672	.688	.000	.890	.625	.679	.788	.000	.730	.708	.886	.417	.000	.893	.904

ALL TRAFFIC DATA

City of Modesto
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File Name : 15-7942-001 Albers Road/Geer Road & Yosemite Boulevard
Date : 12/12/2015

Unshifted Count = All Vehicles & Uturns

	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
13:00	12	57	11	0	80	33	37	11	0	81	2	80	43	0	125	16	35	9	0	60	346	0
13:15	18	66	11	0	95	26	46	15	0	87	4	56	35	0	95	10	47	8	0	65	342	0
13:30	11	65	9	0	85	25	35	10	0	70	5	74	42	0	121	7	41	7	0	55	331	0
13:45	18	62	6	0	86	26	30	7	0	63	9	53	35	0	97	9	32	4	0	45	291	0
Total	59	250	37	0	346	110	148	43	0	301	20	263	155	0	438	42	155	28	0	225	1310	0
14:00	11	73	16	0	100	21	34	14	0	69	4	56	30	0	90	9	41	6	0	56	315	0
14:15	24	56	13	0	93	30	40	10	0	80	5	76	40	0	121	8	41	7	0	56	350	0
14:30	18	52	7	0	77	36	29	12	0	77	5	54	37	0	96	14	47	6	0	67	317	0
14:45	19	57	13	0	89	31	34	14	0	79	5	72	34	0	111	3	48	4	0	55	334	0
Total	72	238	49	0	359	118	137	50	0	305	19	258	141	0	418	34	177	23	0	234	1316	0
22:00	4	31	2	0	37	11	11	5	0	27	2	39	8	0	49	4	21	4	0	29	142	0
22:15	5	45	5	0	55	14	14	4	0	32	3	30	17	0	50	4	17	3	0	24	161	0
22:30	12	49	5	0	66	7	12	3	0	22	4	36	14	0	54	4	17	1	0	22	164	0
22:45	3	38	4	0	45	12	12	1	0	25	1	40	15	0	56	3	13	3	0	19	145	0
Total	24	163	16	0	203	44	49	13	0	106	10	145	54	0	209	15	68	11	0	94	612	0
Grand Total	155	651	102	0	908	272	334	106	0	712	49	666	350	0	1065	91	400	62	0	553	3238	0
Apprch %	17.1%	71.7%	11.2%	0.0%		38.2%	46.9%	14.9%	0.0%		4.6%	62.5%	32.9%	0.0%		16.5%	72.3%	11.2%	0.0%			
Total %	4.8%	20.1%	3.2%	0.0%	28.0%	8.4%	10.3%	3.3%	0.0%	22.0%	1.5%	20.6%	10.8%	0.0%	32.9%	2.8%	12.4%	1.9%	0.0%	17.1%	100.0%	

NOON PEAK	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 14:00 to 15:00																					
Peak Hour For Entire Intersection Begins at 14:00																					
14:00	11	73	16	0	100	21	34	14	0	69	4	56	30	0	90	9	41	6	0	56	315
14:15	24	56	13	0	93	30	40	10	0	80	5	76	40	0	121	8	41	7	0	56	350
14:30	18	52	7	0	77	36	29	12	0	77	5	54	37	0	96	14	47	6	0	67	317
14:45	19	57	13	0	89	31	34	14	0	79	5	72	34	0	111	3	48	4	0	55	334
Total Volume	72	238	49	0	359	118	137	50	0	305	19	258	141	0	418	34	177	23	0	234	1316
% App Total	20.1%	66.3%	13.6%	0.0%		38.7%	44.9%	16.4%	0.0%		4.5%	61.7%	33.7%	0.0%		14.5%	75.6%	9.8%	0.0%		
PHF	.750	.815	.766	.000	.898	.819	.856	.893	.000	.953	.950	.849	.881	.000	.864	.607	.922	.821	.000	.873	.940

PM PEAK HOUR	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 22:00 to 23:00																					
Peak Hour For Entire Intersection Begins at 22:00																					
22:00	4	31	2	0	37	11	11	5	0	27	2	39	8	0	49	4	21	4	0	29	142
22:15	5	45	5	0	55	14	14	4	0	32	3	30	17	0	50	4	17	3	0	24	161
22:30	12	49	5	0	66	7	12	3	0	22	4	36	14	0	54	4	17	1	0	22	164
22:45	3	38	4	0	45	12	12	1	0	25	1	40	15	0	56	3	13	3	0	19	145
Total Volume	24	163	16	0	203	44	49	13	0	106	10	145	54	0	209	15	68	11	0	94	612
% App Total	11.8%	80.3%	7.9%	0.0%		41.5%	46.2%	12.3%	0.0%		4.8%	69.4%	25.8%	0.0%		16.0%	72.3%	11.7%	0.0%		
PHF	.500	.832	.800	.000	.769	.786	.875	.650	.000	.828	.625	.906	.794	.000	.933	.938	.810	.688	.000	.810	.933

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Wednesday
Date: 12/9/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	136	163	0	0	299

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	1		5		0	0	6	
00:15	0		0		0	0	0		12:15	4		3		0	0	7	
00:30	0		0		0	0	0		12:30	5		9		0	0	14	
00:45	0		0		0	0	0		12:45	1	11	2	19	0	0	3	30
01:00	0		0		0	0	0		13:00	1		0		0	0	1	
01:15	0		0		0	0	0		13:15	3		4		0	0	7	
01:30	0		0		0	0	0		13:30	0		2		0	0	2	
01:45	0		0		0	0	0		13:45	4	8	5	11	0	0	9	19
02:00	0		0		0	0	0		14:00	1		2		0	0	3	
02:15	0		0		0	0	0		14:15	3		7		0	0	10	
02:30	0		0		0	0	0		14:30	5		1		0	0	6	
02:45	0		0		0	0	0		14:45	3	12	5	15	0	0	8	27
03:00	0		0		0	0	0		15:00	5		3		0	0	8	
03:15	1		0		0	0	1		15:15	1		2		0	0	3	
03:30	0		0		0	0	0		15:30	3		5		0	0	8	
03:45	1	2	1	1	0	0	2	3	15:45	2	11	4	14	0	0	6	25
04:00	0		0		0	0	0		16:00	2		1		0	0	3	
04:15	0		0		0	0	0		16:15	4		2		0	0	6	
04:30	0		1		0	0	1		16:30	3		3		0	0	6	
04:45	0		0	1	0	0	0	1	16:45	4	13	2	8	0	0	6	21
05:00	0		0		0	0	0		17:00	6		5		0	0	11	
05:15	0		2		0	0	2		17:15	2		6		0	0	8	
05:30	1		1		0	0	2		17:30	3		0		0	0	3	
05:45	0	1	0	3	0	0	0	4	17:45	1	12	0	11	0	0	1	23
06:00	0		0		0	0	0		18:00	3		4		0	0	7	
06:15	2		3		0	0	5		18:15	2		2		0	0	4	
06:30	0		1		0	0	1		18:30	3		2		0	0	5	
06:45	1	3	0	4	0	0	1	7	18:45	2	10	2	10	0	0	4	20
07:00	0		3		0	0	3		19:00	4		0		0	0	4	
07:15	0		5		0	0	5		19:15	1		3		0	0	4	
07:30	3		3		0	0	6		19:30	3		3		0	0	6	
07:45	2	5	4	15	0	0	6	20	19:45	1	9	0	6	0	0	1	15
08:00	1		4		0	0	5		20:00	0		4		0	0	4	
08:15	3		2		0	0	5		20:15	1		0		0	0	1	
08:30	2		4		0	0	6		20:30	0		1		0	0	1	
08:45	0	6	1	11	0	0	1	17	20:45	1	2	0	5	0	0	1	7
09:00	1		3		0	0	4		21:00	2		1		0	0	3	
09:15	2		1		0	0	3		21:15	2		0		0	0	2	
09:30	2		3		0	0	5		21:30	1		0		0	0	1	
09:45	1	6	2	9	0	0	3	15	21:45	1	6	0	1	0	0	1	7
10:00	5		0		0	0	5		22:00	0		0		0	0	0	
10:15	2		3		0	0	5		22:15	0		1		0	0	1	
10:30	1		3		0	0	4		22:30	1		0		0	0	1	
10:45	3	11	2	8	0	0	5	19	22:45	0	1	1	2	0	0	1	3
11:00	2		3		0	0	5		23:00	0		0		0	0	0	
11:15	3		4		0	0	7		23:15	0		0		0	0	0	
11:30	0		0		0	0	0		23:30	0		0		0	0	0	
11:45	2	7	2	9	0	0	4	16	23:45	0		0		0	0	0	
TOTALS	41		61				102		TOTALS	95		102				197	
SPLIT %	40.2%		59.8%				34.1%		SPLIT %	48.2%		51.8%				65.9%	

DAILY TOTALS	NB	SB	EB	WB	Total
	136	163	0	0	299

AM Peak Hour	11:45	11:45	11:45	PM Peak Hour	16:15	12:00	14:15
AM Pk Volume	12	19	31	PM Pk Volume	17	19	32
Pk Hr Factor	0.600	0.528	0.554	Pk Hr Factor	0.708	0.528	0.800
7 - 9 Volume	11	26	37	4 - 6 Volume	25	19	44
7 - 9 Peak Hour	07:30	07:15	07:15	4 - 6 Peak Hour	16:15	16:30	16:30
7 - 9 Pk Volume	9	16	22	4 - 6 Pk Volume	17	16	31
Pk Hr Factor	0.750	0.800	0.917	Pk Hr Factor	0.708	0.667	0.705

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Thursday
Date: 12/10/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	141	160	0	0	301

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	4		1		0	0	5	
00:15	0		0		0	0	0		12:15	3		1		0	0	4	
00:30	0		0		0	0	0		12:30	1		5		0	0	6	
00:45	0		0		0	0	0		12:45	2	10	3	10	0	0	5	20
01:00	0		0		0	0	0		13:00	2		3		0	0	5	
01:15	0		0		0	0	0		13:15	1		2		0	0	3	
01:30	0		0		0	0	0		13:30	2		1		0	0	3	
01:45	0		0		0	0	0		13:45	1	6	2	8	0	0	3	14
02:00	0		1		0	0	1		14:00	11		5		0	0	16	
02:15	2		0		0	0	2		14:15	7		4		0	0	11	
02:30	0		1		0	0	1		14:30	5		3		0	0	8	
02:45	0	2	0	2	0	0	0	4	14:45	4	27	5	17	0	0	9	44
03:00	0		0		0	0	0		15:00	7		5		0	0	12	
03:15	1		0		0	0	1		15:15	2		2		0	0	4	
03:30	0		0		0	0	0		15:30	1		4		0	0	5	
03:45	0	1	0		0	0	0	1	15:45	2	12	2	13	0	0	4	25
04:00	1		0		0	0	1		16:00	2		4		0	0	6	
04:15	0		0		0	0	0		16:15	2		1		0	0	3	
04:30	0		0		0	0	0		16:30	2		5		0	0	7	
04:45	0	1	0		0	0	0	1	16:45	3	9	3	13	0	0	6	22
05:00	0		2		0	0	2		17:00	3		4		0	0	7	
05:15	0		0		0	0	0		17:15	2		2		0	0	4	
05:30	0		2		0	0	2		17:30	2		3		0	0	5	
05:45	1	1	0	4	0	0	1	5	17:45	2	9	1	10	0	0	3	19
06:00	0		1		0	0	1		18:00	1		5		0	0	6	
06:15	1		2		0	0	3		18:15	2		0		0	0	2	
06:30	0		2		0	0	2		18:30	4		1		0	0	5	
06:45	1	2	2	7	0	0	3	9	18:45	4	11	4	10	0	0	8	21
07:00	0		2		0	0	2		19:00	1		1		0	0	2	
07:15	2		3		0	0	5		19:15	3		1		0	0	4	
07:30	2		4		0	0	6		19:30	1		3		0	0	4	
07:45	4	8	8	17	0	0	12	25	19:45	2	7	1	6	0	0	3	13
08:00	3		3		0	0	6		20:00	3		3		0	0	6	
08:15	0		2		0	0	2		20:15	0		3		0	0	3	
08:30	0		1		0	0	1		20:30	1		0		0	0	1	
08:45	0	3	1	7	0	0	1	10	20:45	0	4	0	6	0	0	0	10
09:00	1		2		0	0	3		21:00	1		0		0	0	1	
09:15	0		1		0	0	1		21:15	1		0		0	0	1	
09:30	1		3		0	0	4		21:30	0		1		0	0	1	
09:45	2	4	1	7	0	0	3	11	21:45	0	2	0	1	0	0	0	3
10:00	3		2		0	0	5		22:00	2		0		0	0	2	
10:15	4		3		0	0	7		22:15	0		0		0	0	0	
10:30	3		1		0	0	4		22:30	1		1		0	0	2	
10:45	2	12	2	8	0	0	4	20	22:45	1	4	2	3	0	0	3	7
11:00	0		2		0	0	2		23:00	0		1		0	0	1	
11:15	2		4		0	0	6		23:15	0		1		0	0	1	
11:30	2		2		0	0	4		23:30	0		0		0	0	0	
11:45	2	6	1	9	0	0	3	15	23:45	0		0	2	0	0	0	2
TOTALS		40		61				101	TOTALS		101		99				200
SPLIT %		39.6%		60.4%				33.6%	SPLIT %		50.5%		49.5%				66.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	141	160	0	0	301

AM Peak Hour	09:45	07:15	07:15	PM Peak Hour	14:00	14:00	14:00
AM Pk Volume	12	18	29	PM Pk Volume	27	17	44
Pk Hr Factor	0.750	0.563	0.604	Pk Hr Factor	0.614	0.850	0.688
7 - 9 Volume	11	24	35	4 - 6 Volume	18	23	41
7 - 9 Peak Hour	07:15	07:15	07:15	4 - 6 Peak Hour	16:15	16:30	16:30
7 - 9 Pk Volume	11	18	29	4 - 6 Pk Volume	10	14	24
Pk Hr Factor	0.688	0.563	0.604	Pk Hr Factor	0.833	0.700	0.857

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Friday
Date: 12/11/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	120	153	0	0	273

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	4		5		0	0	9	
00:15	0		0		0	0	0		12:15	2		3		0	0	5	
00:30	0		0		0	0	0		12:30	1		4		0	0	5	
00:45	0		0		0	0	0		12:45	4	11	3	15	0	0	7	26
01:00	0		0		0	0	0		13:00	2		2		0	0	4	
01:15	0		0		0	0	0		13:15	1		1		0	0	2	
01:30	1		0		0	0	1		13:30	0		6		0	0	6	
01:45	0	1	0		0	0	0	1	13:45	4	7	3	12	0	0	7	19
02:00	0		1		0	0	1		14:00	3		2		0	0	5	
02:15	1		0		0	0	1		14:15	4		4		0	0	8	
02:30	1		0		0	0	1		14:30	4		2		0	0	6	
02:45	0	2	1	2	0	0	1	4	14:45	3	14	5	13	0	0	8	27
03:00	1		0		0	0	1		15:00	3		2		0	0	5	
03:15	0		0		0	0	0		15:15	3		2		0	0	5	
03:30	0		0		0	0	0		15:30	3		1		0	0	4	
03:45	0	1	0		0	0	0	1	15:45	1	10	1	6	0	0	2	16
04:00	0		0		0	0	0		16:00	3		5		0	0	8	
04:15	0		0		0	0	0		16:15	1		0		0	0	1	
04:30	0		0		0	0	0		16:30	2		5		0	0	7	
04:45	0		0		0	0	0		16:45	3	9	1	11	0	0	4	20
05:00	0		1		0	0	1		17:00	10		6		0	0	16	
05:15	0		0		0	0	0		17:15	4		7		0	0	11	
05:30	0		2		0	0	2		17:30	3		2		0	0	5	
05:45	0		0	3	0	0	0	3	17:45	0	17	4	19	0	0	4	36
06:00	0		0		0	0	0		18:00	1		2		0	0	3	
06:15	0		1		0	0	1		18:15	0		1		0	0	1	
06:30	1		0		0	0	1		18:30	3		1		0	0	4	
06:45	1	2	1	2	0	0	2	4	18:45	1	5	0	4	0	0	1	9
07:00	0		2		0	0	2		19:00	2		0		0	0	2	
07:15	1		5		0	0	6		19:15	1		1		0	0	2	
07:30	2		6		0	0	8		19:30	3		2		0	0	5	
07:45	2	5	2	15	0	0	4	20	19:45	3	9	2	5	0	0	5	14
08:00	1		3		0	0	4		20:00	0		0		0	0	0	
08:15	1		3		0	0	4		20:15	0		1		0	0	1	
08:30	2		2		0	0	4		20:30	0		1		0	0	1	
08:45	0	4	3	11	0	0	3	15	20:45	0		3	5	0	0	3	5
09:00	1		2		0	0	3		21:00	1		0		0	0	1	
09:15	1		3		0	0	4		21:15	2		0		0	0	2	
09:30	1		3		0	0	4		21:30	1		1		0	0	2	
09:45	2	5	2	10	0	0	4	15	21:45	0	4	1	2	0	0	1	6
10:00	0		4		0	0	4		22:00	1		2		0	0	3	
10:15	1		1		0	0	2		22:15	1		0		0	0	1	
10:30	4		4		0	0	8		22:30	1		1		0	0	2	
10:45	2	7	2	11	0	0	4	18	22:45	1	4	0	3	0	0	1	7
11:00	0		0		0	0	0		23:00	0		0		0	0	0	
11:15	1		0		0	0	1		23:15	0		0		0	0	0	
11:30	2		3		0	0	5		23:30	0		0		0	0	0	
11:45	0	3	1	4	0	0	1	7	23:45	0		0		0	0	0	
TOTALS		30		58				88	TOTALS		90		95				185
SPLIT %		34.1%		65.9%				32.2%	SPLIT %		48.6%		51.4%				67.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	120	153	0	0	273

AM Peak Hour	11:30	07:15	07:15	PM Peak Hour	16:45	16:30	16:30
AM Pk Volume	8	16	22	PM Pk Volume	20	19	38
Pk Hr Factor	0.500	0.667	0.688	Pk Hr Factor	0.500	0.679	0.594
7 - 9 Volume	9	26	35	4 - 6 Volume	26	30	56
7 - 9 Peak Hour	07:15	07:15	07:15	4 - 6 Peak Hour	16:45	16:30	16:30
7 - 9 Pk Volume	6	16	22	4 - 6 Pk Volume	20	19	38
Pk Hr Factor	0.750	0.667	0.688	Pk Hr Factor	0.500	0.679	0.594

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Saturday
Date: 12/12/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	95	118	0	0	213

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	1		3		0	0	4	
00:15	0		0		0	0	0		12:15	2		2		0	0	4	
00:30	0		0		0	0	0		12:30	3		3		0	0	6	
00:45	0		1	1	0	0	1	1	12:45	2	8	0	8	0	0	2	16
01:00	0		0		0	0	0		13:00	0		2		0	0	2	
01:15	0		0		0	0	0		13:15	3		2		0	0	5	
01:30	0		0		0	0	0		13:30	1		1		0	0	2	
01:45	0		0		0	0	0		13:45	3	7	1	6	0	0	4	13
02:00	0		0		0	0	0		14:00	4		3		0	0	7	
02:15	0		0		0	0	0		14:15	0		3		0	0	3	
02:30	1		1		0	0	2		14:30	2		1		0	0	3	
02:45	0	1	0	1	0	0	0	2	14:45	3	9	5	12	0	0	8	21
03:00	0		1		0	0	1		15:00	0		2		0	0	2	
03:15	2		2		0	0	4		15:15	1		5		0	0	6	
03:30	1		0		0	0	1		15:30	1		0		0	0	1	
03:45	0	3	0	3	0	0	0	6	15:45	2	4	0	7	0	0	2	11
04:00	0		0		0	0	0		16:00	3		4		0	0	7	
04:15	0		0		0	0	0		16:15	1		3		0	0	4	
04:30	0		0		0	0	0		16:30	1		1		0	0	2	
04:45	0		0		0	0	0		16:45	3	8	1	9	0	0	4	17
05:00	1		0		0	0	1		17:00	3		2		0	0	5	
05:15	0		0		0	0	0		17:15	1		1		0	0	2	
05:30	0		0		0	0	0		17:30	1		3		0	0	4	
05:45	0	1	0		0	0	0	1	17:45	1	6	1	7	0	0	2	13
06:00	0		0		0	0	0		18:00	0		1		0	0	1	
06:15	1		0		0	0	1		18:15	1		2		0	0	3	
06:30	0		2		0	0	2		18:30	3		4		0	0	7	
06:45	1	2	0	2	0	0	1	4	18:45	3	7	0	7	0	0	3	14
07:00	0		1		0	0	1		19:00	2		3		0	0	5	
07:15	4		0		0	0	4		19:15	1		2		0	0	3	
07:30	0		1		0	0	1		19:30	0		2		0	0	2	
07:45	1	5	1	3	0	0	2	8	19:45	0	3	2	9	0	0	2	12
08:00	1		3		0	0	4		20:00	1		0		0	0	1	
08:15	2		0		0	0	2		20:15	1		3		0	0	4	
08:30	0		0		0	0	0		20:30	1		0		0	0	1	
08:45	4	7	1	4	0	0	5	11	20:45	1	4	0	3	0	0	1	7
09:00	0		1		0	0	1		21:00	0		0		0	0	0	
09:15	1		3		0	0	4		21:15	1		2		0	0	3	
09:30	0		5		0	0	5		21:30	0		1		0	0	1	
09:45	1	2	3	12	0	0	4	14	21:45	0	1	1	4	0	0	1	5
10:00	0		0		0	0	0		22:00	0		2		0	0	2	
10:15	0		0		0	0	0		22:15	0		1		0	0	1	
10:30	3		3		0	0	6		22:30	1		2		0	0	3	
10:45	2	5	1	4	0	0	3	9	22:45	0	1	0	5	0	0	0	6
11:00	1		0		0	0	1		23:00	1		0		0	0	1	
11:15	5		6		0	0	11		23:15	1		0		0	0	1	
11:30	2		2		0	0	4		23:30	0		0		0	0	0	
11:45	1	9	3	11	0	0	4	20	23:45	0	2	0		0	0	0	2
TOTALS	35		41				76		TOTALS	60		77				137	
SPLIT %	46.1%		53.9%				35.7%		SPLIT %	43.8%		56.2%				64.3%	

DAILY TOTALS	NB	SB	EB	WB	Total
	95	118	0	0	213

AM Peak Hour	10:30	11:15	11:15	PM Peak Hour	13:15	14:30	14:00
AM Pk Volume	11	14	23	PM Pk Volume	11	13	21
Pk Hr Factor	0.550	0.583	0.523	Pk Hr Factor	0.688	0.650	0.656
7 - 9 Volume	12	7	19	4 - 6 Volume	14	16	30
7 - 9 Peak Hour	08:00	07:15	07:15	4 - 6 Peak Hour	16:00	16:00	16:00
7 - 9 Pk Volume	7	5	11	4 - 6 Pk Volume	8	9	17
Pk Hr Factor	0.438	0.417	0.688	Pk Hr Factor	0.667	0.563	0.607

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Sunday
Date: 12/13/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	97	107	0	0	204

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	1		5		0	0	6	
00:15	0		0		0	0	0		12:15	5		0		0	0	5	
00:30	0		0		0	0	0		12:30	5		1		0	0	6	
00:45	0		0		0	0	0		12:45	3	14	4	10	0	0	7	24
01:00	0		0		0	0	0		13:00	1		1		0	0	2	
01:15	0		0		0	0	0		13:15	0		6		0	0	6	
01:30	0		0		0	0	0		13:30	3		2		0	0	5	
01:45	0		0		0	0	0		13:45	0	4	0	9	0	0	0	13
02:00	0		0		0	0	0		14:00	1		0		0	0	1	
02:15	0		0		0	0	0		14:15	1		0		0	0	1	
02:30	0		0		0	0	0		14:30	1		3		0	0	4	
02:45	0		0		0	0	0		14:45	1	4	1	4	0	0	2	8
03:00	0		0		0	0	0		15:00	3		0		0	0	3	
03:15	0		0		0	0	0		15:15	7		5		0	0	12	
03:30	1		0		0	0	1		15:30	3		3		0	0	6	
03:45	0	1	0		0	0	0	1	15:45	3	16	8	16	0	0	11	32
04:00	0		0		0	0	0		16:00	1		1		0	0	2	
04:15	2		0		0	0	2		16:15	4		2		0	0	6	
04:30	0		0		0	0	0		16:30	2		3		0	0	5	
04:45	0	2	0		0	0	0	2	16:45	2	9	4	10	0	0	6	19
05:00	0		0		0	0	0		17:00	2		5		0	0	7	
05:15	0		0		0	0	0		17:15	3		3		0	0	6	
05:30	0		0		0	0	0		17:30	1		1		0	0	2	
05:45	0		1	1	0	0	1	1	17:45	0	6	0	9	0	0	0	15
06:00	1		0		0	0	1		18:00	5		3		0	0	8	
06:15	0		0		0	0	0		18:15	2		1		0	0	3	
06:30	0		0		0	0	0		18:30	1		0		0	0	1	
06:45	0	1	0		0	0	0	1	18:45	2	10	2	6	0	0	4	16
07:00	1		0		0	0	1		19:00	0		2		0	0	2	
07:15	1		1		0	0	2		19:15	2		0		0	0	2	
07:30	0		1		0	0	1		19:30	1		1		0	0	2	
07:45	0	2	2	4	0	0	2	6	19:45	2	5	0	3	0	0	2	8
08:00	0		1		0	0	1		20:00	0		0		0	0	0	
08:15	0		1		0	0	1		20:15	1		0		0	0	1	
08:30	1		2		0	0	3		20:30	1		1		0	0	2	
08:45	1	2	1	5	0	0	2	7	20:45	0	2	0	1	0	0	0	3
09:00	1		1		0	0	2		21:00	0		1		0	0	1	
09:15	0		2		0	0	2		21:15	0		0		0	0	0	
09:30	0		2		0	0	2		21:30	1		0		0	0	1	
09:45	1	2	2	7	0	0	3	9	21:45	0	1	0	1	0	0	0	2
10:00	1		2		0	0	3		22:00	1		0		0	0	1	
10:15	3		4		0	0	7		22:15	0		0		0	0	0	
10:30	1		4		0	0	5		22:30	1		2		0	0	3	
10:45	3	8	3	13	0	0	6	21	22:45	0	2	0	2	0	0	0	4
11:00	2		2		0	0	4		23:00	0		0		0	0	0	
11:15	0		1		0	0	1		23:15	1		0		0	0	1	
11:30	2		2		0	0	4		23:30	0		0		0	0	0	
11:45	1	5	1	6	0	0	2	11	23:45	0	1	0		0	0	0	1
TOTALS		23		36				59	TOTALS		74		71				145
SPLIT %		39.0%		61.0%				28.9%	SPLIT %		51.0%		49.0%				71.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	97	107	0	0	204

AM Peak Hour	11:45	10:00	10:15	PM Peak Hour	15:00	15:15	15:00
AM Pk Volume	12	13	22	PM Pk Volume	16	17	32
Pk Hr Factor	0.600	0.813	0.786	Pk Hr Factor	0.571	0.531	0.667
7 - 9 Volume	4	9	13	4 - 6 Volume	15	19	34
7 - 9 Peak Hour	07:00	07:45	07:45	4 - 6 Peak Hour	16:15	16:30	16:15
7 - 9 Pk Volume	2	6	7	4 - 6 Pk Volume	10	15	24
Pk Hr Factor	0.500	0.750	0.583	Pk Hr Factor	0.625	0.750	0.857

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Monday
Date: 12/14/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	138	165	0	0	303

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	4		2		0	0	6	
00:15	0		0		0	0	0		12:15	4		6		0	0	10	
00:30	0		0		0	0	0		12:30	2		4		0	0	6	
00:45	0		0		0	0	0		12:45	1	11	4	16	0	0	5	27
01:00	0		0		0	0	0		13:00	2		1		0	0	3	
01:15	0		0		0	0	0		13:15	5		3		0	0	8	
01:30	0		0		0	0	0		13:30	3		4		0	0	7	
01:45	0		0		0	0	0		13:45	1	11	4	12	0	0	5	23
02:00	1		0		0	0	1		14:00	3		4		0	0	7	
02:15	0		1		0	0	1		14:15	5		7		0	0	12	
02:30	0		0		0	0	0		14:30	0		3		0	0	3	
02:45	0	1	0	1	0	0	0	2	14:45	6	14	2	16	0	0	8	30
03:00	0		0		0	0	0		15:00	2		3		0	0	5	
03:15	0		0		0	0	0		15:15	5		2		0	0	7	
03:30	0		0		0	0	0		15:30	1		6		0	0	7	
03:45	0		0		0	0	0		15:45	5	13	1	12	0	0	6	25
04:00	0		0		0	0	0		16:00	5		3		0	0	8	
04:15	0		0		0	0	0		16:15	1		3		0	0	4	
04:30	0		0		0	0	0		16:30	4		3		0	0	7	
04:45	1	1	0		0	0	1	1	16:45	2	12	3	12	0	0	5	24
05:00	1		1		0	0	2		17:00	5		6		0	0	11	
05:15	0		2		0	0	2		17:15	2		2		0	0	4	
05:30	0		0		0	0	0		17:30	1		0		0	0	1	
05:45	0	1	0	3	0	0	0	4	17:45	0	8	2	10	0	0	2	18
06:00	0		0		0	0	0		18:00	4		5		0	0	9	
06:15	0		0		0	0	0		18:15	3		2		0	0	5	
06:30	1		1		0	0	2		18:30	1		5		0	0	6	
06:45	2	3	3	4	0	0	5	7	18:45	0	8	0	12	0	0	0	20
07:00	2		4		0	0	6		19:00	2		1		0	0	3	
07:15	1		3		0	0	4		19:15	3		1		0	0	4	
07:30	1		4		0	0	5		19:30	2		1		0	0	3	
07:45	0	4	2	13	0	0	2	17	19:45	1	8	0	3	0	0	1	11
08:00	4		3		0	0	7		20:00	2		1		0	0	3	
08:15	4		4		0	0	8		20:15	1		1		0	0	2	
08:30	4		2		0	0	6		20:30	0		0		0	0	0	
08:45	1	13	6	15	0	0	7	28	20:45	3	6	1	3	0	0	4	9
09:00	1		2		0	0	3		21:00	0		0		0	0	0	
09:15	2		1		0	0	3		21:15	0		0		0	0	0	
09:30	1		1		0	0	2		21:30	0		0		0	0	0	
09:45	3	7	2	6	0	0	5	13	21:45	0		0		0	0	0	
10:00	1		2		0	0	3		22:00	0		0		0	0	0	
10:15	1		6		0	0	7		22:15	0		1		0	0	1	
10:30	4		3		0	0	7		22:30	2		0		0	0	2	
10:45	1	7	3	14	0	0	4	21	22:45	0	2	1	2	0	0	1	4
11:00	4		2		0	0	6		23:00	0		0		0	0	0	
11:15	2		1		0	0	3		23:15	1		0		0	0	1	
11:30	0		4		0	0	4		23:30	0		0		0	0	0	
11:45	1	7	3	10	0	0	4	17	23:45	0	1	1	1	0	0	1	2
TOTALS		44		66				110	TOTALS		94		99				193
SPLIT %		40.0%		60.0%				36.3%	SPLIT %		48.7%		51.3%				63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	138	165	0	0	303

AM Peak Hour	08:00	08:00	08:00	PM Peak Hour	15:15	13:30	13:30
AM Pk Volume	13	15	28	PM Pk Volume	16	19	31
Pk Hr Factor	0.813	0.625	0.875	Pk Hr Factor	0.800	0.679	0.646
7 - 9 Volume	17	28	45	4 - 6 Volume	20	22	42
7 - 9 Peak Hour	08:00	08:00	08:00	4 - 6 Peak Hour	16:30	16:15	16:15
7 - 9 Pk Volume	13	15	28	4 - 6 Pk Volume	13	15	27
Pk Hr Factor	0.813	0.625	0.875	Pk Hr Factor	0.650	0.625	0.614

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Tuesday
Date: 12/15/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	122	157	0	0	279

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	2		3		0	0	5	
00:15	0		0		0	0	0		12:15	4		4		0	0	8	
00:30	0		0		0	0	0		12:30	4		2		0	0	6	
00:45	0		0		0	0	0		12:45	3	13	4	13	0	0	7	26
01:00	0		0		0	0	0		13:00	1		4		0	0	5	
01:15	0		0		0	0	0		13:15	2		0		0	0	2	
01:30	0		0		0	0	0		13:30	1		1		0	0	2	
01:45	0		0		0	0	0		13:45	2	6	5	10	0	0	7	16
02:00	0		0		0	0	0		14:00	2		3		0	0	5	
02:15	0		0		0	0	0		14:15	4		6		0	0	10	
02:30	0		1		0	0	1		14:30	3		7		0	0	10	
02:45	0		0	1	0	0	0	1	14:45	4	13	3	19	0	0	7	32
03:00	0		0		0	0	0		15:00	4		3		0	0	7	
03:15	1		1		0	0	2		15:15	3		2		0	0	5	
03:30	0		0		0	0	0		15:30	1		5		0	0	6	
03:45	0	1	0	1	0	0	0	2	15:45	4	12	3	13	0	0	7	25
04:00	0		0		0	0	0		16:00	2		1		0	0	3	
04:15	0		0		0	0	0		16:15	3		2		0	0	5	
04:30	0		0		0	0	0		16:30	1		2		0	0	3	
04:45	0		1	1	0	0	1	1	16:45	2	8	1	6	0	0	3	14
05:00	0		1		0	0	1		17:00	2		3		0	0	5	
05:15	0		0		0	0	0		17:15	3		3		0	0	6	
05:30	0		2		0	0	2		17:30	1		0		0	0	1	
05:45	0		0	3	0	0	0	3	17:45	3	9	1	7	0	0	4	16
06:00	0		0		0	0	0		18:00	3		1		0	0	4	
06:15	0		1		0	0	1		18:15	2		3		0	0	5	
06:30	0		3		0	0	3		18:30	4		2		0	0	6	
06:45	0		1	5	0	0	1	5	18:45	4	13	1	7	0	0	5	20
07:00	1		3		0	0	4		19:00	1		4		0	0	5	
07:15	1		5		0	0	6		19:15	2		5		0	0	7	
07:30	2		4		0	0	6		19:30	2		1		0	0	3	
07:45	3	7	2	14	0	0	5	21	19:45	3	8	1	11	0	0	4	19
08:00	2		4		0	0	6		20:00	3		1		0	0	4	
08:15	0		3		0	0	3		20:15	1		1		0	0	2	
08:30	0		1		0	0	1		20:30	1		1		0	0	2	
08:45	0	2	1	9	0	0	1	11	20:45	1	6	0	3	0	0	1	9
09:00	1		2		0	0	3		21:00	1		0		0	0	1	
09:15	2		3		0	0	5		21:15	0		1		0	0	1	
09:30	0		2		0	0	2		21:30	1		0		0	0	1	
09:45	2	5	3	10	0	0	5	15	21:45	0	2	0	1	0	0	0	3
10:00	3		1		0	0	4		22:00	1		0		0	0	1	
10:15	0		3		0	0	3		22:15	0		0		0	0	0	
10:30	2		0		0	0	2		22:30	0		0		0	0	0	
10:45	2	7	4	8	0	0	6	15	22:45	0	1	0		0	0	0	1
11:00	2		5		0	0	7		23:00	0		0		0	0	0	
11:15	2		3		0	0	5		23:15	0		0		0	0	0	
11:30	2		2		0	0	4		23:30	0		0		0	0	0	
11:45	2	8	3	13	0	0	5	21	23:45	1	1	2	2	0	0	3	3
TOTALS		30		65				95	TOTALS		92		92				184
SPLIT %		31.6%		68.4%				34.1%	SPLIT %		50.0%		50.0%				65.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	122	157	0	0	279

AM Peak Hour	11:45	07:15	11:45	PM Peak Hour	14:15	13:45	14:15
AM Pk Volume	12	15	24	PM Pk Volume	15	21	34
Pk Hr Factor	0.750	0.750	0.750	Pk Hr Factor	0.938	0.750	0.850
7 - 9 Volume	9	23	32	4 - 6 Volume	17	13	30
7 - 9 Peak Hour	07:15	07:15	07:15	4 - 6 Peak Hour	17:00	16:30	16:30
7 - 9 Pk Volume	8	15	23	4 - 6 Pk Volume	9	9	17
Pk Hr Factor	0.667	0.750	0.958	Pk Hr Factor	0.750	0.750	0.708

TWO-WAY STOP SIGN CONTROLLED INTERSECTIONS

EXHIBIT 17-2. LEVEL-OF-SERVICE CRITERIA FOR TWSC INTERSECTIONS

Level of Service	Average Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

ALL-WAY STOP SIGN CONTROLLED INTERSECTIONS

The level-of-service criteria are given in Exhibit 17-22. The criteria for AWSC intersections have different threshold values than do those for signalized intersections primarily because drivers expect different levels of performance from distinct types of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection. Thus a higher level of control delay is acceptable at a signalized intersection for the same LOS.

EXHIBIT 17-22. LEVEL-OF-SERVICE CRITERIA FOR AWSC INTERSECTIONS

Level of Service	Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

SIGNALIZED INTERSECTIONS

The average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value. The criteria are listed in Exhibit 16-2.

EXHIBIT 16-2. LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
B	> 10–20
C	> 20–35
D	> 35–55
E	> 55–80
F	> 80

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HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/11/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	63	289	42	115	160	61	23	411	142	97	406	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	66	301	44	120	167	64	24	428	148	101	423	58
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	485	70	156	496	183	37	1642	735	132	1619	221
Arrive On Green	0.05	0.16	0.16	0.09	0.20	0.20	0.02	0.46	0.46	0.07	0.52	0.52
Sat Flow, veh/h	1774	3104	449	1774	2532	935	1774	3539	1583	1774	3130	427
Grp Volume(v), veh/h	66	170	175	120	115	116	24	428	148	101	238	243
Grp Sat Flow(s),veh/h/ln	1774	1770	1783	1774	1770	1698	1774	1770	1583	1774	1770	1787
Q Serve(g_s), s	2.7	6.6	6.7	4.9	4.1	4.3	1.0	5.4	4.1	4.1	5.5	5.6
Cycle Q Clear(g_c), s	2.7	6.6	6.7	4.9	4.1	4.3	1.0	5.4	4.1	4.1	5.5	5.6
Prop In Lane	1.00		0.25	1.00		0.55	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	85	276	278	156	347	333	37	1642	735	132	915	924
V/C Ratio(X)	0.77	0.62	0.63	0.77	0.33	0.35	0.64	0.26	0.20	0.77	0.26	0.26
Avail Cap(c_a), veh/h	314	506	510	435	626	601	169	1642	735	386	915	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	28.9	29.0	32.8	25.4	25.5	35.7	12.0	11.6	33.4	9.9	9.9
Incr Delay (d2), s/veh	13.8	2.2	2.3	7.8	0.6	0.6	16.9	0.4	0.6	8.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.4	3.5	2.7	2.1	2.1	0.7	2.7	1.9	2.3	2.8	2.9
LnGrp Delay(d),s/veh	48.4	31.2	31.3	40.6	26.0	26.1	52.5	12.4	12.3	42.3	10.6	10.6
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		411			351			600			582	
Approach Delay, s/veh		34.0			31.0			14.0			16.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	38.1	10.5	15.5	5.5	42.0	7.5	18.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	29.0	18.0	21.0	7.0	38.0	13.0	26.0
Max Q Clear Time (g_c+I1), s	6.1	7.4	6.9	8.7	3.0	7.6	4.7	6.3
Green Ext Time (p_c), s	0.1	6.6	0.2	2.7	0.0	7.3	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.9
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/11/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	48	0	17	29	10	3	62	45	24	74	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	53	0	19	32	11	3	68	49	26	81	4
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	206	0	32	171	56	6	2162	967	42	2169	106
Arrive On Green	0.01	0.06	0.00	0.02	0.07	0.07	0.00	0.61	0.61	0.02	0.63	0.63
Sat Flow, veh/h	1774	3632	0	1774	2624	857	1774	3539	1583	1774	3434	168
Grp Volume(v), veh/h	11	53	0	19	21	22	3	68	49	26	41	44
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1712	1774	1770	1583	1774	1770	1833
Q Serve(g_s), s	0.3	0.8	0.0	0.6	0.6	0.7	0.1	0.4	0.7	0.8	0.5	0.5
Cycle Q Clear(g_c), s	0.3	0.8	0.0	0.6	0.6	0.7	0.1	0.4	0.7	0.8	0.5	0.5
Prop In Lane	1.00		0.00	1.00		0.50	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	20	206	0	32	116	112	6	2162	967	42	1117	1158
V/C Ratio(X)	0.55	0.26	0.00	0.59	0.18	0.20	0.52	0.03	0.05	0.62	0.04	0.04
Avail Cap(c_a), veh/h	416	1277	0	544	766	741	384	2162	967	576	1117	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	25.0	0.0	27.0	24.5	24.5	27.6	4.3	4.3	26.8	3.9	3.9
Incr Delay (d2), s/veh	21.7	0.7	0.0	15.6	0.7	0.8	57.4	0.0	0.1	13.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.0	0.4	0.3	0.3	0.1	0.2	0.3	0.6	0.2	0.3
LnGrp Delay(d),s/veh	48.9	25.6	0.0	42.6	25.2	25.4	85.0	4.3	4.4	40.5	3.9	3.9
LnGrp LOS	D	C		D	C	C	F	A	A	D	A	A
Approach Vol, veh/h		64			62			120			111	
Approach Delay, s/veh		29.6			30.6			6.4			12.5	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	37.9	5.0	7.2	4.2	39.0	4.6	7.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	29.0	17.0	20.0	12.0	35.0	13.0	24.0
Max Q Clear Time (g_c+I1), s	2.8	2.7	2.6	2.8	2.1	2.5	2.3	2.7
Green Ext Time (p_c), s	0.0	1.0	0.0	0.4	0.0	1.1	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	254	45	145	184	64	25	413	154	101	455	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	62	262	46	149	190	66	26	426	159	104	469	55
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	444	77	192	546	184	40	1579	707	136	1597	187
Arrive On Green	0.04	0.15	0.15	0.11	0.21	0.21	0.02	0.45	0.45	0.08	0.50	0.50
Sat Flow, veh/h	1774	3018	523	1774	2602	876	1774	3539	1583	1774	3194	373
Grp Volume(v), veh/h	62	152	156	149	127	129	26	426	159	104	259	265
Grp Sat Flow(s),veh/h/ln	1774	1770	1771	1774	1770	1708	1774	1770	1583	1774	1770	1797
Q Serve(g_s), s	2.5	5.8	5.9	5.9	4.4	4.6	1.0	5.5	4.4	4.1	6.2	6.2
Cycle Q Clear(g_c), s	2.5	5.8	5.9	5.9	4.4	4.6	1.0	5.5	4.4	4.1	6.2	6.2
Prop In Lane	1.00		0.30	1.00		0.51	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	80	260	260	192	372	359	40	1579	707	136	885	899
V/C Ratio(X)	0.78	0.58	0.60	0.78	0.34	0.36	0.65	0.27	0.23	0.77	0.29	0.29
Avail Cap(c_a), veh/h	320	492	492	518	688	665	173	1579	707	394	885	899
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	28.6	28.7	31.3	24.2	24.3	34.9	12.5	12.3	32.6	10.5	10.5
Incr Delay (d2), s/veh	14.9	2.1	2.2	6.7	0.5	0.6	16.4	0.4	0.7	8.7	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.0	3.1	3.3	2.2	2.2	0.7	2.8	2.1	2.3	3.2	3.3
LnGrp Delay(d),s/veh	48.9	30.7	30.9	37.9	24.7	24.9	51.3	13.0	13.0	41.3	11.4	11.4
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		370			405			611			628	
Approach Delay, s/veh		33.8			29.6			14.6			16.3	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	36.1	11.8	14.6	5.6	40.0	7.2	19.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	27.0	21.0	20.0	7.0	36.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	6.1	7.5	7.9	7.9	3.0	8.2	4.5	6.6
Green Ext Time (p_c), s	0.2	6.7	0.3	2.7	0.0	7.5	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	17	78	5	35	43	11	15	106	63	32	107	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	19	87	6	39	48	12	17	118	70	36	119	6
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	224	15	57	228	55	29	2119	948	54	2101	105
Arrive On Green	0.02	0.07	0.07	0.03	0.08	0.08	0.02	0.60	0.60	0.03	0.61	0.61
Sat Flow, veh/h	1774	3362	230	1774	2830	682	1774	3539	1583	1774	3430	172
Grp Volume(v), veh/h	19	45	48	39	29	31	17	118	70	36	61	64
Grp Sat Flow(s),veh/h/ln	1774	1770	1822	1774	1770	1742	1774	1770	1583	1774	1770	1832
Q Serve(g_s), s	0.6	1.4	1.5	1.3	0.9	1.0	0.6	0.8	1.1	1.2	0.8	0.8
Cycle Q Clear(g_c), s	0.6	1.4	1.5	1.3	0.9	1.0	0.6	0.8	1.1	1.2	0.8	0.8
Prop In Lane	1.00		0.13	1.00		0.39	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	32	118	121	57	143	140	29	2119	948	54	1084	1122
V/C Ratio(X)	0.59	0.38	0.39	0.69	0.21	0.22	0.58	0.06	0.07	0.67	0.06	0.06
Avail Cap(c_a), veh/h	392	662	682	483	753	741	302	2119	948	483	1084	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	26.3	26.3	28.2	25.3	25.3	28.7	4.9	4.9	28.2	4.6	4.6
Incr Delay (d2), s/veh	16.0	2.0	2.0	13.6	0.7	0.8	16.9	0.1	0.2	13.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.8	0.8	0.8	0.5	0.5	0.4	0.4	0.5	0.8	0.4	0.4
LnGrp Delay(d),s/veh	44.6	28.3	28.3	41.8	26.0	26.1	45.6	4.9	5.1	41.7	4.7	4.7
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		112			99			205			161	
Approach Delay, s/veh		31.1			32.2			8.4			13.0	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	39.2	5.9	7.9	5.0	40.0	5.1	8.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	16.0	22.0	10.0	36.0	13.0	25.0
Max Q Clear Time (g_c+I1), s	3.2	3.1	3.3	3.5	2.6	2.8	2.6	3.0
Green Ext Time (p_c), s	0.0	1.7	0.0	0.7	0.0	1.8	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/11/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	177	23	118	137	50	19	258	141	72	238	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	36	188	24	126	146	53	20	274	150	77	253	52
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	384	48	166	477	167	33	1675	749	100	1499	303
Arrive On Green	0.03	0.12	0.12	0.09	0.19	0.19	0.02	0.47	0.47	0.06	0.51	0.51
Sat Flow, veh/h	1774	3163	399	1774	2574	900	1774	3539	1583	1774	2934	593
Grp Volume(v), veh/h	36	104	108	126	99	100	20	274	150	77	151	154
Grp Sat Flow(s),veh/h/ln	1774	1770	1792	1774	1770	1704	1774	1770	1583	1774	1770	1758
Q Serve(g_s), s	1.3	3.4	3.5	4.3	3.0	3.2	0.7	2.8	3.5	2.7	2.9	2.9
Cycle Q Clear(g_c), s	1.3	3.4	3.5	4.3	3.0	3.2	0.7	2.8	3.5	2.7	2.9	2.9
Prop In Lane	1.00		0.22	1.00		0.53	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	53	215	218	166	328	316	33	1675	749	100	904	898
V/C Ratio(X)	0.68	0.48	0.50	0.76	0.30	0.32	0.60	0.16	0.20	0.77	0.17	0.17
Avail Cap(c_a), veh/h	283	593	601	623	932	897	255	1675	749	425	904	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	25.7	25.7	27.7	22.0	22.1	30.5	9.4	9.6	29.2	8.2	8.2
Incr Delay (d2), s/veh	14.4	1.7	1.7	6.9	0.5	0.6	16.1	0.2	0.6	11.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.8	1.8	2.5	1.5	1.6	0.5	1.4	1.6	1.6	1.5	1.5
LnGrp Delay(d),s/veh	44.5	27.4	27.5	34.6	22.5	22.7	46.6	9.6	10.2	40.9	8.6	8.6
LnGrp LOS	D	C	C	C	C	C	D	A	B	D	A	A
Approach Vol, veh/h		248			325			444			382	
Approach Delay, s/veh		29.9			27.3			11.5			15.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	33.6	9.9	11.6	5.2	36.0	5.9	15.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	26.0	22.0	21.0	9.0	32.0	10.0	33.0
Max Q Clear Time (g_c+I1), s	4.7	5.5	6.3	5.5	2.7	4.9	3.3	5.2
Green Ext Time (p_c), s	0.1	4.1	0.3	2.1	0.0	4.4	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/11/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	15	68	11	44	49	13	10	145	54	24	163	16
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	16	73	12	47	53	14	11	156	58	26	175	17
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	204	33	66	247	63	20	2064	924	42	1945	187
Arrive On Green	0.02	0.07	0.07	0.04	0.09	0.09	0.01	0.58	0.58	0.02	0.60	0.60
Sat Flow, veh/h	1774	3055	491	1774	2796	711	1774	3539	1583	1774	3263	314
Grp Volume(v), veh/h	16	42	43	47	33	34	11	156	58	26	94	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1776	1774	1770	1737	1774	1770	1583	1774	1770	1807
Q Serve(g_s), s	0.5	1.2	1.3	1.5	1.0	1.0	0.3	1.1	0.9	0.8	1.3	1.3
Cycle Q Clear(g_c), s	0.5	1.2	1.3	1.5	1.0	1.0	0.3	1.1	0.9	0.8	1.3	1.3
Prop In Lane	1.00		0.28	1.00		0.41	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	28	118	119	66	156	153	20	2064	924	42	1054	1077
V/C Ratio(X)	0.57	0.35	0.37	0.71	0.21	0.22	0.55	0.08	0.06	0.62	0.09	0.09
Avail Cap(c_a), veh/h	384	671	674	609	895	878	352	2064	924	481	1054	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	24.7	24.7	26.4	23.5	23.5	27.2	5.0	5.0	26.8	4.8	4.8
Incr Delay (d2), s/veh	17.1	1.8	1.9	13.3	0.7	0.7	21.6	0.1	0.1	13.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.7	0.9	0.5	0.5	0.3	0.5	0.4	0.6	0.6	0.7
LnGrp Delay(d),s/veh	44.2	26.5	26.6	39.6	24.1	24.2	48.9	5.1	5.1	40.4	4.9	4.9
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		101			114			225			218	
Approach Delay, s/veh		29.3			30.5			7.2			9.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	36.3	6.1	7.7	4.6	37.0	4.9	8.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	29.0	19.0	21.0	11.0	33.0	12.0	28.0
Max Q Clear Time (g_c+I1), s	2.8	3.1	3.5	3.3	2.3	3.3	2.5	3.0
Green Ext Time (p_c), s	0.0	2.3	0.1	0.7	0.0	2.4	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/11/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	72	301	75	127	210	61	60	421	154	97	417	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	314	78	132	219	64	62	439	160	101	434	100
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	480	117	169	572	163	79	1615	722	131	1390	318
Arrive On Green	0.05	0.17	0.17	0.10	0.21	0.21	0.04	0.46	0.46	0.07	0.49	0.49
Sat Flow, veh/h	1774	2820	690	1774	2720	776	1774	3539	1583	1774	2862	654
Grp Volume(v), veh/h	75	195	197	132	141	142	62	439	160	101	267	267
Grp Sat Flow(s),veh/h/ln	1774	1770	1741	1774	1770	1726	1774	1770	1583	1774	1770	1747
Q Serve(g_s), s	3.3	8.1	8.3	5.7	5.3	5.6	2.7	6.0	4.8	4.4	7.2	7.3
Cycle Q Clear(g_c), s	3.3	8.1	8.3	5.7	5.3	5.6	2.7	6.0	4.8	4.4	7.2	7.3
Prop In Lane	1.00		0.40	1.00		0.45	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	97	301	296	169	372	363	79	1615	722	131	859	848
V/C Ratio(X)	0.77	0.65	0.66	0.78	0.38	0.39	0.78	0.27	0.22	0.77	0.31	0.31
Avail Cap(c_a), veh/h	295	475	467	408	588	573	159	1615	722	363	859	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	30.3	30.4	34.6	26.5	26.6	37.0	13.2	12.9	35.6	12.2	12.2
Incr Delay (d2), s/veh	12.0	2.4	2.6	7.6	0.6	0.7	15.2	0.4	0.7	9.1	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.1	4.2	3.1	2.7	2.7	1.7	3.0	2.2	2.5	3.7	3.7
LnGrp Delay(d),s/veh	48.5	32.7	33.0	42.2	27.1	27.3	52.2	13.6	13.6	44.7	13.1	13.2
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		467			415			661			635	
Approach Delay, s/veh		35.3			32.0			17.2			18.2	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	39.7	11.5	17.3	7.5	42.0	8.3	20.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	29.0	18.0	21.0	7.0	38.0	13.0	26.0
Max Q Clear Time (g_c+I1), s	6.4	8.0	7.7	10.3	4.7	9.3	5.3	7.6
Green Ext Time (p_c), s	0.1	7.1	0.2	3.0	0.0	7.8	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.2
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/11/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	42	88	21	21	33	10	12	65	49	24	77	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	46	97	23	23	36	11	13	71	54	26	85	8
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	235	54	38	181	53	23	2088	934	42	1967	183
Arrive On Green	0.04	0.08	0.08	0.02	0.07	0.07	0.01	0.59	0.59	0.02	0.60	0.60
Sat Flow, veh/h	1774	2859	658	1774	2704	789	1774	3539	1583	1774	3274	304
Grp Volume(v), veh/h	46	59	61	23	23	24	13	71	54	26	45	48
Grp Sat Flow(s),veh/h/ln	1774	1770	1747	1774	1770	1723	1774	1770	1583	1774	1770	1809
Q Serve(g_s), s	1.5	1.8	1.9	0.7	0.7	0.7	0.4	0.5	0.8	0.8	0.6	0.6
Cycle Q Clear(g_c), s	1.5	1.8	1.9	0.7	0.7	0.7	0.4	0.5	0.8	0.8	0.6	0.6
Prop In Lane	1.00		0.38	1.00		0.46	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	65	145	143	38	119	116	23	2088	934	42	1063	1087
V/C Ratio(X)	0.71	0.41	0.43	0.60	0.19	0.21	0.56	0.03	0.06	0.62	0.04	0.04
Avail Cap(c_a), veh/h	596	750	741	470	625	609	345	2088	934	470	1063	1087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	24.7	24.7	27.5	25.0	25.0	27.8	4.9	4.9	27.4	4.6	4.6
Incr Delay (d2), s/veh	13.5	1.8	2.0	14.5	0.8	0.9	19.5	0.0	0.1	13.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.9	1.0	0.5	0.4	0.4	0.3	0.2	0.4	0.6	0.3	0.3
LnGrp Delay(d),s/veh	40.5	26.5	26.7	41.9	25.7	25.9	47.3	4.9	5.0	41.2	4.7	4.7
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		166			70			138			119	
Approach Delay, s/veh		30.5			31.1			8.9			12.7	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	37.4	5.2	8.6	4.7	38.0	6.1	7.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	24.0	11.0	34.0	19.0	20.0
Max Q Clear Time (g_c+I1), s	2.8	2.8	2.7	3.9	2.4	2.6	3.5	2.7
Green Ext Time (p_c), s	0.0	1.1	0.0	0.8	0.0	1.2	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	266	78	157	234	64	62	423	166	101	466	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	71	274	80	162	241	66	64	436	171	104	480	96
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	442	127	206	628	168	82	1502	672	135	1337	266
Arrive On Green	0.05	0.16	0.16	0.12	0.23	0.23	0.05	0.42	0.42	0.08	0.45	0.45
Sat Flow, veh/h	1774	2717	778	1774	2761	740	1774	3539	1583	1774	2944	585
Grp Volume(v), veh/h	71	177	177	162	153	154	64	436	171	104	287	289
Grp Sat Flow(s),veh/h/ln	1774	1770	1725	1774	1770	1732	1774	1770	1583	1774	1770	1759
Q Serve(g_s), s	2.9	6.7	7.0	6.5	5.3	5.5	2.6	5.9	5.1	4.2	7.7	7.8
Cycle Q Clear(g_c), s	2.9	6.7	7.0	6.5	5.3	5.5	2.6	5.9	5.1	4.2	7.7	7.8
Prop In Lane	1.00		0.45	1.00		0.43	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	92	288	281	206	402	394	82	1502	672	135	804	799
V/C Ratio(X)	0.77	0.61	0.63	0.79	0.38	0.39	0.78	0.29	0.25	0.77	0.36	0.36
Avail Cap(c_a), veh/h	269	463	451	513	707	692	269	1502	672	366	804	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	28.3	28.4	31.2	23.7	23.8	34.3	13.7	13.5	32.9	12.9	12.9
Incr Delay (d2), s/veh	12.9	2.1	2.3	6.5	0.6	0.6	14.5	0.5	0.9	8.8	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.5	3.5	3.5	2.7	2.7	1.6	2.9	2.3	2.4	4.0	4.0
LnGrp Delay(d),s/veh	46.9	30.4	30.7	37.7	24.3	24.4	48.7	14.2	14.4	41.7	14.2	14.2
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		425			469			671			680	
Approach Delay, s/veh		33.3			29.0			17.6			18.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	34.8	12.4	15.8	7.4	37.0	7.8	20.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	29.0	21.0	19.0	11.0	33.0	11.0	29.0
Max Q Clear Time (g_c+I1), s	6.2	7.9	8.5	9.0	4.6	9.8	4.9	7.5
Green Ext Time (p_c), s	0.1	7.4	0.3	2.9	0.1	7.7	0.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	49	118	23	39	47	11	24	109	67	32	110	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	54	131	26	43	52	12	27	121	74	36	122	9
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	288	56	62	264	59	43	1946	871	54	1860	136
Arrive On Green	0.04	0.10	0.10	0.03	0.09	0.09	0.02	0.55	0.55	0.03	0.56	0.56
Sat Flow, veh/h	1774	2958	574	1774	2877	642	1774	3539	1583	1774	3345	244
Grp Volume(v), veh/h	54	77	80	43	31	33	27	121	74	36	64	67
Grp Sat Flow(s),veh/h/ln	1774	1770	1762	1774	1770	1749	1774	1770	1583	1774	1770	1820
Q Serve(g_s), s	1.7	2.3	2.4	1.3	0.9	1.0	0.8	0.9	1.2	1.1	0.9	0.9
Cycle Q Clear(g_c), s	1.7	2.3	2.4	1.3	0.9	1.0	0.8	0.9	1.2	1.1	0.9	0.9
Prop In Lane	1.00		0.33	1.00		0.37	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	72	173	172	62	162	160	43	1946	871	54	984	1012
V/C Ratio(X)	0.75	0.45	0.46	0.69	0.19	0.20	0.62	0.06	0.08	0.66	0.07	0.07
Avail Cap(c_a), veh/h	605	762	758	509	667	659	414	1946	871	477	984	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	23.7	23.8	26.6	23.4	23.4	26.9	5.8	5.9	26.7	5.7	5.7
Incr Delay (d2), s/veh	14.3	1.8	2.0	13.1	0.6	0.6	13.6	0.1	0.2	12.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.2	1.2	0.9	0.5	0.5	0.6	0.4	0.6	0.7	0.5	0.5
LnGrp Delay(d),s/veh	40.7	25.5	25.7	39.7	24.0	24.1	40.5	5.9	6.1	39.6	5.8	5.8
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		211			107			222			167	
Approach Delay, s/veh		29.5			30.3			10.2			13.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	34.7	5.9	9.4	5.4	35.0	6.3	9.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	29.0	16.0	24.0	13.0	31.0	19.0	21.0
Max Q Clear Time (g_c+I1), s	3.1	3.2	3.3	4.4	2.8	2.9	3.7	3.0
Green Ext Time (p_c), s	0.0	1.7	0.0	1.1	0.0	1.8	0.1	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	210	62	136	171	50	57	270	155	72	253	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	64	223	66	145	182	53	61	287	165	77	269	81
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	415	120	190	584	165	78	1502	672	100	1178	348
Arrive On Green	0.05	0.15	0.15	0.11	0.21	0.21	0.04	0.42	0.42	0.06	0.44	0.44
Sat Flow, veh/h	1774	2711	783	1774	2724	772	1774	3539	1583	1774	2696	795
Grp Volume(v), veh/h	64	144	145	145	116	119	61	287	165	77	175	175
Grp Sat Flow(s),veh/h/ln	1774	1770	1725	1774	1770	1727	1774	1770	1583	1774	1770	1722
Q Serve(g_s), s	2.2	4.6	4.8	4.9	3.4	3.6	2.1	3.1	4.1	2.6	3.8	3.9
Cycle Q Clear(g_c), s	2.2	4.6	4.8	4.9	3.4	3.6	2.1	3.1	4.1	2.6	3.8	3.9
Prop In Lane	1.00		0.45	1.00		0.45	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	82	271	264	190	379	370	78	1502	672	100	773	752
V/C Ratio(X)	0.78	0.53	0.55	0.76	0.31	0.32	0.79	0.19	0.25	0.77	0.23	0.23
Avail Cap(c_a), veh/h	373	601	586	660	888	866	373	1502	672	431	773	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	24.1	24.2	26.8	20.4	20.5	29.3	11.1	11.4	28.8	10.9	10.9
Incr Delay (d2), s/veh	14.9	1.6	1.8	6.2	0.5	0.5	15.8	0.3	0.9	11.7	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.4	2.4	2.7	1.7	1.8	1.4	1.6	2.0	1.6	2.0	2.0
LnGrp Delay(d),s/veh	44.0	25.7	26.0	33.0	20.9	21.0	45.0	11.4	12.3	40.5	11.6	11.6
LnGrp LOS	D	C	C	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		353			380			513			427	
Approach Delay, s/veh		29.1			25.5			15.7			16.8	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	30.2	10.6	13.5	6.7	31.0	6.8	17.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	25.0	23.0	21.0	13.0	27.0	13.0	31.0
Max Q Clear Time (g_c+I1), s	4.6	6.1	6.9	6.8	4.1	5.9	4.2	5.6
Green Ext Time (p_c), s	0.1	4.4	0.3	2.7	0.1	4.6	0.1	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/11/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	33	91	26	50	54	13	21	148	59	24	167	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	35	98	28	54	58	14	23	159	63	26	180	22
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	236	65	72	276	64	38	1983	887	42	1789	216
Arrive On Green	0.03	0.09	0.09	0.04	0.10	0.10	0.02	0.56	0.56	0.02	0.56	0.56
Sat Flow, veh/h	1774	2743	756	1774	2850	665	1774	3539	1583	1774	3181	384
Grp Volume(v), veh/h	35	62	64	54	35	37	23	159	63	26	99	103
Grp Sat Flow(s),veh/h/ln	1774	1770	1729	1774	1770	1745	1774	1770	1583	1774	1770	1795
Q Serve(g_s), s	1.1	1.8	1.9	1.7	1.0	1.1	0.7	1.1	1.0	0.8	1.4	1.5
Cycle Q Clear(g_c), s	1.1	1.8	1.9	1.7	1.0	1.1	0.7	1.1	1.0	0.8	1.4	1.5
Prop In Lane	1.00		0.44	1.00		0.38	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	53	152	149	72	171	169	38	1983	887	42	995	1010
V/C Ratio(X)	0.66	0.41	0.43	0.75	0.21	0.22	0.60	0.08	0.07	0.62	0.10	0.10
Avail Cap(c_a), veh/h	449	704	687	577	831	820	417	1983	887	417	995	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	23.9	24.0	26.3	23.0	23.1	26.8	5.6	5.6	26.8	5.6	5.6
Incr Delay (d2), s/veh	12.8	1.7	2.0	14.1	0.6	0.6	14.3	0.1	0.2	13.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	1.0	1.1	0.5	0.6	0.5	0.6	0.5	0.6	0.7	0.8
LnGrp Delay(d),s/veh	39.4	25.7	26.0	40.4	23.6	23.7	41.1	5.7	5.7	40.4	5.8	5.8
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		161			126			245			228	
Approach Delay, s/veh		28.8			30.8			9.0			9.8	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	35.0	6.3	8.8	5.2	35.1	5.7	9.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	31.0	18.0	22.0	13.0	31.0	14.0	26.0
Max Q Clear Time (g_c+I1), s	2.8	3.1	3.7	3.9	2.7	3.5	3.1	3.1
Green Ext Time (p_c), s	0.0	2.5	0.1	1.0	0.0	2.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	72	301	75	177	304	61	53	421	154	97	577	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	314	78	184	317	64	55	439	160	101	601	143
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	480	117	228	718	143	70	1502	672	130	1301	309
Arrive On Green	0.05	0.17	0.17	0.13	0.24	0.24	0.04	0.42	0.42	0.07	0.46	0.46
Sat Flow, veh/h	1774	2820	690	1774	2942	587	1774	3539	1583	1774	2839	674
Grp Volume(v), veh/h	75	195	197	184	189	192	55	439	160	101	374	370
Grp Sat Flow(s),veh/h/ln	1774	1770	1741	1774	1770	1759	1774	1770	1583	1774	1770	1744
Q Serve(g_s), s	3.3	8.1	8.3	7.9	7.1	7.3	2.4	6.4	5.1	4.4	11.4	11.5
Cycle Q Clear(g_c), s	3.3	8.1	8.3	7.9	7.1	7.3	2.4	6.4	5.1	4.4	11.4	11.5
Prop In Lane	1.00		0.40	1.00		0.33	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	97	301	296	228	432	429	70	1502	672	130	811	799
V/C Ratio(X)	0.78	0.65	0.66	0.81	0.44	0.45	0.78	0.29	0.24	0.77	0.46	0.46
Avail Cap(c_a), veh/h	203	428	421	452	676	672	203	1502	672	271	811	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	30.4	30.5	33.3	25.1	25.2	37.4	14.9	14.5	35.8	14.6	14.6
Incr Delay (d2), s/veh	12.3	2.3	2.6	6.7	0.7	0.7	17.1	0.5	0.8	9.4	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.2	4.2	4.3	3.6	3.6	1.5	3.2	2.3	2.5	5.9	5.9
LnGrp Delay(d),s/veh	49.0	32.7	33.0	40.0	25.8	25.9	54.5	15.4	15.3	45.1	16.5	16.6
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		467			565			654			845	
Approach Delay, s/veh		35.5			30.5			18.6			19.9	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	37.3	14.1	17.4	7.1	40.0	8.3	23.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	33.0	20.0	19.0	9.0	36.0	9.0	30.0
Max Q Clear Time (g_c+I1), s	6.4	8.4	9.9	10.3	4.4	13.5	5.3	9.3
Green Ext Time (p_c), s	0.1	9.3	0.3	3.1	0.0	9.0	0.0	4.7

Intersection Summary	
HCM 2010 Ctrl Delay	24.8
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/13/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	83	182	14	21	33	10	12	225	99	24	77	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	91	200	15	23	36	11	13	247	109	26	85	8
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	390	29	38	190	56	23	1985	888	42	1872	174
Arrive On Green	0.07	0.12	0.12	0.02	0.07	0.07	0.01	0.56	0.56	0.02	0.57	0.57
Sat Flow, veh/h	1774	3340	249	1774	2704	789	1774	3539	1583	1774	3274	304
Grp Volume(v), veh/h	91	105	110	23	23	24	13	247	109	26	45	48
Grp Sat Flow(s),veh/h/ln	1774	1770	1819	1774	1770	1723	1774	1770	1583	1774	1770	1809
Q Serve(g_s), s	2.9	3.2	3.3	0.7	0.7	0.8	0.4	1.9	1.9	0.8	0.7	0.7
Cycle Q Clear(g_c), s	2.9	3.2	3.3	0.7	0.7	0.8	0.4	1.9	1.9	0.8	0.7	0.7
Prop In Lane	1.00		0.14	1.00		0.46	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	120	207	213	38	125	121	23	1985	888	42	1011	1034
V/C Ratio(X)	0.76	0.51	0.52	0.61	0.18	0.20	0.56	0.12	0.12	0.62	0.04	0.05
Avail Cap(c_a), veh/h	768	981	1008	338	552	537	246	1985	888	338	1011	1034
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	23.9	24.0	28.0	25.3	25.3	28.3	6.0	6.0	27.9	5.4	5.4
Incr Delay (d2), s/veh	9.2	1.9	1.9	14.6	0.7	0.8	19.6	0.1	0.3	14.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.7	1.8	0.5	0.4	0.4	0.3	1.0	0.9	0.6	0.3	0.4
LnGrp Delay(d),s/veh	35.7	25.9	25.9	42.6	26.0	26.1	48.0	6.1	6.3	41.9	5.5	5.5
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		306			70			369			119	
Approach Delay, s/veh		28.8			31.5			7.6			13.5	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	36.4	5.2	10.7	4.8	37.0	7.9	8.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	30.0	11.0	32.0	8.0	33.0	25.0	18.0
Max Q Clear Time (g_c+I1), s	2.8	3.9	2.7	5.3	2.4	2.7	4.9	2.8
Green Ext Time (p_c), s	0.0	2.5	0.0	1.5	0.0	2.6	0.2	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/13/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	266	78	207	328	64	55	423	166	101	626	134
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	71	274	80	213	338	66	57	436	171	104	645	138
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	413	118	258	728	141	73	1513	677	134	1340	286
Arrive On Green	0.05	0.15	0.15	0.15	0.25	0.25	0.04	0.43	0.43	0.08	0.46	0.46
Sat Flow, veh/h	1774	2717	778	1774	2960	572	1774	3539	1583	1774	2903	620
Grp Volume(v), veh/h	71	177	177	213	201	203	57	436	171	104	393	390
Grp Sat Flow(s),veh/h/ln	1774	1770	1725	1774	1770	1762	1774	1770	1583	1774	1770	1753
Q Serve(g_s), s	3.2	7.5	7.8	9.3	7.7	7.9	2.6	6.4	5.6	4.6	12.3	12.3
Cycle Q Clear(g_c), s	3.2	7.5	7.8	9.3	7.7	7.9	2.6	6.4	5.6	4.6	12.3	12.3
Prop In Lane	1.00		0.45	1.00		0.32	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	92	269	262	258	435	433	73	1513	677	134	817	810
V/C Ratio(X)	0.78	0.66	0.68	0.82	0.46	0.47	0.78	0.29	0.25	0.78	0.48	0.48
Avail Cap(c_a), veh/h	199	353	345	487	640	638	199	1513	677	266	817	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	32.0	32.1	33.2	25.7	25.8	38.1	15.0	14.7	36.4	14.9	14.9
Incr Delay (d2), s/veh	13.0	2.7	3.4	6.5	0.8	0.8	16.4	0.5	0.9	9.3	2.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.9	3.9	5.0	3.9	3.9	1.6	3.2	2.6	2.6	6.5	6.4
LnGrp Delay(d),s/veh	50.5	34.7	35.5	39.8	26.5	26.6	54.4	15.5	15.6	45.6	16.9	17.0
LnGrp LOS	D	C	D	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		425			617			664			887	
Approach Delay, s/veh		37.7			31.1			18.9			20.3	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	38.2	15.7	16.2	7.3	41.0	8.1	23.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	34.0	22.0	16.0	9.0	37.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	6.6	8.4	11.3	9.8	4.6	14.3	5.2	9.9
Green Ext Time (p_c), s	0.1	9.8	0.4	2.4	0.0	9.3	0.0	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/13/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	212	16	39	47	11	24	269	117	32	110	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	100	236	18	43	52	12	27	299	130	36	122	9
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	445	34	61	269	60	43	1842	824	54	1761	129
Arrive On Green	0.07	0.13	0.13	0.03	0.09	0.09	0.02	0.52	0.52	0.03	0.53	0.53
Sat Flow, veh/h	1774	3335	253	1774	2877	642	1774	3539	1583	1774	3345	244
Grp Volume(v), veh/h	100	124	130	43	31	33	27	299	130	36	64	67
Grp Sat Flow(s),veh/h/ln	1774	1770	1818	1774	1770	1749	1774	1770	1583	1774	1770	1820
Q Serve(g_s), s	3.1	3.7	3.8	1.4	0.9	1.0	0.9	2.5	2.4	1.1	1.0	1.0
Cycle Q Clear(g_c), s	3.1	3.7	3.8	1.4	0.9	1.0	0.9	2.5	2.4	1.1	1.0	1.0
Prop In Lane	1.00		0.14	1.00		0.37	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	133	236	243	61	165	163	43	1842	824	54	932	958
V/C Ratio(X)	0.75	0.53	0.53	0.70	0.19	0.20	0.62	0.16	0.16	0.67	0.07	0.07
Avail Cap(c_a), veh/h	778	963	989	374	559	553	343	1842	824	374	932	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	23.0	23.0	27.2	23.8	23.9	27.5	7.2	7.1	27.3	6.6	6.6
Incr Delay (d2), s/veh	8.3	1.8	1.8	13.4	0.5	0.6	13.7	0.2	0.4	13.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.0	2.0	0.9	0.5	0.5	0.6	1.3	1.2	0.8	0.5	0.5
LnGrp Delay(d),s/veh	34.2	24.8	24.8	40.6	24.4	24.5	41.3	7.3	7.5	40.5	6.8	6.8
LnGrp LOS	C	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		354			107			456			167	
Approach Delay, s/veh		27.5			30.9			9.4			14.0	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	33.7	6.0	11.6	5.4	34.0	8.3	9.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	29.0	12.0	31.0	11.0	30.0	25.0	18.0
Max Q Clear Time (g_c+I1), s	3.1	4.5	3.4	5.8	2.9	3.0	5.1	3.0
Green Ext Time (p_c), s	0.0	3.2	0.0	1.8	0.0	3.3	0.2	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.1
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/13/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	46	192	58	186	283	50	53	270	155	72	413	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	49	204	62	198	301	53	56	287	165	77	439	140
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	381	113	249	743	129	71	1528	684	100	1186	375
Arrive On Green	0.04	0.14	0.14	0.14	0.25	0.25	0.04	0.43	0.43	0.06	0.45	0.45
Sat Flow, veh/h	1774	2694	797	1774	3015	525	1774	3539	1583	1774	2648	837
Grp Volume(v), veh/h	49	132	134	198	175	179	56	287	165	77	292	287
Grp Sat Flow(s),veh/h/ln	1774	1770	1722	1774	1770	1770	1774	1770	1583	1774	1770	1715
Q Serve(g_s), s	1.9	4.8	5.0	7.5	5.8	5.9	2.2	3.5	4.6	3.0	7.6	7.7
Cycle Q Clear(g_c), s	1.9	4.8	5.0	7.5	5.8	5.9	2.2	3.5	4.6	3.0	7.6	7.7
Prop In Lane	1.00		0.46	1.00		0.30	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	62	250	243	249	436	436	71	1528	684	100	793	768
V/C Ratio(X)	0.78	0.53	0.55	0.80	0.40	0.41	0.79	0.19	0.24	0.77	0.37	0.37
Avail Cap(c_a), veh/h	281	458	446	613	790	790	281	1528	684	306	793	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	27.7	27.8	28.9	21.9	21.9	33.0	12.2	12.5	32.3	12.7	12.7
Incr Delay (d2), s/veh	19.0	1.7	1.9	5.7	0.6	0.6	17.1	0.3	0.8	11.8	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.5	2.5	4.1	2.9	3.0	1.4	1.7	2.2	1.8	3.9	3.9
LnGrp Delay(d),s/veh	52.2	29.4	29.7	34.6	22.5	22.6	50.2	12.5	13.4	44.2	14.0	14.1
LnGrp LOS	D	C	C	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		315			552			508			656	
Approach Delay, s/veh		33.1			26.9			16.9			17.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	34.0	13.7	13.8	6.8	35.1	6.4	21.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	30.0	24.0	18.0	11.0	31.0	11.0	31.0
Max Q Clear Time (g_c+I1), s	5.0	6.6	9.5	7.0	4.2	9.7	3.9	7.9
Green Ext Time (p_c), s	0.1	6.5	0.5	2.8	0.0	6.3	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
1: Geer Rd/Albers Rd & Yosemite Blvd

1/13/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	89	203	22	50	54	13	21	308	109	24	167	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	96	218	24	54	58	14	23	331	117	26	180	22
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	406	44	71	269	63	38	1913	856	42	1726	208
Arrive On Green	0.07	0.13	0.13	0.04	0.09	0.09	0.02	0.54	0.54	0.02	0.54	0.54
Sat Flow, veh/h	1774	3220	351	1774	2850	665	1774	3539	1583	1774	3181	384
Grp Volume(v), veh/h	96	119	123	54	35	37	23	331	117	26	99	103
Grp Sat Flow(s),veh/h/ln	1774	1770	1801	1774	1770	1745	1774	1770	1583	1774	1770	1795
Q Serve(g_s), s	3.1	3.7	3.8	1.8	1.1	1.2	0.8	2.8	2.2	0.9	1.6	1.6
Cycle Q Clear(g_c), s	3.1	3.7	3.8	1.8	1.1	1.2	0.8	2.8	2.2	0.9	1.6	1.6
Prop In Lane	1.00		0.19	1.00		0.38	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	127	223	227	71	167	165	38	1913	856	42	960	974
V/C Ratio(X)	0.76	0.53	0.54	0.77	0.21	0.22	0.61	0.17	0.14	0.62	0.10	0.11
Avail Cap(c_a), veh/h	659	747	760	479	568	560	330	1913	856	330	960	974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	24.2	24.3	28.2	24.8	24.8	28.7	6.9	6.7	28.6	6.6	6.6
Incr Delay (d2), s/veh	8.8	2.0	2.0	15.7	0.6	0.7	14.8	0.2	0.3	14.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.9	2.0	1.2	0.6	0.6	0.5	1.4	1.0	0.6	0.8	0.9
LnGrp Delay(d),s/veh	35.8	26.2	26.3	43.8	25.4	25.5	43.5	7.1	7.1	42.9	6.8	6.8
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		338			126			471			228	
Approach Delay, s/veh		29.0			33.3			8.9			10.9	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	36.0	6.4	11.5	5.3	36.1	8.2	9.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	32.0	16.0	25.0	11.0	32.0	22.0	19.0
Max Q Clear Time (g_c+I1), s	2.9	4.8	3.8	5.8	2.8	3.6	5.1	3.2
Green Ext Time (p_c), s	0.0	4.0	0.1	1.7	0.0	4.0	0.2	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.8
HCM 2010 LOS	B

Fruit Yard Project Description

The Fruit Yard facility exists at the southwest corner of Geer Road and Yosemite Blvd. (State Hwy. 132). It started as an Old Foamy Drive-In in the late 1950s, and has expanded through the years. The Trainas, the current owner, purchased the property in 1977 (over 38 years ago). Over the last 38 years, the site has grown from an Old Foamy to what exists today, The Fruit Yard Restaurant, a service station with six (6) pumps, a produce market, a cardlock fueling facility with six (6) pumps, a mesquite barbeque business, and a large park and lake. The site has paved parking associated with the existing uses, as well as overflow parking used on an intermittent basis over larger portions of the property. The existing lake and park is used by The Fruit Yard customers and guests, including for weddings and special events. The current developed area covers approximately fourteen (14) acres, with the remaining approximately twenty-nine (29) acres of the property in open land and fruit trees including apricots, peaches, nectarines and cherries.

The Fruit Yard Restaurant provides banqueting facilities and meeting rooms for a number of different clubs and groups. Over the years, hundreds of weddings and events have been held at The Fruit Yard to meet the needs of local residents.

Most regular events are accommodated on-site and involve attendance at a small scale, such as 1,000 persons or less, and might include weddings, fundraisers, or small group events. All parking is accommodated on-site and amplification is used if the event includes an auctioneer, DJ or band. These events always end prior to midnight, and a typical year could have about fifty (50) such events, with about half of them occurring during daylight hours, and maybe a quarter extending past 10:00 p.m., but not past midnight.

Over the years, the site has also hosted numerous large public gatherings including events such as the Passport to Paradise fundraiser for the American Cancer Society, Graffiti Night events, car shows and small to large musical events. Most of these events have occurred over the last fourteen (14) plus years, and large scale events (such as concerts with attendance over 2,000) obtain public assembly permits from the Stanislaus County Sheriff's Department.

Large scale events have occurred less regularly than the smaller regular events. Examples are large Graffiti type events or major concerts. Over the last 14 years, major concerts showcasing about forty (40) of the top 200 bands of the 50s and 60s have occurred at the site, including such groups as The Supremes, The Beach Boys, Little Richard, and The Isley Brothers. The attendance at these events is typically over 2,000 people, but some have had attendance on the order of 4,000 to 5,000, with the largest event being The Supremes which attracted around 8,000 concertgoers. To put on such an event, a public assembly permit is obtained from the Sheriff's office. A large stage and fencing must be rented, and a ticket booth is installed to take tickets. Portable generators are brought in to run portable lights, and portable toilet facilities are provided. Security is hired, and parking lot attendants are hired to direct and control parking on-site, but for the largest of events, off-site parking has occurred.

When these major concert events occur, they are held at the western end of the park currently under construction as part of the existing Planned Development zone on the property. That is, west of the existing lake and park. These concerts easily cover up at least four (4) to five (5) acres of flat land for the concert stage, fencing, and attendees. Parking is provided around the property as needed to accommodate the attendees.

With construction of an amphitheater, a couple of things would occur. First, a stage, fencing and ticket booth would not need to be rented for each major event. Attendance would be limited to the capacity of the amphitheater (about 3,500). In addition, the attendance area would be reduced to just the amphitheater site (about two (2) to three (3) total acres), rather than the larger area needed when events were held on flat ground. As the attendance is limited, The Fruit Yard is able to provide adequate parking on-site.

In the busiest times, The Fruit Yard has acquired public assembly permits, holding up to six (6) of these major events in a year. The historical average has been about three or four events per year. Major events have attendance expected at over 2,000 persons. Regular events, such as weddings, fundraisers and small group meetings occur regularly, but are much smaller in size and are not subject to Sheriff's public assembly permits.

The existing businesses at the site operate from 6 a.m. in the morning until about 10 p.m. in the evening, with the cardlock facility and service station being open 24 hours a day. Special events and Weddings may occur until midnight.

PARCEL 1
34-PM-85

PARCEL A
29-PM-146

PARCEL A
24-PM-98

APN 09-13-21

APN 09-13-07

APN 09-13-06

PARCEL B
18-PM-78

EXTEND EXISTING TURN LANE
TO ACCOMMODATE EXISTING DRIVEWAY

EXISTING PYLON
SIGN TO BE UPDATED
AND PROPOSED ELECTRONIC
READER SIGNED TO BE ADDED

ALBERS
ROAD

YOSEMITE BOULEVARD (STATE HIGHWAY 132)

SEC. 27 SEC. 26
SEC. 34 SEC. 35

88'
50'
33'
55'
22'

EXISTING IRREVOCABLE
OFFER DEDICATION

PARCEL LINE

PARCEL 1
56-PM-83

FUTURE TRACTOR SALES
PER APPROVED PD 317

FUTURE FUELING STATION
PER APPROVED PD 317

PARCEL 2
56-PM-83

PROPOSED TEMPORARY EVENT
PARKING AREA

20'
30'

PROPOSED TEMPORARY EVENT
PARKING AREA

PARCEL 3
56-PM-83

PROPOSED PAVED ACCESS
LANE PER PREVIOUSLY
APPROVED PD 317

FUTURE BANQUET FACILITY
PER APPROVED PD 317

EXISTING
PARKING

THE FRUIT YARD
EX. RESTAURANT

EXISTING
FUEL ISLAND
& CANOPY

EXIST. STORE

PARCEL LINE
FUTURE ACCESS LANE

30'
20'

PARCEL LINE

FUTURE FRUIT PACKING
PER APPROVED PD 317

SECURITY FENCING
TYP.

MAIN ENTRANCE

MAINT.
BLDG.

PROP.
GAZEBO

PARCEL 12
56-PM-83

EXIST. ORCHARD

PARCEL 10
56-PM-83

PROPOSED
100'
BUILDING
41,000 S.F.

PROPOSED
SINGLE ROOF ONLY
5,000 S.F.
FF=134.0

CATCH POINT

BENCH = 131.5

BENCH = 140.7

TOP = 140.8

EX. POND

PROPOSED COVERED
SEATING AREA

PROPOSED TEMPORARY EVENT
PARKING AREA

EXISTING
FUEL ISLAND
& CANOPY

PARCEL LINE

GEER ROAD

SCALE: 1"=40'

EXISTING
STORM DRAIN
BASIN

PROPOSED OVERFLOW
PARKING
135 STALLS

CATCH POINT

EXTEND EXISTING TURN
LANE TO ACCOMMODATE
EXISTING DRIVEWAY

24-5-42

PARCEL LINE

PARCEL 7
56-PM-83

EXISTING IRREVOCABLE
OFFER DEDICATION

PROPOSED AREA OF OVERFLOW
PARKING PER APPROVED PD 317

NOTE: AS FUTURE OUTPARCELS ARE
DEVELOPED AND EVENT PARKING
IS DISPLACED ADDITIONAL PARKING
AREA WILL BE MADE AVAILABLE WITHIN
THIS PARCEL.

EXIST. ORCHARD

PROPOSED TEMPORARY EVENT
PARKING AREA

FUTURE RV / CAMPGROUND
PER APPROVED PD 317

FUTURE STORAGE FACILITY
PER APPROVED PD 317

EXIST. ORCHARD

EXIST.
MAINT.
BLDG.

PARCEL 9
56-PM-83

5-5-82

PARCEL 8
56-PM-83

62'
50'
112'

PARKING SUMMARY:

PROPOSED AMPHITHEATER MAXIMUM CAPACITY 3,500 PEOPLE

REQUIRED:
1/3 PEOPLE 1,167

PROVIDED:
SPECIAL EVENT PARKING 1,167
OVERFLOW PARKING 135
TOTAL: 1,302

NOTE:
THIS DRAWING IS DIAGRAMMATIC TO DEPICT POSSIBLE IMPROVEMENTS AND IS FOR ILLUSTRATIVE PURPOSES ONLY. THIS DRAWING IS NOT BINDING AND DOES NOT REPRESENT ANY REQUIRED IMPROVEMENTS.

REVISION	DATE	DESCRIPTION	BY

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE (209) 545-3390 FAX (209) 545-3875 www.assceng.com

SITE PLAN TO ACCOMPANY USE PERMIT

PARK SITE DEVELOPMENT PLAN

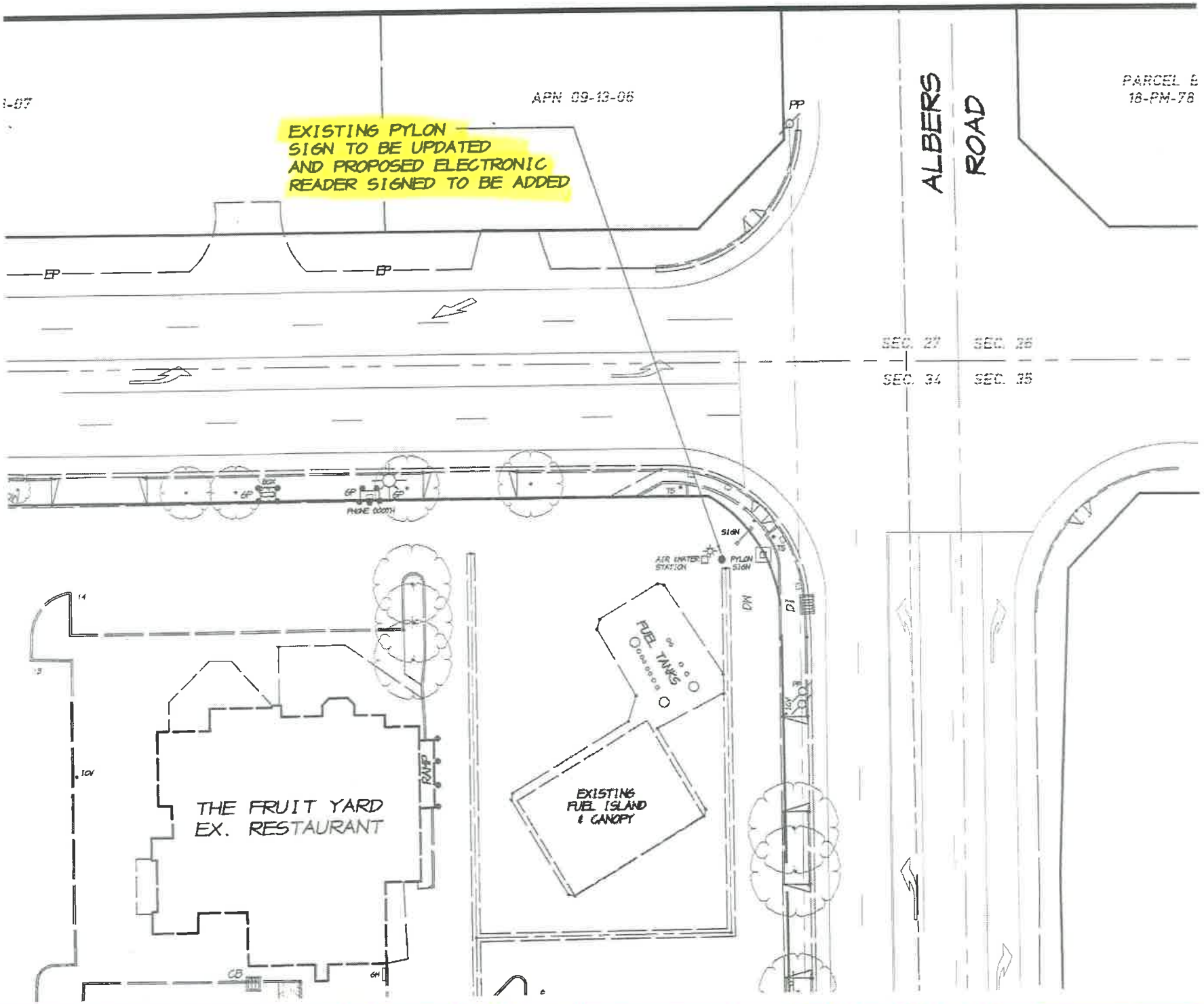
THE FRUIT YARD

STANISLAUS COUNTY CALIFORNIA

RYAN CARREL, R.C.E. 61619
DAVE SKIDMORE, L.S. 7126

DRAWN BY: J.F.
DATE: 1/20/17 7:54
SCALE: 1"=40'
DWG: 496A UP_SITE
CHECKED:
JOB #: 496A-15

SHEET 1
OF 1


EXISTING PYLON SIGN TO BE UPDATED AND PROPOSED ELECTRONIC READER SIGNED TO BE ADDED
APN 09-13-06
ALBERS ROAD
PARCEL 6
18-PM-78
SEC. 27
SEC. 26
SEC. 34
SEC. 35
PHONE BOOTH
AIR WATER STATION
PYLON SIGN
FUEL TANKS
EXISTING FUEL ISLAND & CANOPY
THE FRUIT YARD
EX. RESTAURANT
RAMP

OPTION #3

SIGN DESIGNS

Environmental Noise Analysis

The Fruit Yard Project

Stanislaus County, CA

BAC Job # 2015-129

Prepared For:

Associated Engineering Group

Attn: Jim Freitas
4206 Technology Drive, Ste. 4
Modesto, CA 95356

Prepared By:

Bollard Acoustical Consultants, Inc.

Paul Bollard, President

Revised December 30, 2016

BOLLARD
Acoustical Consultants

3551 Bankhead Road < Loomis, CA 95650 < Phone: (916) 663-0500 < Fax: (916) 663-0501 < BACNOISE.COM

Project History

Bollard Acoustical Consultants, Inc. (BAC) prepared a noise analysis for the Fruit Yard project dated August 31, 2015. On November 6, 2015, comments were received from Stanislaus County on the BAC noise analysis. The specific comments provided by the County in November 2015, are as follows:

1) A method for verifying compliance with the measures identified on page 12 needs to be incorporated into the project. The method may include a system for monitoring and recording sound levels for the duration of events in order to allow for enforcement. Simply identifying sound output limits without a means of monitoring is not sufficient.

2) The noise consultant should make an initial attempt to identify crowd noise based on previous work/other projects. Any error in the initial attempt will be captured when the evaluation of actual concerts occurs. If this type of initial attempt is not feasible, the analysis should clearly state such.

3) The noise analysis needs to define “large concert” and “small events” based on an actual measurable scale (such as crowd size).

4) The noise analysis provided only evaluates noise levels generated from the amphitheater. Unless all amplified noise will be limited to the amphitheater, an additional noise assessment needs to be conducted for amplified noise events to be conducted elsewhere on the site. A simple assumption that smaller events are expected to generate considerably lower sound levels then a concert event is not an adequate assessment and does not qualify in addressing the noise analysis needed for compliance with the 2008 approval.

5) The noise analysis provided only focuses on A-weighted sound levels expressed in dBA. An analysis of the bass or dBC levels generated from any sound event occurring in the park/amphitheater areas is needed. The bass "thump" is commonly the source of noise complaints.

6) The mapped contour lines provided in the noise analysis are very helpful and should be revised to incorporate the expanded evaluation of the park area.

7) The noise analysis needs to consider changes that may occur to intervening orchards which are identified as helping to absorb sound. Orchards are subject to removal and cannot be relied upon for long term sound mitigation. If the model used is accurate, what would the sound be without the orchards? Is mitigation needed to address changes in future conditions if the orchards are removed?

8) The noise analysis should clarify if the existing ambient noise environment factored in any nut harvesting activities, or other seasonal activities, that may have been occurring during the test period, but are not a constant factor.

9) The noise analysis needs to more specifically define the size and construction of the "sound wall along the rear of the stage" as identified on page 8 (of the original analysis).

Based on the County's November 2015 comments, additional analysis was conducted by BAC to expand the scope of the noise study beyond the original focus of the amphitheater, and to develop responses to the above comments provided by the County. The original noise study report was revised to include the supplemental information requested by Stanislaus County and the revised report date was February 3, 2016.

Following the release of the revised February 3, 2016 noise study, Stanislaus County commissioned j.c. brennan & associates (JCB) to prepare a peer review of that study. That peer review was completed with the results presented in a letter from JCB to BaseCamp Environmental dated November 15, 2016. That peer review letter is incorporated into this report by reference.

In response to the JCB peer review, BAC prepared a letter to Associated Engineering Group (Jim Freitas) dated December 30, 2016 which contains BAC's responses to the peer review comments. In addition, BAC revised the February 3, 2016 noise study to incorporate changes and to include additional information where appropriate based on the JCB peer review. This report, dated December 30, 2016, contains those revisions and additional information.

Introduction

The proposed Fruit Yard project site is located at the southwest quadrant of the intersection of Yosemite Boulevard (SR 132) and Geer Road, in unincorporated Stanislaus County, California. The project site address is 7948 Yosemite Boulevard, on Assessor's Parcel Number 009-027-004. The site is zoned Planned Development (PD) and is surrounded by agricultural land uses and dispersed rural residences. Figure 1 shows the project site location and surrounding land uses. Figure 2 shows the proposed amphitheater site plan.

Due to the presence of rural residences in the general project vicinity, the Stanislaus County project conditions of approval (COA) contain provisions with respect to allowable noise generation of the proposed amphitheater. The specific COA's which are applicable to noise are as follows:

8. An acoustical analysis shall be prepared in accordance with the Noise Element of the Stanislaus County General Plan prior to any outdoor use of amplified sound or blasting devices to insure noise levels do not exceed the maximum allowable noise levels as allowed by the Noise Element.

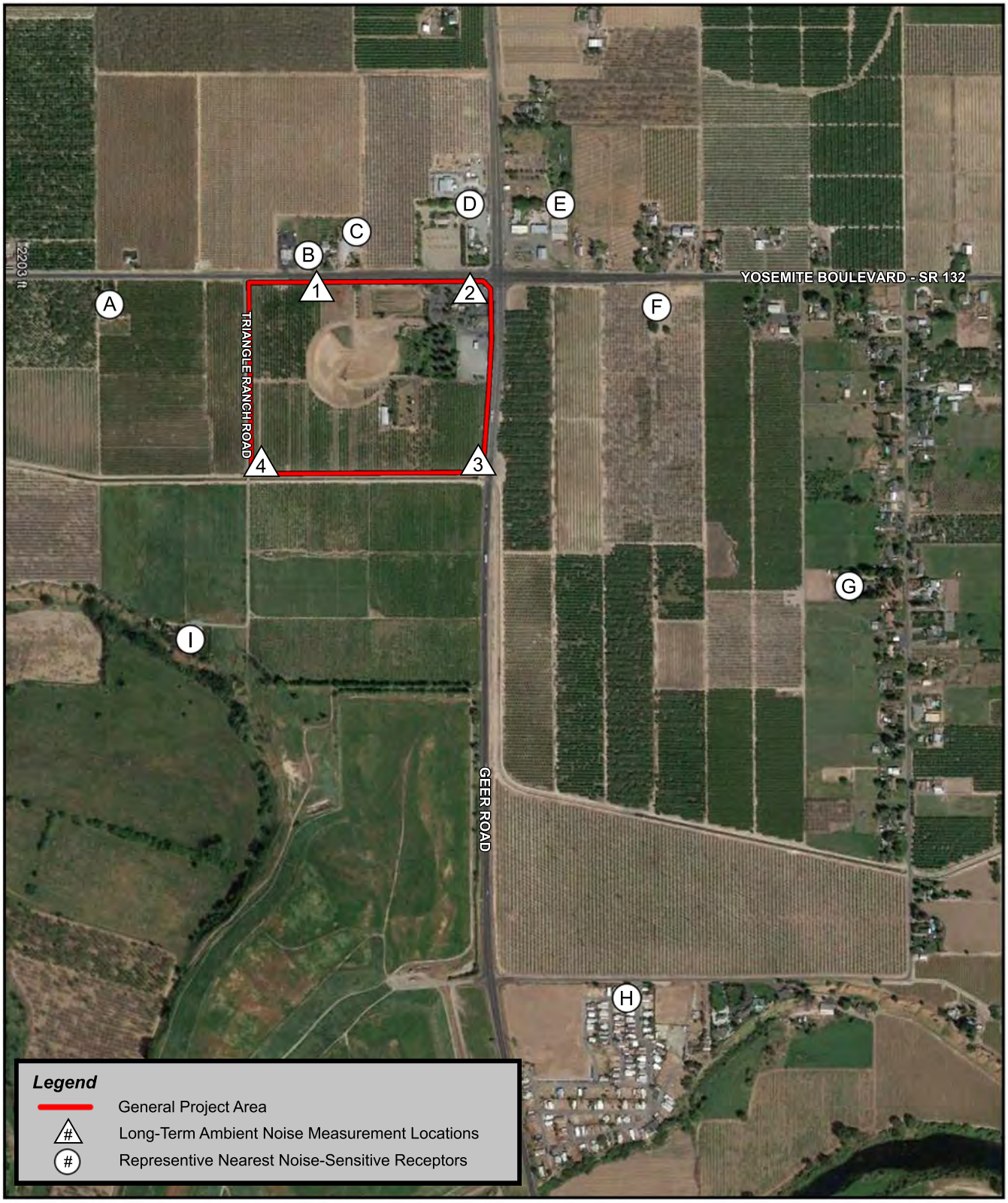
72. In accordance with the Noise Element of the Stanislaus County General Plan, noise levels associated with all on-site activities shall not exceed the maximum allowable noise levels as allowed by the Noise Element. The property owner shall be responsible for verifying compliance and for any costs associated with verification.

In response to these conditions, as well as November 2015 comments made by Stanislaus County, and November 2016 peer review comments made by j.c. brennan, Inc., the project applicant has retained Bollard Acoustical Consultants, Inc. (BAC) to prepare this revised analysis of potential noise impacts associated with the project.

Specifically, this analysis has been prepared to quantify pre-project ambient noise levels in the immediate project vicinity, to identify the appropriate Stanislaus County noise level standards, to predict amplified music sound levels occurring anywhere on the site at the nearest potentially affected noise-sensitive land uses to the project site, to predict changes in off-site traffic noise levels, to predict noise and vibration levels caused by project construction, and to compare those levels against the applicable noise and vibration standards of Stanislaus County, and to recommend additional noise control measures if it is determined that those standards would be exceeded. This report contains the results of the sound study.

Figure 1

Project Area, Monitoring Sites, and Representative Receptor Locations
The Fruit Yard Project - Stanislaus County, California



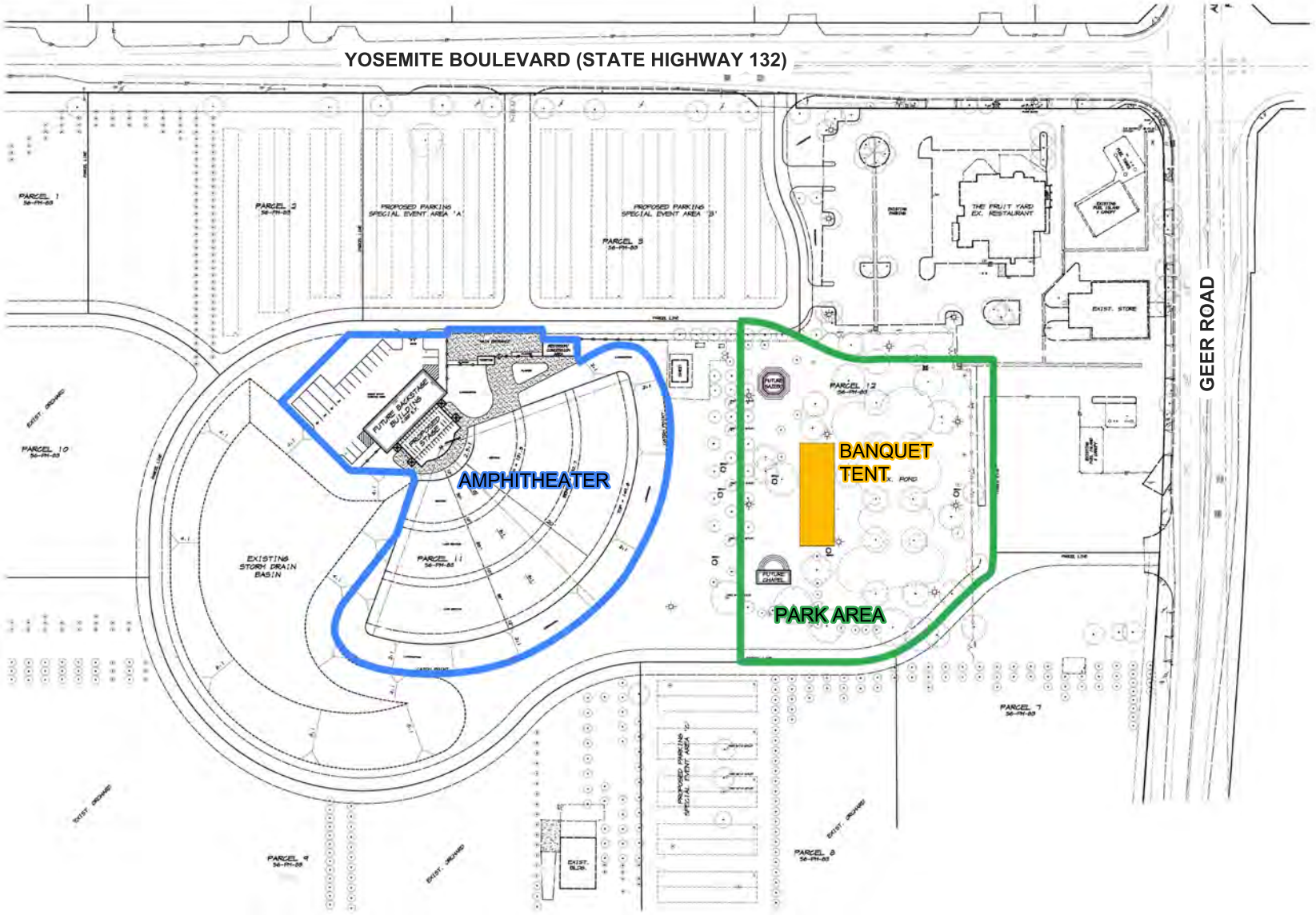
BOLLARD
Acoustical Consultants

Scale (feet)
0 600 1,200

Figure 2

Project Site Plan

The Fruit Yard Project - Stanislaus County, California



BOLLARD Acoustical Consultants

Acoustic Fundamentals & Terminology

Noise is often defined simply as unwanted sound. Loudness is the human impression of the strength of a sound pressure waves impacting the eardrum. The loudness of a noise does not necessarily correlate with its sound level.

The human ear does not perceive all frequencies equally. For sound levels in the normal range of human hearing, the human ear does not perceive very low and very high frequencies as well as mid-range frequencies. In other words, for two sounds of equal intensity in the normal range of human hearing, a mid-frequency sound is perceived as being louder than a low-frequency or very high frequency sound. This may seem counterintuitive as often times we may hear only low-frequency sounds, such as the bass of music being played in a nearby car or the sound of a distant concert. But this phenomenon is due to the fact that, due to their longer wavelengths, low-frequency sounds pass through barriers more efficiently than mid and high-frequency sounds, as well as the fact that low frequency sounds are not absorbed into the atmosphere as readily as higher frequency sounds (i.e. low frequency sound "carries" further over distance).

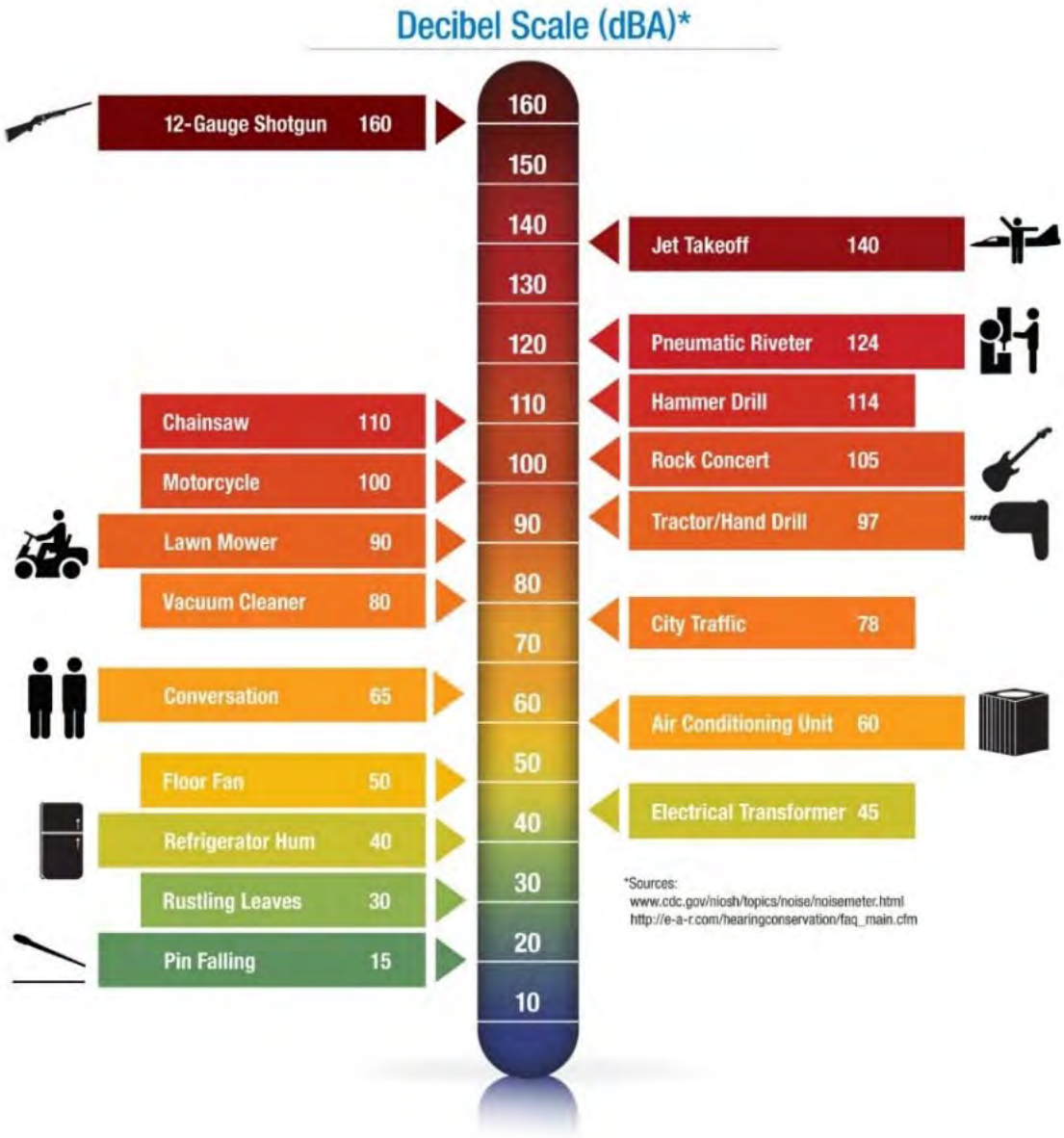
To account for the differences in perception of human hearing to different frequencies, the A-weighting scale was developed. A-weighted noise levels are basically linear, or flat, sound pressure levels shaped by a filter. The A-weighting filter adjusts the linear measurement to account for the way in which the ear responds to different frequencies of sound. Measurements in dBA are decibel scale readings that have been adjusted using the A-weighting filter to attempt to take into account the varying sensitivity of the human ear to different frequencies of sound. Researchers have generally agreed that A-weighted sound pressure levels (sound levels) are very well correlated with community reaction to noise for sound levels in the normal range of human hearing. Figure 3 provides examples of maximum sound levels associated with common noise sources.

At very high noise levels, the human ear perceives very low and very high frequency sounds better than at the more moderate ranges of noise levels commonly encountered in society. To better represent the loudness of very high noise levels, the C-weighting scale was developed. The C-weighting scale is quite flat, and therefore includes much more of the low-frequency range of sounds than the A scale. The effect of using a C-weighting scale vs. an A-weighting scale is that the C-weighting scale will report higher noise levels (due to less low-frequency sound being filtered as compared to the A-weighting filter).

The decibel notation used for sound levels describes a logarithmic relationship of acoustical energy, so that sound levels cannot be added or subtracted in the conventional arithmetic manner. For example, a doubling of acoustical energy results in a change of 3 decibels (dB), which is usually considered to be barely perceptible. A 10-fold increase in acoustical energy yields a 10 decibel change, which is subjectively like a doubling of loudness.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent sound level (L_{eq}), usually measured over a one-hour period.

Figure 3
Typical A-Weighted Sound Levels of Common Noise Sources



Stanislaus County Criteria for Acceptable Noise Exposure

Stanislaus County General Plan Noise Element

The Stanislaus County General Plan Noise Element establishes acceptable noise level limits for new projects affected by both transportation and non-transportation noise sources. The primary objective of the Noise Element is to prescribe policies that lead to the preservation and enhancement of the quality of life for the residents of Stanislaus County by securing and maintaining an environment free from excessive noise.

For stationary noise sources, such as the proposed amphitheater, Stanislaus County regulates the level of noise that may impact adjacent noise-sensitive uses. For this project, the evaluation period is considered to be the worst-case hour during which amplified music would be in use. Noise generated by the project which exceeds the County's noise exposure limits at the closest noise-sensitive uses would require noise mitigation. The County's General noise exposure limits applicable to this project are summarized in Table 1.

Table 1
Maximum Allowable Noise Exposure[1] for Stationary Noise Sources
Stanislaus County Noise Element of the General Plan

	Daytime Standard (7 a.m.-10 p.m.)	Nighttime Standard (10 p.m.-7 a.m.)
Hourly L_{eq}, dBA	55	45
Maximum Level (L_{max}), dBA	75	65

1. Each of the noise level standards specified in Table 1 shall be reduced by five (5) dBA for pure tone noises, noise consisting primarily of speech or music, or for recurring impulsive noises. The standards in Table 1 should be applied at a residential or other noise-sensitive land use and not on the property of a noise-generating land use. Where measured ambient noise levels exceed the standards, the standards shall be increased to the ambient levels.

Source: Stanislaus County Noise Element of the General Plan

As noted in the footnote to Table 1, a -5 dB adjustment is applied to the County's noise standards for sounds consisting of music. In addition, in areas with elevated ambient conditions, the noise standards are increased to match ambient conditions. While it is clear that a -5 dB offset to the Table 1 standards is warranted because the noise source is music, an ambient noise survey was required to determine if existing ambient conditions are sufficiently elevated so as to warrant increasing the noise level standards. Ambient conditions in the immediate project vicinity are described in the following section.

Stanislaus County Code (Noise Ordinance)

Section 10.46 of the Stanislaus County Code (Noise Ordinance) contains the County's noise standards for existing land uses. The Noise Ordinance standards are generally similar to, but not identical to, the County's General Plan noise standards described above. While the Noise Element standards shown in Table 1 are provided in terms of hourly average (Leq) and individual

maximum (Lmax) noise level limits, the Noise Ordinance standards contain more categories and, as a result, are more complex to apply. Specifically, the Noise Ordinance standards are graduated depending on the percentage of the hour the noise source in question is present at a given level. Table 2 shows the County Noise Ordinance exterior noise standards for residential uses.

Table 2
Exterior Residential Noise Standards
Stanislaus County Noise Ordinance

Jurisdiction	Metric	Minutes per Hour Sound is Present	Daytime (7 am – 10 pm)	Nighttime (10 pm – 7 am)
Stanislaus County	L_{max}	0	70	65
	L_{02}	1	65	60
	L_{08}	5	60	55
	L_{25}	15	55	50
	L_{50}	30	50	45

Stanislaus County Code Section 10.46.050

1. Pure Tone Noise, Speech and Music. The exterior noise level standards set forth in Table 2 shall be reduced by five dB(A) for pure tone noises, noises consisting primarily of speech or music, or reoccurring impulsive noise.

2. In the event the measured ambient noise level exceeds the applicable noise level standard above, the ambient noise level shall become the applicable exterior noise level standard.

Comparison of Tables 1 and 2 indicates that the Noise Ordinance nighttime standard of 65 dB Lmax is identical to the County Noise Element nighttime standard of 65 dB Lmax. However, the daytime maximum noise level standards differ by 5 dB, with the Noise Ordinance standard being lower (more restrictive).

Both the County Noise Element and Noise Ordinance require increasing the noise level standard equal to ambient conditions in cases where the measured ambient noise levels already exceed the County's noise standards. For this project, because measured daytime maximum noise levels exceeded the noise ordinance standards by a wide margin, both the Noise Element and Noise Ordinance maximum noise level limits would be increased to equal the ambient levels. (A detailed discussion of ambient conditions in the project vicinity follows in the next section). As a result, the maximum noise level allowed by both the Noise Ordinance and Noise Element would be identical for this project during both daytime and nighttime periods after adjusting for ambient conditions. Therefore, analysis of impacts associated with project-generated maximum noise levels using the County General Plan noise standards would ensure compliance with the County's maximum Noise Ordinance standards as well.

The most restrictive noise standard metric contained in the County's Noise Ordinance is the median, or L50, standards. The median, or L50, noise metric represents the noise level limit applicable to sound levels present for 50% of the hour. If a noise source is not present for 50% of the hour (30 minutes), it would not be captured by the L50 metric.

As shown in Table 2, the Noise Ordinance median daytime and nighttime noise standards are 50 and 45 dB L50, respectively. As shown in Table 1, the Noise Element average daytime and nighttime noise standards are 55 and 45 dB Leq, respectively. After accounting for the fact that median noise levels are typically 5 dB lower than average noise levels for time-varying noise sources (such as concerts), the differences between the County's General Plan Noise Element and County Code Noise Ordinance standards are essentially equivalent. However, because the Noise Ordinance median noise standard only applies to sources of noise which are present for at least 30 minutes out of the hour, whereas the General Plan Noise Element average noise level standard pertains to all noise generated during the hour, the County's General Plan noise standards could result in a more conservative assessment of project noise impacts than use of the County Noise Ordinance median noise level standards.

The County Noise Ordinance also contains intermediate noise standards for sound levels present for 1 minute, 5 minutes, and 15 minutes per hour. The purpose of these standards is to allow higher levels of noise at the nearest residences provided that noise is present for shorter durations of the hour. Because this analysis uses the hourly average and maximum noise level descriptors to bracket all of the noise generation of the project, this analysis is believed to provide a conservative assessment of project noise impacts at the nearest residences. Additional analysis of the intermediate Noise Ordinance metrics is not expected to result in either greater noise protection at the nearest residences or different findings from those reached in this analysis.

Discussion of Alternative Noise Standards for Amplified Music

Pursuant to the County's adopted noise level standards shown in Table 1, the original noise analysis focused on A-weighted sound levels expressed in dBA. As noted in Stanislaus County Comment #5 (see Page 1), the County is requesting that this revised report include an analysis of the bass (low frequency) levels generated from any sound event occurring in the park/amphitheater area using the C-weighting scale This request was made because the bass "thump" is commonly the source of noise complaints in the County.

As noted in the Acoustic Fundamentals and Terminology section of this report, sound levels measured using the C-weighting scale will always be higher than levels measured using the A-weighting scale. This is because the C-weighted filter is much flatter than the A-weighted filter. The result is that more low-frequency sound is included in a C-weighted measurement than in an A-weighted measurement. The numeric difference in measured A and C-weighted sound levels associated with amplified music at the project site will depend on the level of low-frequency sound generated by the sound systems utilized at the site.

To evaluate potential noise impacts of the proposed amplified music at the project site in terms of C-weighted levels, appropriate C-weighted noise standards must be considered. Stanislaus County recently conditioned an event center in the County to comply with C-weighted sound level limits *within* the entertainment venue. However, these limits were applied *inside* an enclosed venue whereas amplified music at the Project site will occur *outdoors*.

For guidance in developing *exterior* C-weighted noise level standards for this project, the City of Roseville Noise Ordinance was consulted. Section 9.24.110 of the Roseville Municipal Code

(Noise Regulation), contains exterior noise level limits for amplified sound in terms of A and C-weighting scales, as well as one-third octave band thresholds. Those standards indicate that the C-weighted noise level standards are 25 dB higher than the corresponding A-weighting standards for amplified music during both daytime and nighttime periods. For example, the daytime A-weighted standard for amplified music is 50 dBA and the daytime C-weighted noise standard is 75 dBC.

On the surface, the use of a C-weighted noise level standard that is 25 dB higher than the corresponding A-weighting noise standard might appear to indicate the C-weighted standard is less restrictive than the A-weighted standard. However, in the 31.5 hertz 1/3 octave frequency band, the difference between A and C weighting filters is 35 dB. Therefore, if the sound source in question contains considerable content in that low frequency band, the use of a C-weighted standard which is 25 dB greater than the A-weighted standard would result in a 10 dB *reduction* in very low frequency sound at the receiver. A 10 dB reduction is substantial, representing a halving of perceived loudness.

In BAC's professional opinion, the most effective means of controlling sound in the community resulting from amplified sound at the Project site would be to place logical limits on the level of the low-frequency sound originating at the source. Specific recommendations for such limits are included in the Conclusions and Recommendations section of this report. To provide additional protection to the residences located in the project vicinity, this revised noise study report also recommends C-weighted noise level standards applicable at the nearest residences as follows:

- Daytime: 80 dBC Leq
- Nighttime: 70 dBC Leq

As with the County's Noise Element and Noise Ordinance standards cited in Tables 1 and 2, the C-weighted noise level standards cited above should be adjusted upward or downward to reflect local ambient conditions at the nearest residences. Because the ambient noise survey originally conducted for this project was prepared to address compliance with the County's A-weighted General Plan Noise Element standards, C-weighted ambient noise level data has not been collected for this project. Such C-weighted data can be collected in the days immediately prior to and following the first amphitheater events, and the C-weighted noise level standards shown above can, and should, be adjusted accordingly based on C-weighted ambient conditions.

Existing Ambient Noise Environment

The ambient noise environment in the immediate project vicinity is primarily defined by traffic on Yosemite Boulevard and Geer Road, as well as by local agricultural-related activities. To generally quantify the existing ambient noise environment in the immediate project vicinity, continuous hourly noise level measurements were conducted at four locations surrounding the project site from Friday, June 19 through Sunday, June 21, 2015. The noise measurement locations are shown on Figure 1.

Larson-Davis Laboratories (LDL) Model 820 precision integrating sound levels meter were used to complete the noise level measurement survey. The meters were calibrated before use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy off the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

The noise level measurement survey results are summarized below in Table 3. The detailed results of the ambient noise surveys are contained in Appendix B in tabular format and graphically in Appendix C. The Table 3 noise level data is reported in terms of average (Leq) and maximum (Lmax) noise levels, as those are the descriptors contained within the County's General Plan Noise Element. However, median (L50) and 90th percentile (L90) noise levels are also included in Appendix B.

Table 3
Summary of Ambient Noise Measurement Results
Fruit Yard Project Vicinity

				Daytime (7 am - 10 pm)		Nighttime (10 pm - 7 am)	
Site	**Dist. to Roadway C/L**	**Date**	**L_{dn}**	**L_{eq}**	**L_{max}**	**L_{eq}**	**L_{max}**
1	100 ft. SR 132	Friday, June 19	67	65	96	59	83
		Saturday, June 20	66	63	90	58	81
		Sunday, June 21	64	62	93	56	83
		Average	**66**	**63**	**93**	**58**	**82**
2	125 ft. SR 132	Friday, June 19	71	66	94	64	92
	200 ft. Geer Rd.	Saturday, June 20	71	66	97	64	94
		Sunday, June 21	69	66	98	61	86
		Average	**70**	**66**	**96**	**63**	**91**
3	95 ft. Geer Rd.	Friday, June 19	67	64	93	60	83
		Saturday, June 20	66	62	91	60	82
		Sunday, June 21	65	61	90	57	86
		Average	**66**	**62**	**91**	**59**	**84**
4	1,300 ft. SR 132	Friday, June 19	58	58	94	49	67
	1,500 ft. Geer Rd.	Saturday, June 20	55	49	80	49	74
		Sunday, June 21	53	48	73	47	74
		Average	**55**	**52**	**82**	**48**	**72**

Source: Bollard Acoustical Consultants, Inc. 2015 ambient noise survey results.

The Table 3 data indicate that measured ambient noise levels in the immediate project vicinity currently exceed the Stanislaus County noise level standards shown in Table 1 at the existing residences located adjacent to Both Yosemite Boulevard and Geer Road (Representative Receptors A, B, C, D, E and F on Figure 1). As a result, the County noise standards for those receptors were adjusted upwards based on the ambient noise level data collected at Sites 1 and 2. At the residences which are more removed from the local roadways (Receptors G, H and I), ambient noise levels are lower. As a result, the County noise standards for those receptors were adjusted downwards based on the ambient noise level data collected at measurement Site 4.

It should be noted that, while Receptor B is located approximately the same distance from SR-132 as noise measurement Site 1, Receptor C is located 250 feet from the SR-132 centerline. Given this additional distance, ambient noise levels at Receptor C are predicted to be 5 dB lower than levels at Receptor B. A similar situation exists at Receptor E.

After adjusting the County noise standards to reflect local ambient conditions, a -5 dB offset was applied to the adjusted standards to account for the fact that the noise source in question consists of music. Table 4 provides the adjusted noise level standards for the two types of residential receptors in the immediate project vicinity.

Table 4
Stanislaus County Noise Standards Applied to this Project
After Adjustment for Elevated Ambient and Noise Source Consisting of Music

Receptor	Noise Metric	Adjusted Daytime Standard (7 a.m.-10 p.m.)	Adjusted Nighttime Standard (10 p.m.-7 a.m.)
A, B, D, F	Hourly L_{eq}, dBA	60	55
(near busy roadways)	Maximum Level (L_{max}), dBA	80	70
C, E	Hourly L_{eq}, dBA	55	50
(setback from roadways 250-350 feet)	Maximum Level (L_{max}), dBA	75	65
G, H, I	Hourly L_{eq}, dBA	50	40
(isolated from busy roads)	Maximum Level (L_{max}), dBA	65	55

Source: Stanislaus County Noise Element of the General Plan adjusted for ambient conditions and music noise source.

It should be noted that the dominant noise source during the ambient survey period was local traffic on SR-132 and Geer Road. This was particularly evident at measurement Sites 1-3, which represented existing residences located in the immediate vicinity of those roadways. Measurement Site 4 was removed from the local roadways, but distant roadway noise remained the major noise source affecting that location.

No orchard harvesting operations were observed by BAC staff during the noise survey in the vicinity of Measurement Site 4. Although the passing of farm vehicles near measurement Site 4 resulted in brief periods of elevated noise levels, Appendices C10-C12 indicate that average daytime noise levels at that location did not fluctuate in a manner consistent with nearby harvesting operations.

Project-Generated Amplified Music Analysis

Pursuant to Stanislaus County Comments 3 and 4 shown on Page 1, this revised analysis includes an evaluation of the sound generated by larger concerts and events held at the amphitheater as well as smaller events held in the park area. A separate discussion of potential impacts of amplified music played at both locations follows.

Amplified Music Originating in Amphitheater

The proposed amphitheater site plan is shown on Figure 2. That figure illustrates that the amphitheater stage will face southeast, away from the nearest existing residences located immediately opposite the project site on Yosemite, Boulevard. With the exception of stage monitors, the speakers used during a concert at this venue would similarly face towards the southeast. Due to the directionality of speakers, this measure will substantially reduce the noise exposure at existing residences to the north of the project site. In addition, the project applicant is proposing a solid wall along the rear of the stage, which would further attenuate sound from both main and monitor speakers in the northerly direction.

The earthen berm which forms the amphitheater, is estimated to be approximately 20 feet tall around the rear of the amphitheater. See Appendix D for photographs of the existing site grading which indicate the amphitheater slope. This earthen berm will provide substantial shielding of music noise in the south and east directions.

To quantify the sound propagation from the amphitheater during a concert event, BAC utilized the SoundPLAN 7.1 model. SoundPlan is a state-of-the-art, three-dimensional, sound propagation model. Inputs to the model included site aerial photography, existing earthen berm elevations, the proposed sound barrier at the rear of the stage, and inputs pertaining to speaker locations and sound output of those speakers. Atmospheric conditions modeled using SoundPlan consisted of a cool evening/nighttime temperature of 60 degrees F and relative humidity of 70%. While atmospheric conditions will vary, the atmospheric inputs to the SoundPlan model are considered to be reasonably representative of conditions which will be present during evening/nighttime concert conditions at the amphitheater.

To provide a reasonably worst-case assessment of amphitheater sound generation, reference sound pressure levels of 90 dBA Leq and 100 dBA Lmax were assumed at a distance of 100 feet from the front of the stage. The results of the SoundPlan Model run are shown in Figure 4a for average (Leq) sound levels, and in Figure 5 for maximum (Lmax) noise levels. Figure 4b shows predicted amphitheater music sound levels with worst-case modelled sound levels from crowd noise superimposed. Crowd noise is discussed in the following section of this report.

The modeling results shown on Figure 4a indicate that the average music noise levels generated during concert events would range from approximately 29 to 51 dB Leq at the nearest residences. The modeling results shown on Figure 5 indicate that the maximum noise levels generated during concert events would range from approximately 39 to 61 dB Lmax at the nearest residences.

The SoundPlan results shown in Figures 4 and 5 indicate that, with the exception of Receptor I, project noise generation would be acceptable at all of the nearest residential receptor locations relative to the adjusted noise level standards shown in Table 4.

At the Residence represented by Receptor I, the predicted average and maximum noise levels are predicted to be approximately 52 dB Leq and 62 dB Lmax, respectively. While these predicted noise levels would exceed Table 4 noise standards, the SoundPlan Model did not account for the considerable sound absorption provided by the approximately 1,000 feet of intervening orchards. As a result, the Figure 4 and 5 noise levels are predicted to be overstated at Receptor I by approximately 10 dB.

Table 5 shows the predicted music sound levels at each of the sensitive receptor locations shown on Figure 1, and the relationship of those levels to the Stanislaus County Noise Element standards. Because the adjusted maximum noise level standards are 15-20 dB higher than the adjusted average noise level standards, and because maximum sound levels generated during concert events are predicted to be 10 dB higher than average levels, compliance with the average noise level standards would result in compliance with the maximum noise level standards as well. Therefore, the focus of the Table 5 data is on predicted average sound levels at the nearest residences.

Table 5
Predicted Music Sound Levels at Nearest Residences Relative to Adjusted Noise Standards
Fruit-Yard Amphitheater Events

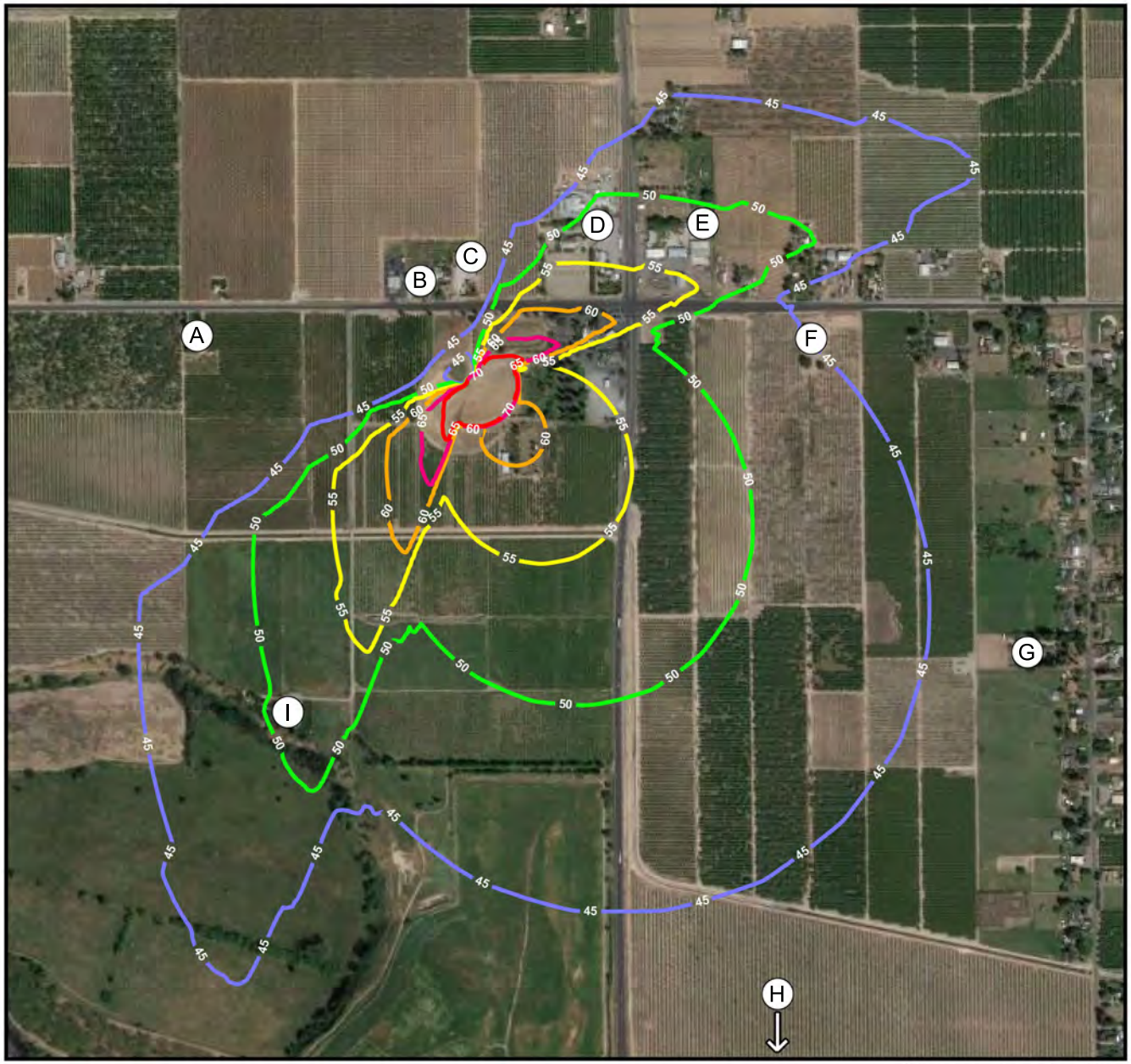
Receptor	Predicted Music Level Leq, dBA	Day / Night Leq Standard, dBA	Exceedance of Standards?
A	29	60 / 55	No
B	37	60 / 55	No
C	40	55 / 50	No
D	42	60 / 55	No
E	51	55 / 50	Nighttime (1 dBA)
F	47	60 / 55	No
G	44	50 / 40	Nighttime (4 dBA)
H	42	50 / 40	Nighttime (2 dBA)
I[1]	42	50 / 40	Nighttime (2 dBA)

Source: BAC using SoundPlan Noise Prediction model with directional source level of 90 dBA Leq at 100 feet from speakers.
1. An additional 10 dBA was subtracted from SoundPlan model results to account for attenuation provided by intervening orchards.

The Table 5 data indicate that sound generated by music during amphitheater events would be satisfactory relative to the County's adjusted daytime noise level standards, but that it could exceed the County's nighttime noise level standards at 4 of the nearest representative residential receptor areas. As a result, amphitheater events should be limited to daytime hours (7 am to 10 pm) until it can be determined through monitoring of daytime concerts that compliance with the recommended nighttime noise level standards can be achieved.

Figure 4A

The Fruit Yard Project
Stanislaus County, California
Concert Noise Level Contours



Noise contours created with SoundPLAN 7.1

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200
feet

Leq, dBA

	=	45
	=	50
	=	55
	=	60
	=	65
	=	70

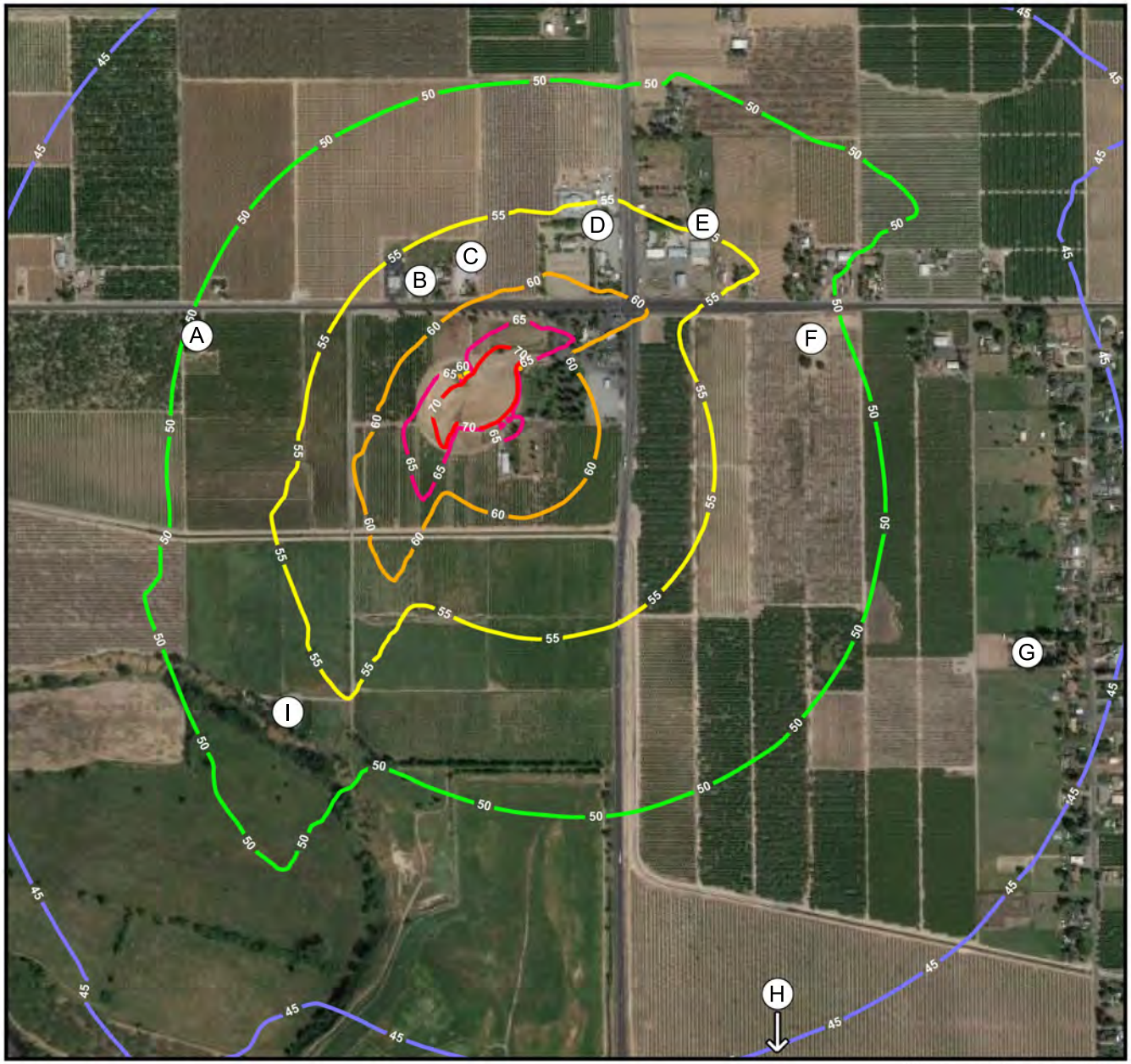
Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Average noise level contours
- Based on reference noise level of 90 dB Leq 100 feet from stage

Figure 4B



Noise contours created with SoundPLAN 7.1

The Fruit Yard Project
Stanislaus County, California
Amphitheater with Crowd
Noise Level Contours

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200
feet

Leq, dBA

= 45
= 50
= 55
= 60
= 65
= 70

Legend

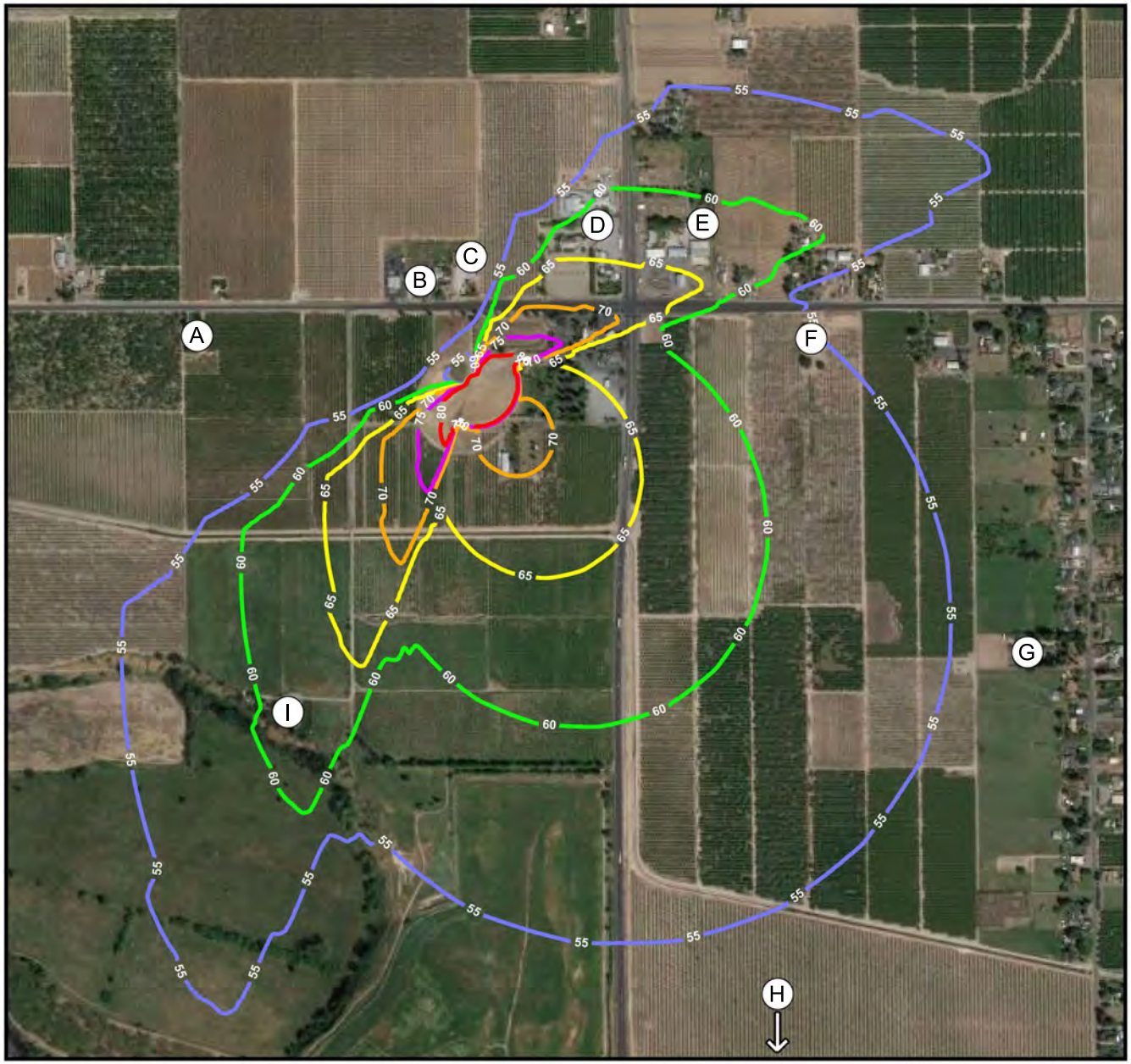
(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Average noise level contours
- Based on amphitheater reference noise level of 90 dB Leq 100 feet from stage
- Based on crowd area noise level of 83 dB per square meter

Figure 5

The Fruit Yard Project
Stanislaus County, California
Concert Noise Level Contours



Noise contours created with SoundPLAN 7.1

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200 feet

Lmax, dBA

- = 55
- = 60
- = 65
- = 70
- = 75
- = 80

Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Maximum noise level contours
- Based on reference noise level of 100 dB Lmax 100 feet from the stage

To check the accuracy of the SoundPlan model in predicting amphitheater-generated sound levels at the nearest receptors, an event simulation was conducted at the project site on Thursday, June 18, 2015. The methodology and results of that simulation are provided in the following section of this report.

Amphitheater Event Simulation

To check the accuracy of the SoundPlan Model in predicting amphitheater sound levels at the nearest potentially affected receptor locations, BAC conducted an event simulation at the amphitheater site on June 18, 2015. The simulation consisted of playing amplified music at high sound levels through four (4) Yamaha MSR 400 watt concert speakers with built-in amplifiers and a Yamaha MSR 800 watt sub-woofer with built in amplifier, using an MP3 player as the source. The sound system was placed at the graded stage area of the proposed amphitheater with the speakers oriented to the southeast. Appendix D shows photographs of the event simulation speaker array.

While sound was played through the sound system to a reference level of 85-90 dBA at 100 feet from the speakers, noise level measurements were conducted at eight (8) locations in the vicinity of the amphitheater. Those locations included the following:

- A reference location 100 feet from the speaker array.
- Three locations on top of the amphitheater berm 225 feet from the speaker array corresponding to the left, middle, and right side limits of amphitheater seating.
- A position directly south of the amphitheater berm.
- A position at long-term noise monitoring Site 1 shown on Figure 1.
- A position adjacent to Receptor H shown on Figure 1.
- A position adjacent to Receptor I shown on Figure 1.

The results of the simulation are as follows:

- The amphitheater berm was measured to reduce music levels by approximately 15 dB at the position directly behind (south of) the berm relative to sound levels measured on top of the berm with direct line of sight to the speakers. This is generally consistent with the SoundPlan model predictions. Appendix E-1 shows the results of the simulation at this location directly shielded by the amphitheater berm.

- The amphitheater berm orientation is in the optimum direction to reduce event-related sound levels at the largest concentration of existing residences on Weyer Road and beyond. Without the amphitheater berm, event sound levels in that direction would be considerably higher at those residences (approximately 10+ dB higher).

- After considering the proposed sound barrier at the rear of the sound stage (which was not present during the simulation), sound levels measured at Receptor B, the nearest residence on the north side of Yosemite Boulevard (SR-132), were consistent with the simulation results. The specific barrier modeled for this assessment was the backstage building identified as being 100 feet wide. BAC assumed this building would be 20 feet tall relative to the stage.

- At Receptor I, which is the nearest residence to the southwest of the amphitheater, sound levels measured during the event simulation were nearly inaudible, and were approximately 10 dB lower than levels predicted using the SoundPlan Model. This is believed to be due to the considerable absorption of sound provided by the intervening 1,000 feet of orchards between the amphitheater and this receptor. Appendix E-2 shows the results of the amphitheater simulation for this receptor. As a result of this shielding, a -10 dB offset was applied to levels predicted at Receptor I, resulting in projected compliance with the County's daytime noise standards at this receptor.

  In Stanislaus County Comment #7 on page 1 of this report, the County requested that the analysis evaluate potential noise impacts should intervening orchards be removed. If the intervening orchards are removed at some point in the future, the -10 dB of attenuation identified during the simulation would no longer apply, and additional analysis of potential noise mitigation measures would be required to ensure compliance with the applicable County noise standards at Receptor I.

- At Receptor H, which represents the mobile home park at the southeast corner of Jantzen Road and Geer Road, the simulation sound levels were completely inaudible. Based on this finding, exceedance of the County's noise standards is not anticipated at this location despite the reported 2 dB exceedance of the nighttime noise level limit for this receptor in Table 5.

Amphitheater Crowd Noise Evaluation

As stated previously, the proposed amphitheater has been oriented such that the stage speakers would be directed away from the nearest residential receptors location on the north side of State Route 132 (Yosemite Boulevard). While the amphitheater speakers would generally face southeast, amphitheaters crowds would face predominately northwest, towards the residences on the north side of SR 132.

Crowd noise would be generated by a combination of patrons clapping and verbally expressing their appreciation for the performers (cheering). The level of crowd noise received at the existing residences located on the north side of SR 132 (Receptors B and C on Figure 1), would depend on the size and enthusiasm of the crowd, as well as the duration of the hour during which the crowd is clapping and cheering.

Regarding crowd cheering, the *Handbook of Noise Control* (Harris, Acoustical Society of America, 1998), provides average A-weighted sound levels of speech for different vocal efforts (Table 16.1, p16.2.). Those vocal efforts are categorized as casual, normal, raised, loud and shouting. BAC utilized these reference levels in the computations of crowd noise at the nearest potentially impacted residences.

During a normal event such as a concert, it is BAC's experience that the crowd noise is intermittent, peaking in intensity at the beginning of a popular song, and at the end of nearly every song. The percentage of the hour during which a crowd is cheering/applauding is also a function of the duration of the song being played and the duration of time between songs. For a

conservative estimate of crowd noise generation, this analysis assumed the crowd would be cheering/applauding during approximately 10% of a given hour during a concert performance. The volume level of cheering patrons during that time is expected to vary from “raised” to “loud” to “shouting”.

Based on a maximum capacity crowd of 3,500 patrons in the amphitheater and the above-described assumptions, BAC computed a worst-case hourly noise level of 57 dBA Leq the nearest residence, located approximately 750 feet to the northwest of the center of the amphitheater seating area. This level does not include shielding by other patrons or the building at the rear of the stage which will serve as a sound barrier. After consideration of that shielding, BAC estimates that worst-case hourly average crowd noise level would be approximately 55 dB L_{eq} or less at the nearest residences to the north.

BAC file data for patrons clapping also varies depending on the intensity of the applause. Applause generally ranges from “polite” to “normal” to “enthusiastic”. At a concert, applause normally falls within the normal to enthusiastic categories. Assuming comparable durations of clapping as cheering during a given hour of a concert event, the computed noise level at the nearest residence from crowd applause also computed to be 55 dB L_{eq} or less.

Combined level for worst-case crowd cheering and applause was conservatively modelled to be 58 dBA Leq or less at the nearest residences to the north. Actual daytime combined crowd cheering and applause sound levels are predicted to be approximately 55 dBA Leq at the nearest residences to the north. This level would be considered satisfactory relative to County daytime noise criteria but would exceed the County’s nighttime noise standards at those nearest residences to the north. As a result, initial daytime amphitheater events should be monitored to determine more precisely the range of crowd noise levels which can be expected prior to the allowance of nighttime events. Depending on the results of that monitoring, it may be necessary to limit events with higher numbers of patrons to daytime hours to ensure crowd noise does not exceed acceptable limits. Once concert events have been held at the amphitheater site, noise level data collected during the event can be correlated with crowd sizes to confirm these assumptions.

Amplified Music Originating in the Park Area

According to project representatives, larger events generally consisting of crowd sizes of 500 or more would typically be held in the amphitheater, whereas smaller events with crowd sizes below 500 would typically be held in the park area.

The park area is shown on Figure 2. That figure also shows a proposed banquet tent located in the central portion of the park, just west of the lake feature. It is likely that receptions with amplified music would occur within the banquet tent, but the park area could accommodate amplified music at other locations as well. It was assumed that the speakers could be positioned in a variety of locations and oriented to the north, south, east or west.

To quantify the sound propagation from the park area during an amplified sound event, BAC utilized the same SoundPLAN 7.1 model previously used to model amphitheater sound levels.

Given the smaller size of the park events relative to events held in the amphitheater, a reference sound pressure level of 75 dBA Leq was assumed at a distance of 100 feet from the front of the speakers. This level of sound is consistent with that generated during a wedding reception or small concert. The results of the SoundPlan Model run are shown in Figures 6-9 for speaker positions facing north, east, south and west, respectively. The SoundPlan model runs also conservatively assume a crowd of 500 persons facing directly opposite the speaker orientation.

Figure 6

Noise contours created with SoundPLAN 7.1

The Fruit Yard Project
Stanislaus County, California
Park Area Noise Level Contours

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200 feet

Leq, dBA

= 45
= 50
= 55
= 60
= 65
= 70

Legend

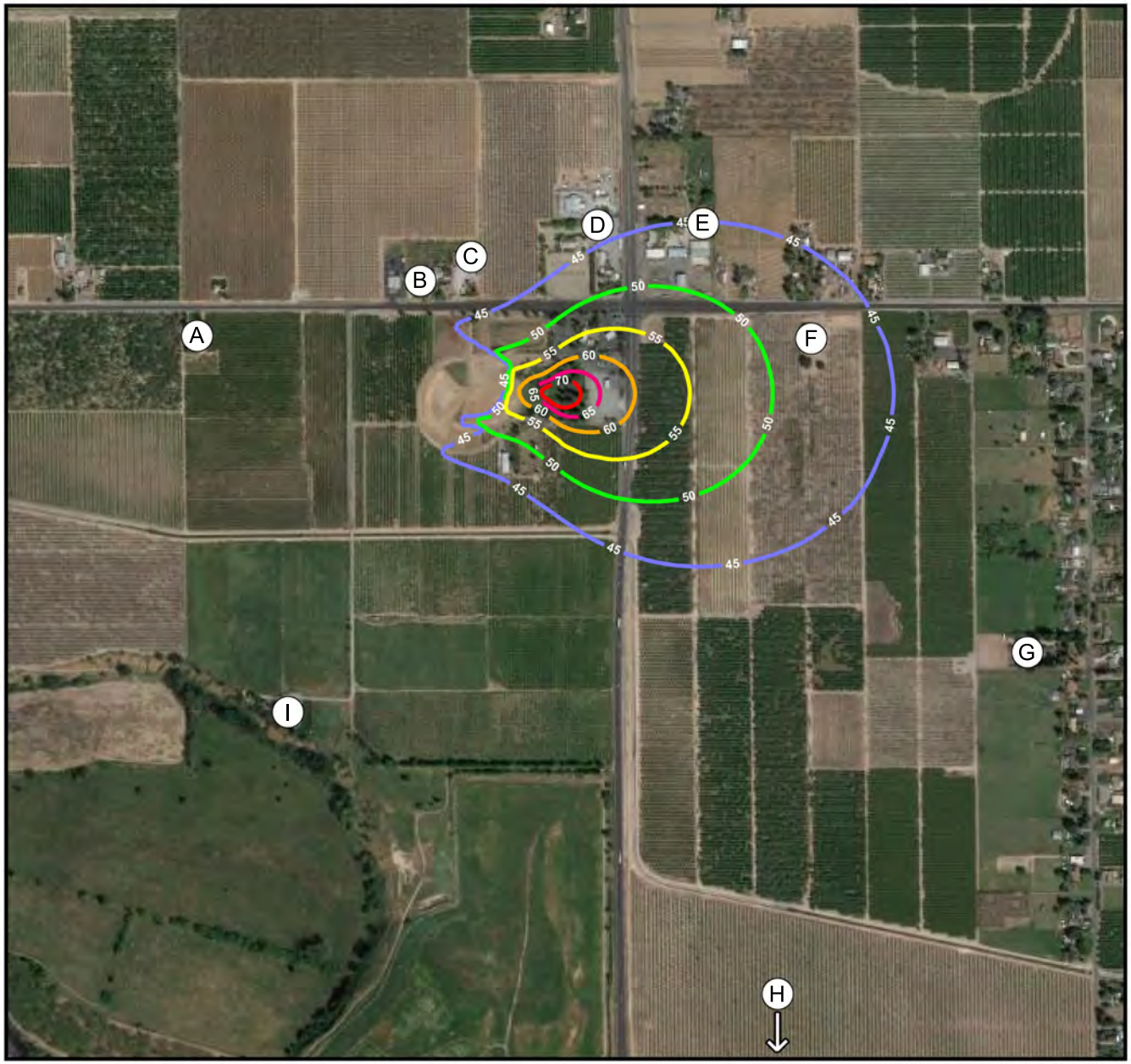
(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Park/banquet area sound system
- Speakers facing north
- Average noise level contours
- Based on reference noise level of 75 dB Leq 100 feet from stage
- Plus 500 person crowd

Figure 7

The Fruit Yard Project
Stanislaus County, California
Park Area Noise Level Contours



Noise contours created with SoundPLAN 7.1

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200 feet

Leq, dBA

= 45
= 50
= 55
= 60
= 65
= 70

Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Park/banquet area sound system
- Speakers facing east
- Average noise level contours
- Based on reference noise level of 75 dB Leq 100 feet from stage
- Plus 500 person crowd

Figure 8

The Fruit Yard Project
Stanislaus County, California
Park Area Noise Level Contours

Noise contours created with SoundPLAN 7.1

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200 feet

Leq, dBA

= 45
= 50
= 55
= 60
= 65
= 70

Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Park/banquet area sound system
- Speakers facing south
- Average noise level contours
- Based on reference noise level of 75 dB Leq 100 feet from stage
- Plus 500 person crowd

Figure 9

The Fruit Yard Project
Stanislaus County, California
Park Area Noise Level Contours

Noise contours created with SoundPLAN 7.1

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200 feet

Leq, dBA

= 45
= 50
= 55
= 60
= 65
= 70

Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Park/banquet area sound system
- Speakers facing west
- Average noise level contours
- Based on reference noise level of 75 dB Leq 100 feet from stage
- Plus 500 person crowd

The modeling results shown on Figures 6-9 indicate the directionality of sound speakers as well as the directionality of the crowd noise. Evaluation of those figures indicate that the average noise levels generated during small amplified music events in the park area would be satisfactory relative to the Table 4 noise standards are all of the nearest residences to the project site during both daytime and nighttime hours. Figure 8 shows that the south-facing speaker orientation would result in the lowest off-site noise levels. Therefore, if small event sound levels are to exceed 75 dBA Leq at a reference distance of 100 feet, a south or southwest-facing speaker orientation is recommended.

As with amplified music generated at the amphitheater area, low frequency sound generated during amplified music events within the park area is also a concern to Stanislaus County. Specific recommendations for control of low-frequency sound are provided in the following section.

Increases in Traffic Noise Levels Resulting from the Project

During events held at either the amphitheater or park area, traffic volumes on the local roadway network would increase. BAC utilized traffic data provided by the project transportation consultant with the Federal Highway Administration Traffic Noise Prediction Model (FHWA-RD-77-108) to evaluate changes in both 24-hour weighted average sound levels (Ldn) and peak hour average sound levels (Leq). FHWA Model Inputs are provided in Appendix F.

Table 6 shows the predicted worst-case traffic noise generation of the project based on maximum amphitheater trip generation in terms of both Ldn and Leq.

The Table 6 data indicate that traffic noise levels would increase on the local roadway network from 0.2 to 0.9 dB L_{dn}, and 1.1 to 3.3 dB L_{eq} during the peak hour. Although the Table 6 data is presented at a distance of 100 feet from the roadway centerline, which represents the approximate exposure of the nearest residences to the local roadway network, the increases shown in Table 6 would be applicable at more distant residences as well.

Relative to baseline traffic noise levels without the project, the short-term project-related traffic noise increases on the days of large amphitheater events are predicted to be less than significant. Furthermore, smaller events held at the park area would generate considerably lower increases in both daily and average traffic noise levels, and would similarly be considered less than significant.

Although future (cumulative) traffic data was not available, it is logical to conclude that future baseline traffic volumes on the local roadway network would be higher than existing volumes due to general growth in the region. Since the Table 6 data includes evaluation of worst-case project trip generation during a large amphitheater event, a similar increase in future project traffic noise levels resulting from large amphitheater events is not anticipated. As a result, the relative increase of project traffic noise generation would be smaller when compared to a greater future baseline. Therefore, the project's contribution to the future traffic noise environment is not expected to be cumulatively considerable.

Table 6
Existing vs. Existing Plus Project Traffic Noise Levels
(100 feet from roadway centerlines)
The Fruit Yard – Stanislaus County, California

		Day/Night Average Level (Ldn)				Peak Hour Average Level (Leq)			
Roadway	**Segment**	**Existing**	**Existing + Project**	**Change**	**Substantial Increase?**	**Existing**	**Existing + Project**	**Change**	**Substantial Increase?**
Yosemite Blvd	West of Project Site	61.2	62.1	0.9	No	51.2	54.5	3.3	No
Yosemite Blvd	East of Project Site	62.9	63.1	0.2	No	52.9	54.0	1.1	No
Albers Road	North of Project Site	63.7	63.9	0.3	No	53.7	54.9	1.2	No
Geer Road	South of Project Site	64.1	64.4	0.3	No	54.1	55.4	1.4	No

Sources: FHWA-RD-77-108, project traffic study, and Bollard Acoustical Consultants, Inc.

In addition to indicating that the project would not result in a significant noise level increase on the local roadways, Table 6 also indicates that the project would not result in exceedance of the County's traffic noise standards at the nearest residences where those standards are not already exceeded.

Noise and Vibration Generated During Project Construction

Construction Noise Levels

During the construction of the proposed project, noise from construction-related activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would vary by site, but heavy construction equipment would generate maximum noise levels, as indicated in Table 7, ranging from 73 to 85 dB L_{max} a distance of 50 feet. The level of project construction noise exposure received at existing noise-sensitive land uses in the project vicinity will depend primarily on the proximity of the construction activities to those residences. It should be noted that the majority of the site grading and amphitheater berm construction has been completed. As a result, substantial construction noise associated with heavy earthmoving equipment is not anticipated.

The nearest existing sensitive uses (residences) to the project site are located on the north side of SR-132 (Receptors B and C on Figure 1). Those residences are located approximately 125+ feet from onsite construction activities. At that distance, the levels shown in Table 7 would be reduced by approximately 8 dB based on spherical spreading of sound alone. Resulting maximum noise levels would range from approximately 65 to 77 dB Lmax. This range of maximum noise levels is well below measured maximum noise levels resulting from existing traffic on SR-132 (See Table 1 and Appendix B & C data), so adverse noise impacts associated with project construction are not anticipated provided construction activities are limited to daytime hours.

Table 7
General Construction Equipment Noise Levels at 50 feet

Type of Equipment	L_{max}, dBA
Backhoe	80
Compactor (ground)	80
Compressor (air)	80
Concrete mixer truck	85
Concrete pump truck	82
Concrete saw	90
Crane (mobile or stationary)	85
Dozer	85
Dump truck	84
Excavator	85
Flatbed truck	84
Front end loader	80
Generator (25 kilovolt-amperes [kVA] or less)	70
Generator (more than 25 kVA)	82
Grader	85
Jackhammer	85
Paver	85
Pneumatic tools	85
Pumps	77
Scraper	85
Tractor	84
Vibratory concrete mixer	80
Welder/Torch	73

Source: Federal Highway Administration's Construction Noise Model, V1.1, December 8, 2008.

Construction Vibration Levels

To quantify reference vibration levels generated by heavy equipment typically utilized in construction, BAC vibration measurement data pertaining to heavy equipment were utilized. Table 8 summarizes that vibration data.

Table 8
Reference Heavy Equipment Vibration Levels

Vibration Source	Measurement Distance, ft.	Peak Particle Velocity (in/sec)
Bulldozers	35	0.0209
Front-Loaders	100	0.0047
Haul Truck	100	0.0062
Water Truck	100	0.0070
Pneumatic Tools	50	0.0187

Source: Bollard Acoustical Consultants, Inc.

The nearest residences would be located approximately 125+ feet from project construction activities. At that distance, construction vibration levels are predicted to be well below 0.01 inches per second, which would be imperceptible. As a result, no adverse vibration impacts associated with project construction are identified for this project.

Conclusions and Recommendations

This analysis concludes that events at the Fruit Yard Amphitheater and Park Area utilizing amplified music can comply with the applicable Stanislaus County noise standards with appropriate noise mitigation measures incorporated into the project design and operation. The following specific recommendations are provided to ensure the project is both within compliance with those County noise regulations and to reduce the potential for nuisance noise complaints associated with audible low-frequency sound even if it is within compliance with County noise standards:

Amphitheater Event Recommendations

1. Amplified music events at the amphitheater should be limited to daytime hours (ending prior to 10 pm) until it can be demonstrated through noise level measurements of concert events that nighttime operations could occur without resulting in adverse nighttime noise impacts. BAC recommends that the first two large concerts held at the amphitheater be limited to daytime hours (music ending at or before 10 pm) to provide an opportunity to evaluate facility noise generation, including crowd noise, at the nearest residences during the less sensitive daytime hours.

2. To ensure compliance with County noise standards, amphitheater sound system output should be limited to an average of 90 dBA Leq averaged over a 5 minute period and a maximum of 100 dBA Lmax at a position located 100 feet from the Amphitheater stage.

3. To control low-frequency sound in the surrounding neighborhood, C-weighted sound levels should be limited to 100 dBC Leq averaged over a 5 minute period and a maximum of 110 dBC Lmax at a position located 100 feet from the Amphitheater stage. In addition,

amplified music shall be limited to an average of 85 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

4. In addition to the noise level limits shown in Table 4, daytime and nighttime C-weighted noise level limits of 80 dBC Leq and 70 dBC Leq should be applied at the nearest residences, respectively. These standards should be adjusted upwards or downwards as appropriate following collection of C-weighted ambient noise level data near the existing residences immediately before and after the first 2 large amphitheater events.

5. During the first 2 large concerts held at the amphitheater, noise levels should be monitored by a qualified acoustical consultant. The monitoring should be conducted continuously from the sound stage, with periodic noise monitoring near the closest residences in all directions surrounding the amphitheater. The noise measurements should include the sound check prior to the concert so the event promoters understand the noise thresholds to be satisfied during the concert event. The purpose of the measurements is to verify compliance with the project's noise standards. If the measurement results indicate that the music levels exceed the appropriate noise standards, additional sound controls should implemented prior to the following concert. Such measures could include reducing the overall output of the amplified sound system, relocating and/or reorienting speakers, use of acoustic curtains along the sides of the speakers to further focus the sound energy into the amphitheater seating area, and limiting amplified music to before 10 pm.

6. Portable sound level meters should be procured and used at the soundstage as well as at the nearest residences to periodically monitor the sound system output during all subsequent amphitheater events. Only by being aware of the instantaneous sound levels can the sound technicians make the appropriate adjustments to the sound mixing board. The meter should meet a Type/Class 1 or 2 compliance and be capable of monitoring in both A and C weighting Scales. In addition, the meter shall be fitted with the manufacturer's windscreen and calibrated before use. A cost-effective option for noise monitoring equipment would be an iOS option available in combination with an iPad/iPhone using microphone and acquisition hardware from AudioControl and software from Studio Six Digital. SSD software would include the AudioTools and several in-app purchases including SPL Graph and SPL Traffic Light.

7. If the results of the initial event noise monitoring is determined to approach or exceed the noise standards developed for this project, a permanent noise monitoring system should be installed at the mixing board area and used to monitor all subsequent amphitheater events until such a time as it is determined that adequate noise controls have been implemented to render permanent monitoring unnecessary.

8. For simplification and to minimize equipment costs, sound level limit triggers shall be set to Leq, C-weighting. The sound technician shall locally check both C-weighted and 1/3-octave band results during sound check prior to an event to establish system gain limits and ensure compliance with the specified limits.

9. The amphitheater owner should make it very clear to event producers what the sound level limits are at the sound stage and the time at which music is required to cease. Suitable measures should be implemented to both ensure the limits are maintained and penalties established if producers fail to comply with the noise level limits.

10. Although sound generated by concert activities at the amphitheater are predicted to be satisfactory relative to Stanislaus County noise standards following implementation of the recommendations cited herein, music will likely be audible at some of the nearest residences to the project site at times. This audibility will vary depending on atmospheric conditions and size of concert, but audibility is not a test of significance for noise impact. Nonetheless, a mechanism should be developed whereby residents concerned about concert sound levels can reach a Fruit Yard representative during the concert so that appropriate investigation of those concerns can be accommodated. Typical smaller events, such as weddings, charity auctions, etc., are expected to generate considerably lower sound levels than a concert event.

11. To maintain crowd noise at acceptable levels, amphitheater events exceeding 2,000 attendees should be concluded by 10 pm. Noise monitoring of crowd noise during the first two events can be utilized to determine if this measure will be necessary long-term.

Park Event Recommendations

1. To ensure compliance with County noise standards, park sound system output should be limited to an average of 75 dBA Leq averaged over a 5 minute period and a maximum of 85 dBA Lmax at a position located 100 feet from the sound system speakers. Sound levels up to 80 dBA Leq at the 100 foot reference distance would be acceptable provided the sound system speakers are oriented south or southwest.

2. To control low-frequency sound in the surrounding neighborhood, C-weighted sound levels should be limited to 85 dBC Leq averaged over a 5 minute period and a maximum of 95 dBC Lmax at a position located 100 feet from the speakers. In addition, amplified music shall be limited to an average of 75 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

3. In addition to the noise level limits shown in Table 4, daytime and nighttime C-weighted noise level limits of 80 dBC Leq and 70 dBC Leq should be applied at the nearest residences, respectively. These standards should be adjusted upwards or downwards as appropriate following collection of C-weighted ambient noise level data near the existing residences immediately before and after the first 2 large amphitheater events.

4. If monitoring of representative amplified music events in the park area indicates that those events are within compliance with the County's noise standards and the C-weighted standards recommended in this report, consideration should be given to eliminating the requirement for routine monitoring of all park events.

This concludes BAC's analysis of amplified sound generated during events held at the Fruit Yard project in Stanislaus County, CA. Please contact Paul Bollard at (916) 663-0500 or PaulB@bacnoise.com with any questions regarding this report.

Appendix A

Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

Appendix B-1

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Friday, June 19, 2015

Hour	Leq	Lmax	L50	L90
0:00	55	78	42	37
1:00	54	78	41	35
2:00	54	76	41	35
3:00	56	76	46	39
4:00	58	75	50	43
5:00	63	83	57	50
6:00	63	78	57	50
7:00	63	82	57	48
8:00	65	90	56	45
9:00	63	85	56	44
10:00	63	85	56	43
11:00	66	96	57	45
12:00	66	95	58	45
13:00	63	82	58	46
14:00	64	84	60	50
15:00	71	95	61	49
16:00	64	89	59	46
17:00	64	83	60	48
18:00	63	83	57	45
19:00	61	77	56	46
20:00	61	80	56	50
21:00	62	81	56	50
22:00	61	78	56	46
23:00	59	83	51	43

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	71	61	65	63	54	59
Lmax (Maximum)	96	77	86	83	75	78
L50 (Median)	61	56	58	57	41	49
L90 (Background)	50	43	47	50	35	42

Computed Ldn, dB	67
% Daytime Energy	86%
% Nighttime Energy	14%

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Appendix B-2

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Saturday, June 20, 2015

Hour	Leq	Lmax	L50	L90
0:00	56	77	46	40
1:00	55	77	44	37
2:00	55	76	44	38
3:00	56	80	43	38
4:00	57	74	49	41
5:00	61	79	56	48
6:00	62	81	54	47
7:00	61	80	53	46
8:00	61	76	54	44
9:00	62	80	57	45
10:00	64	87	58	45
11:00	63	83	59	46
12:00	64	87	59	47
13:00	63	81	58	47
14:00	62	80	58	47
15:00	63	86	57	46
16:00	63	79	59	47
17:00	64	85	58	45
18:00	62	84	56	45
19:00	62	90	55	43
20:00	61	78	55	44
21:00	63	90	53	43
22:00	59	78	52	43
23:00	57	74	48	43

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	64	61	63	62	55	58
Lmax (Maximum)	90	76	83	81	74	77
L50 (Median)	59	53	57	56	43	48
L90 (Background)	47	43	45	48	37	42

Computed Ldn, dB	66
% Daytime Energy	82%
% Nighttime Energy	18%

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Appendix B-3

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Sunday, June 21, 2015

Hour	Leq	Lmax	L50	L90
0:00	56	83	46	41
1:00	57	81	44	37
2:00	53	74	41	36
3:00	52	73	41	34
4:00	52	69	42	36
5:00	58	81	51	43
6:00	57	74	48	43
7:00	58	79	49	42
8:00	61	90	50	42
9:00	61	81	55	43
10:00	61	80	56	44
11:00	63	81	59	46
12:00	64	88	59	45
13:00	61	77	58	44
14:00	62	82	57	44
15:00	62	83	57	45
16:00	61	81	56	44
17:00	66	93	56	45
18:00	61	80	56	46
19:00	62	82	56	45
20:00	61	83	55	45
21:00	66	92	59	47
22:00	60	81	51	43
23:00	54	76	44	38

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	66	58	62	60	52	56
Lmax (Maximum)	93	77	83	83	69	77
L50 (Median)	59	49	56	51	41	45
L90 (Background)	47	42	44	43	34	39

Computed Ldn, dB	64
% Daytime Energy	87%
% Nighttime Energy	13%

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Appendix B-4

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Friday, June 19, 2015

Hour	Leq	Lmax	L50	L90
0:00	59	86	53	45
1:00	60	85	51	42
2:00	63	92	53	40
3:00	61	80	56	47
4:00	63	80	59	52
5:00	67	86	64	59
6:00	68	91	65	61
7:00	71	91	67	62
8:00	67	89	63	59
9:00	65	82	63	58
10:00	66	82	63	58
11:00	65	83	62	58
12:00	66	86	63	58
13:00	66	86	63	59
14:00	67	90	63	59
15:00	65	81	62	58
16:00	65	86	62	57
17:00	65	80	63	59
18:00	66	94	61	57
19:00	64	85	60	56
20:00	64	83	61	57
21:00	65	87	60	57
22:00	66	90	60	56
23:00	64	86	58	52

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	71	64	66	68	59	64
Lmax (Maximum)	94	80	86	92	80	86
L50 (Median)	67	60	62	65	51	58
L90 (Background)	62	56	58	61	40	50

Computed Ldn, dB	71
% Daytime Energy	73%
% Nighttime Energy	27%

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Appendix B-5

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Saturday, June 20, 2015

Hour	Leq	Lmax	L50	L90
0:00	66	94	56	50
1:00	61	86	53	42
2:00	61	82	56	45
3:00	61	89	51	43
4:00	62	84	56	49
5:00	64	81	60	55
6:00	69	88	66	61
7:00	66	84	62	58
8:00	65	82	61	56
9:00	66	90	61	56
10:00	65	91	61	56
11:00	64	84	60	56
12:00	66	90	61	57
13:00	66	89	61	57
14:00	64	85	60	56
15:00	65	85	61	56
16:00	66	88	63	58
17:00	69	94	61	56
18:00	65	88	60	55
19:00	65	87	60	55
20:00	64	81	60	55
21:00	68	97	59	54
22:00	63	85	59	54
23:00	63	83	59	53

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69	64	66	69	61	64
Lmax (Maximum)	97	81	88	94	81	86
L50 (Median)	63	59	61	66	51	57
L90 (Background)	58	54	56	61	42	50

Computed Ldn, dB	71
% Daytime Energy	69%
% Nighttime Energy	31%

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Appendix B-6

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Sunday, June 21, 2015

Hour	Leq	Lmax	L50	L90
0:00	62	86	56	48
1:00	60	80	55	47
2:00	59	80	54	42
3:00	58	80	51	40
4:00	58	72	54	44
5:00	62	84	57	52
6:00	64	85	61	57
7:00	62	81	60	55
8:00	62	79	60	56
9:00	66	88	61	56
10:00	64	91	60	56
11:00	64	85	61	56
12:00	64	83	61	57
13:00	63	81	60	55
14:00	64	83	60	56
15:00	65	87	60	55
16:00	63	81	60	56
17:00	71	98	61	56
18:00	64	84	60	55
19:00	65	87	61	56
20:00	66	89	61	56
21:00	70	94	61	56
22:00	64	86	58	52
23:00	62	85	55	47

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	71	62	66	64	58	61
Lmax (Maximum)	98	79	86	86	72	82
L50 (Median)	61	60	60	61	51	56
L90 (Background)	57	55	56	57	40	48

Computed Ldn, dB	69
% Daytime Energy	81%
% Nighttime Energy	19%

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Appendix B-7

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Friday, June 19, 2015

Hour	Leq	Lmax	L50	L90
0:00	55	74	45	39
1:00	55	75	42	37
2:00	54	75	42	36
3:00	58	79	48	41
4:00	60	79	52	43
5:00	62	75	58	48
6:00	64	78	60	51
7:00	63	77	60	50
8:00	63	85	59	51
9:00	69	93	60	51
10:00	62	79	57	47
11:00	61	78	58	47
12:00	62	77	58	48
13:00	61	77	58	49
14:00	62	77	58	49
15:00	62	79	58	49
16:00	62	80	60	49
17:00	63	78	60	51
18:00	64	90	60	51
19:00	63	83	59	51
20:00	63	80	60	53
21:00	65	92	59	53
22:00	62	83	57	51
23:00	60	78	55	49

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69	61	64	64	54	60
Lmax (Maximum)	93	77	82	83	74	77
L50 (Median)	60	57	59	60	42	51
L90 (Background)	53	47	50	51	36	44

Computed Ldn, dB	67
% Daytime Energy	79%
% Nighttime Energy	21%

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Appendix B-8

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Saturday, June 20, 2015

Hour	Leq	Lmax	L50	L90
0:00	59	82	51	48
1:00	57	79	49	47
2:00	57	80	49	48
3:00	57	77	49	47
4:00	60	81	52	48
5:00	61	79	56	50
6:00	61	78	57	50
7:00	61	78	56	49
8:00	61	79	57	48
9:00	61	77	58	50
10:00	61	82	58	51
11:00	62	81	58	50
12:00	61	83	58	50
13:00	60	78	57	50
14:00	61	82	57	50
15:00	63	90	58	51
16:00	62	81	59	51
17:00	65	87	60	53
18:00	64	91	60	50
19:00	62	79	59	49
20:00	63	87	59	49
21:00	61	77	58	48
22:00	61	80	56	47
23:00	61	77	55	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	65	60	62	61	57	60
Lmax (Maximum)	91	77	82	82	77	79
L50 (Median)	60	56	58	57	49	53
L90 (Background)	53	48	50	50	46	48

Computed Ldn, dB	66
% Daytime Energy	75%
% Nighttime Energy	25%

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Appendix B-9

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Sunday, June 21, 2015

Hour	Leq	Lmax	L50	L90
0:00	57	77	49	44
1:00	56	75	48	43
2:00	55	72	46	42
3:00	56	79	46	43
4:00	55	75	46	44
5:00	57	74	48	45
6:00	60	86	50	45
7:00	58	74	52	45
8:00	59	75	55	45
9:00	61	85	57	48
10:00	61	85	57	48
11:00	61	75	58	49
12:00	60	76	58	50
13:00	60	77	57	48
14:00	61	76	58	49
15:00	61	82	57	49
16:00	61	78	58	49
17:00	62	86	58	49
18:00	62	75	59	49
19:00	63	85	59	50
20:00	62	82	60	50
21:00	65	90	58	49
22:00	59	75	54	47
23:00	59	85	50	45

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	65	58	61	60	55	57
Lmax (Maximum)	90	74	80	86	72	77
L50 (Median)	60	52	57	54	46	48
L90 (Background)	50	45	48	47	42	44

Computed Ldn, dB	65
% Daytime Energy	81%
% Nighttime Energy	19%

Appendix B-10

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Friday, June 19, 2015

Hour	Leq	Lmax	L50	L90
0:00	42	57	40	37
1:00	42	59	40	36
2:00	43	61	41	36
3:00	46	58	43	39
4:00	47	59	46	41
5:00	52	64	51	48
6:00	53	66	52	49
7:00	48	60	48	45
8:00	48	68	46	43
9:00	51	72	45	41
10:00	49	71	45	41
11:00	50	66	48	44
12:00	51	64	47	42
13:00	69	94	56	45
14:00	49	62	47	43
15:00	48	63	46	42
16:00	48	70	44	41
17:00	47	63	45	42
18:00	46	64	44	41
19:00	48	65	45	42
20:00	49	68	47	44
21:00	49	60	48	45
22:00	52	67	50	44
23:00	48	61	46	42

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69	46	58	53	42	49
Lmax (Maximum)	94	60	67	67	57	61
L50 (Median)	56	44	47	52	40	45
L90 (Background)	45	41	43	49	36	41

Computed Ldn, dB	58
% Daytime Energy	92%
% Nighttime Energy	8%

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Appendix B-11

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Saturday, June 20, 2015

Hour	Leq	Lmax	L50	L90
0:00	46	64	44	39
1:00	44	59	42	37
2:00	44	59	42	37
3:00	43	59	40	37
4:00	44	59	43	39
5:00	55	74	51	48
6:00	52	64	50	47
7:00	53	80	48	45
8:00	46	63	45	42
9:00	47	69	44	41
10:00	46	63	43	40
11:00	47	65	43	40
12:00	47	62	43	39
13:00	55	76	43	39
14:00	45	60	42	38
15:00	46	57	44	40
16:00	49	71	45	41
17:00	49	68	46	42
18:00	49	68	47	43
19:00	50	71	46	42
20:00	46	61	44	41
21:00	45	63	43	40
22:00	44	57	43	40
23:00	46	65	44	41

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	55	45	49	55	43	49
Lmax (Maximum)	80	57	66	74	57	62
L50 (Median)	48	42	44	51	40	44
L90 (Background)	45	38	41	48	37	41

Computed Ldn, dB	55
% Daytime Energy	66%
% Nighttime Energy	34%

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Appendix B-12

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Sunday, June 21, 2015

Hour	Leq	Lmax	L50	L90
0:00	44	60	43	39
1:00	44	58	41	36
2:00	42	60	39	35
3:00	41	59	39	34
4:00	40	52	39	35
5:00	53	74	49	44
6:00	48	64	46	43
7:00	48	64	44	41
8:00	46	65	43	40
9:00	47	66	43	39
10:00	44	60	43	39
11:00	49	70	44	40
12:00	51	73	42	39
13:00	43	58	41	38
14:00	44	59	42	38
15:00	45	64	43	39
16:00	45	62	43	40
17:00	51	71	45	41
18:00	50	70	45	41
19:00	49	72	45	41
20:00	47	71	44	41
21:00	48	68	46	42
22:00	45	59	43	40
23:00	45	67	41	37

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	51	43	48	53	40	47
Lmax (Maximum)	73	58	66	74	52	61
L50 (Median)	46	41	44	49	39	42
L90 (Background)	42	38	40	44	34	38

Computed Ldn, dB	53
% Daytime Energy	70%
% Nighttime Energy	30%

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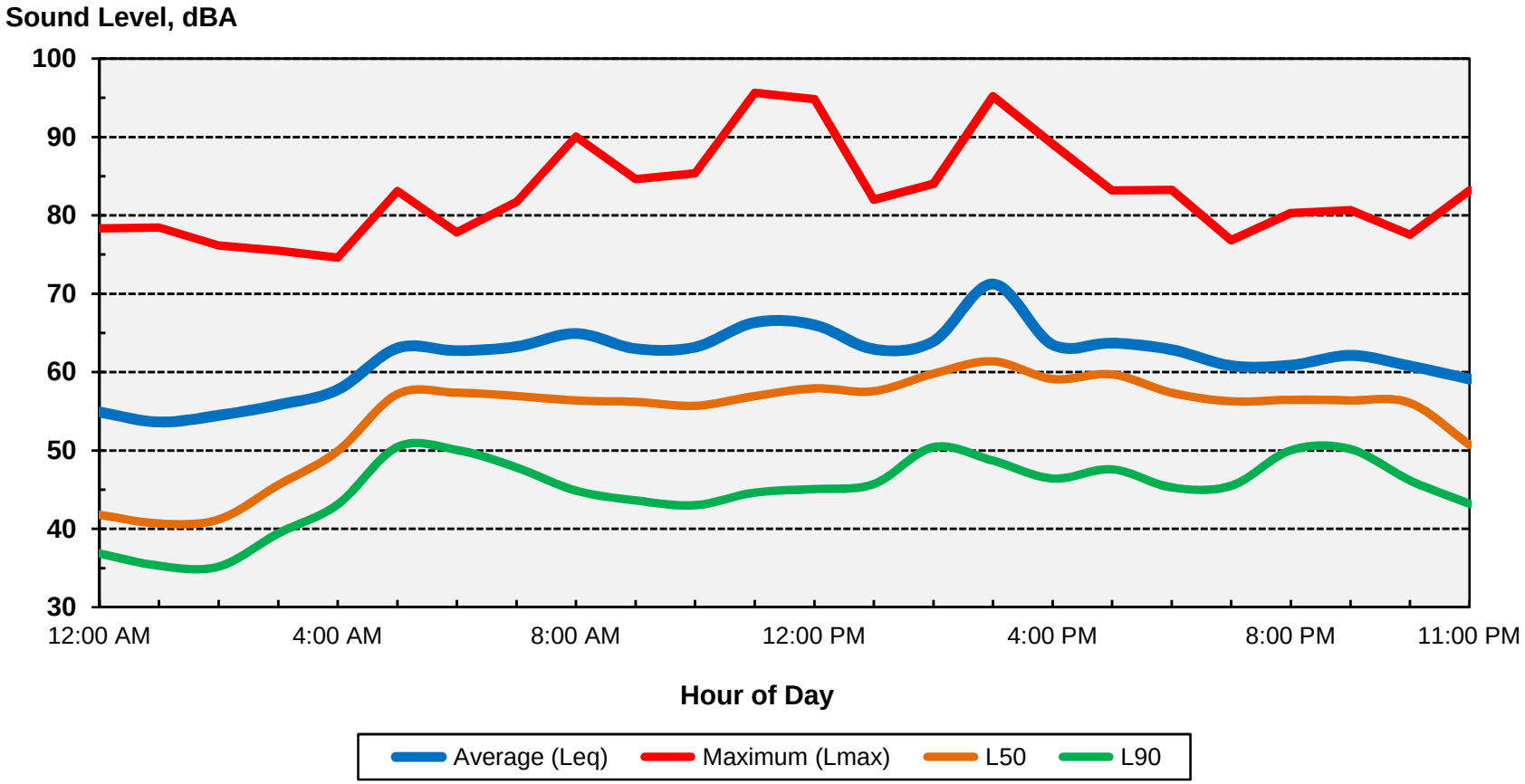
Appendix C-1
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Friday, June 19, 2015



Ldn: 67 dB

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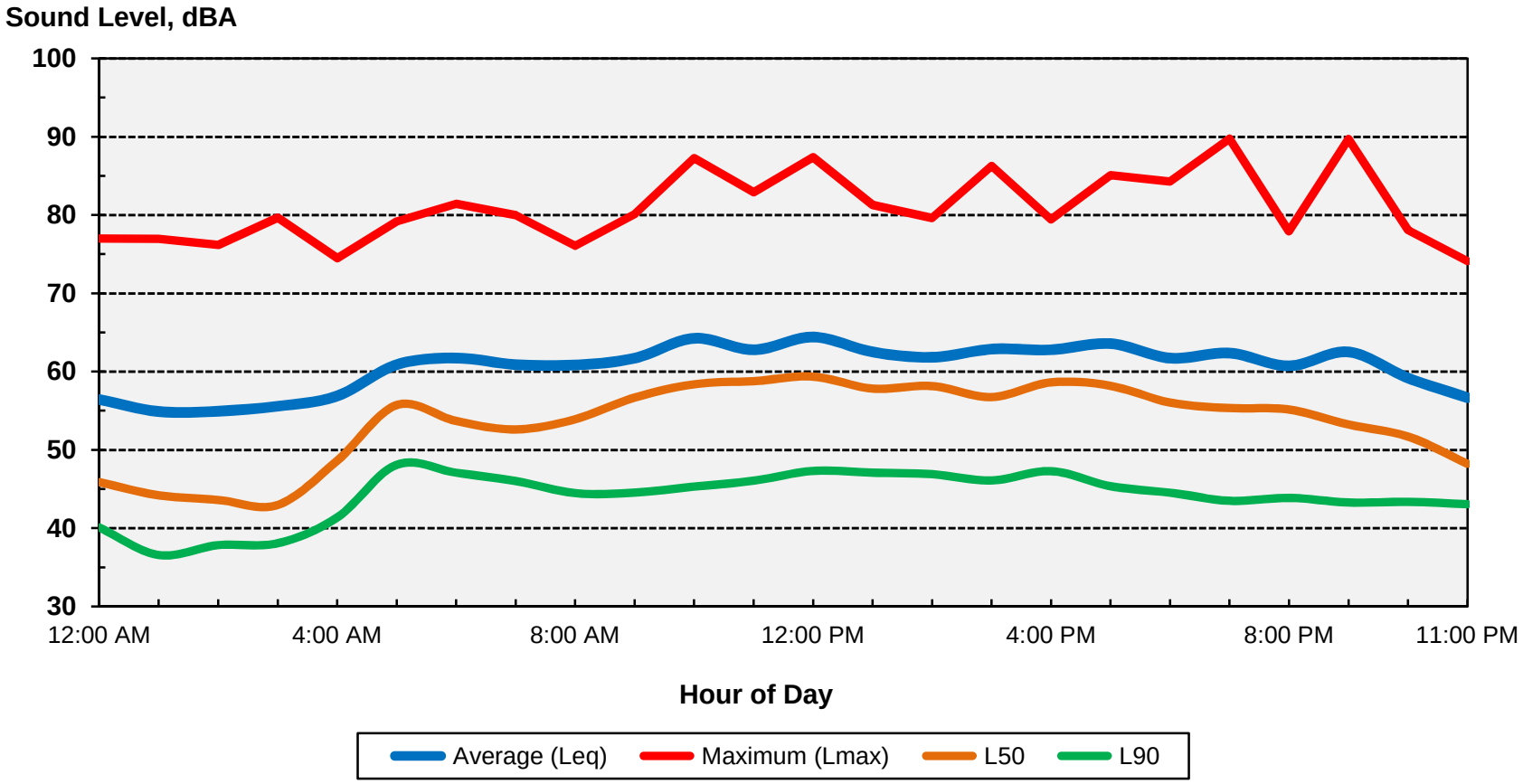
Appendix C-2
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Saturday, June 20, 2015



Ldn: 66 dB

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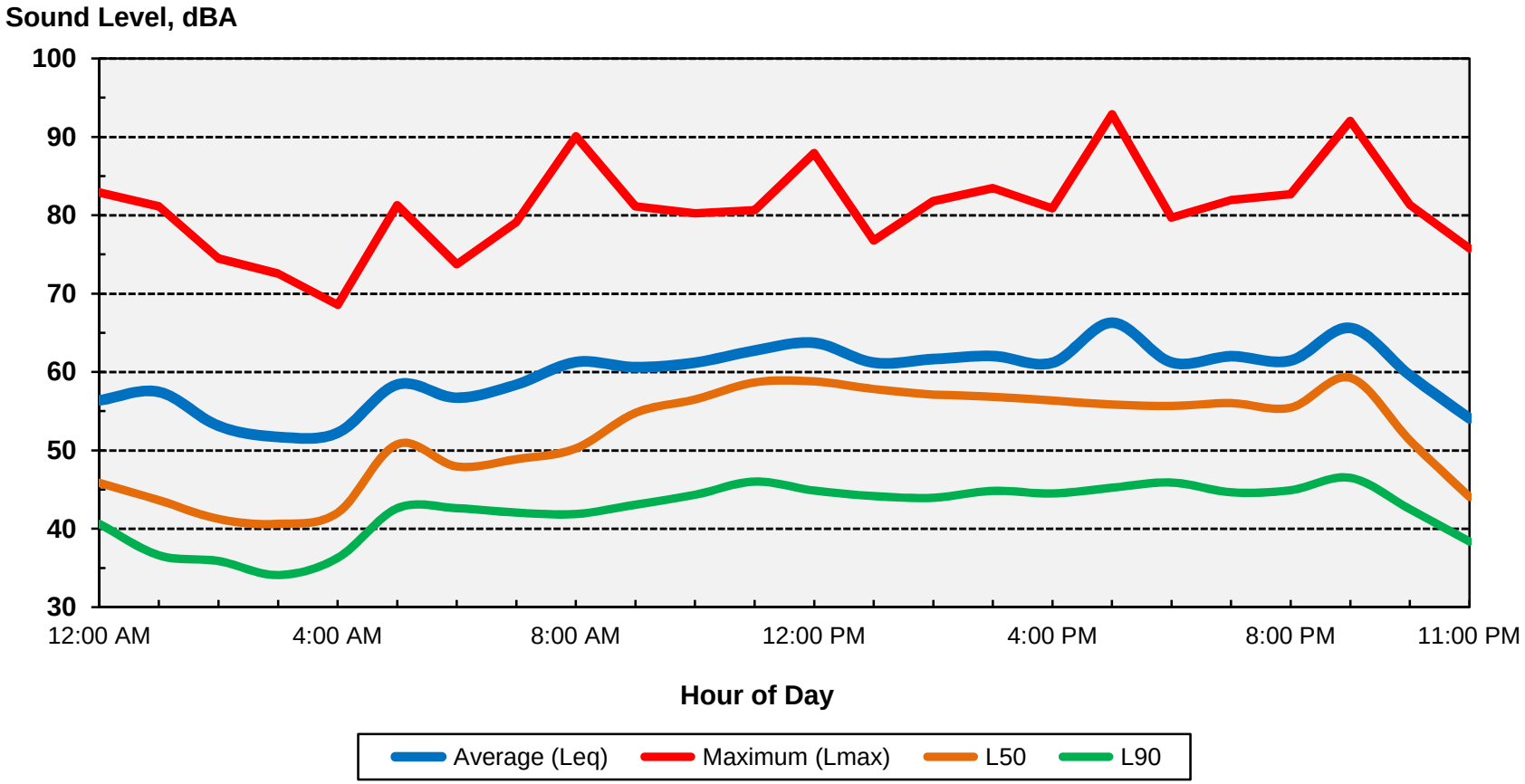
Appendix C-3
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Sunday, June 21, 2015



Ldn: 64 dB

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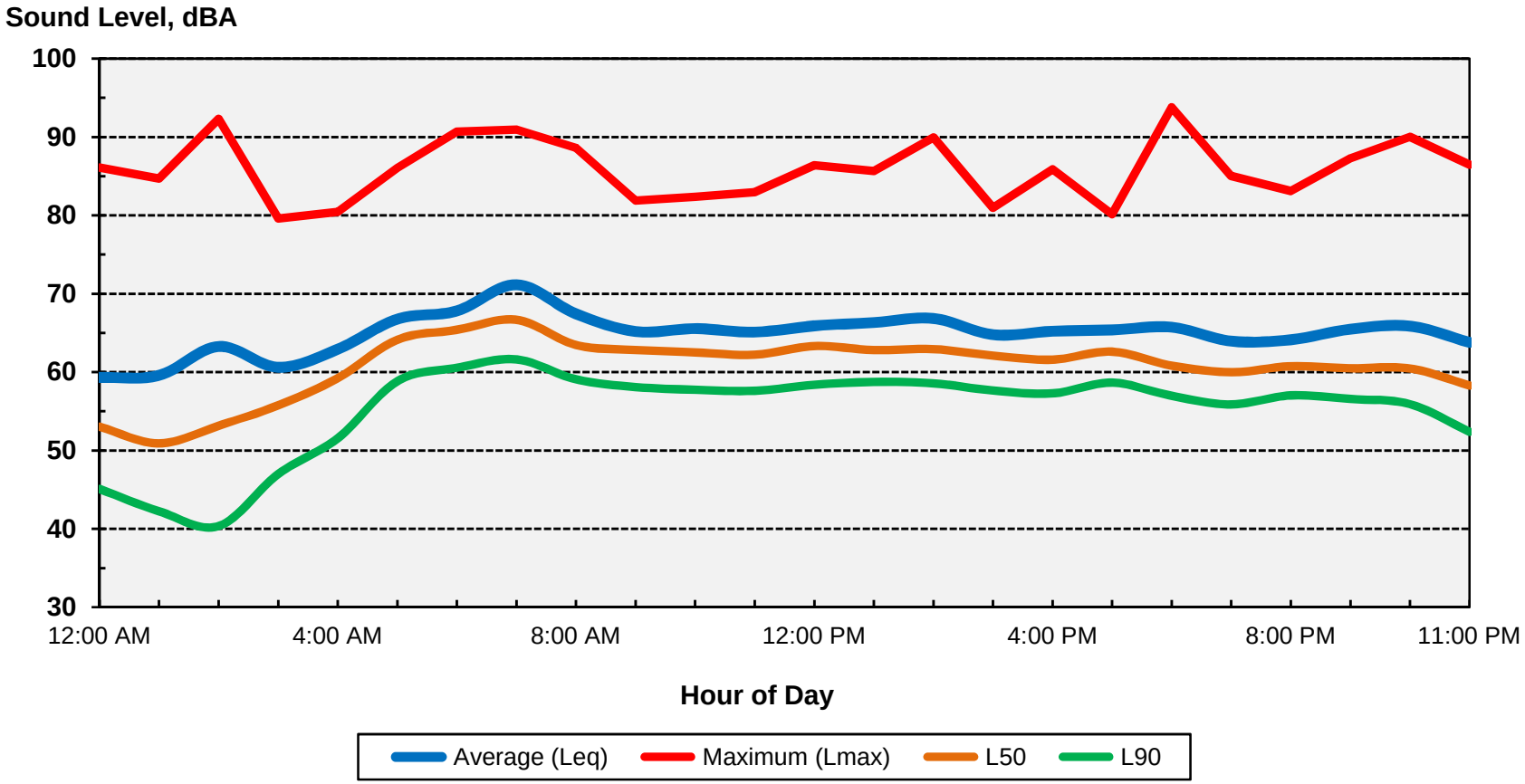
Appendix C-4
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Friday, June 19, 2015



Ldn: 71 dB

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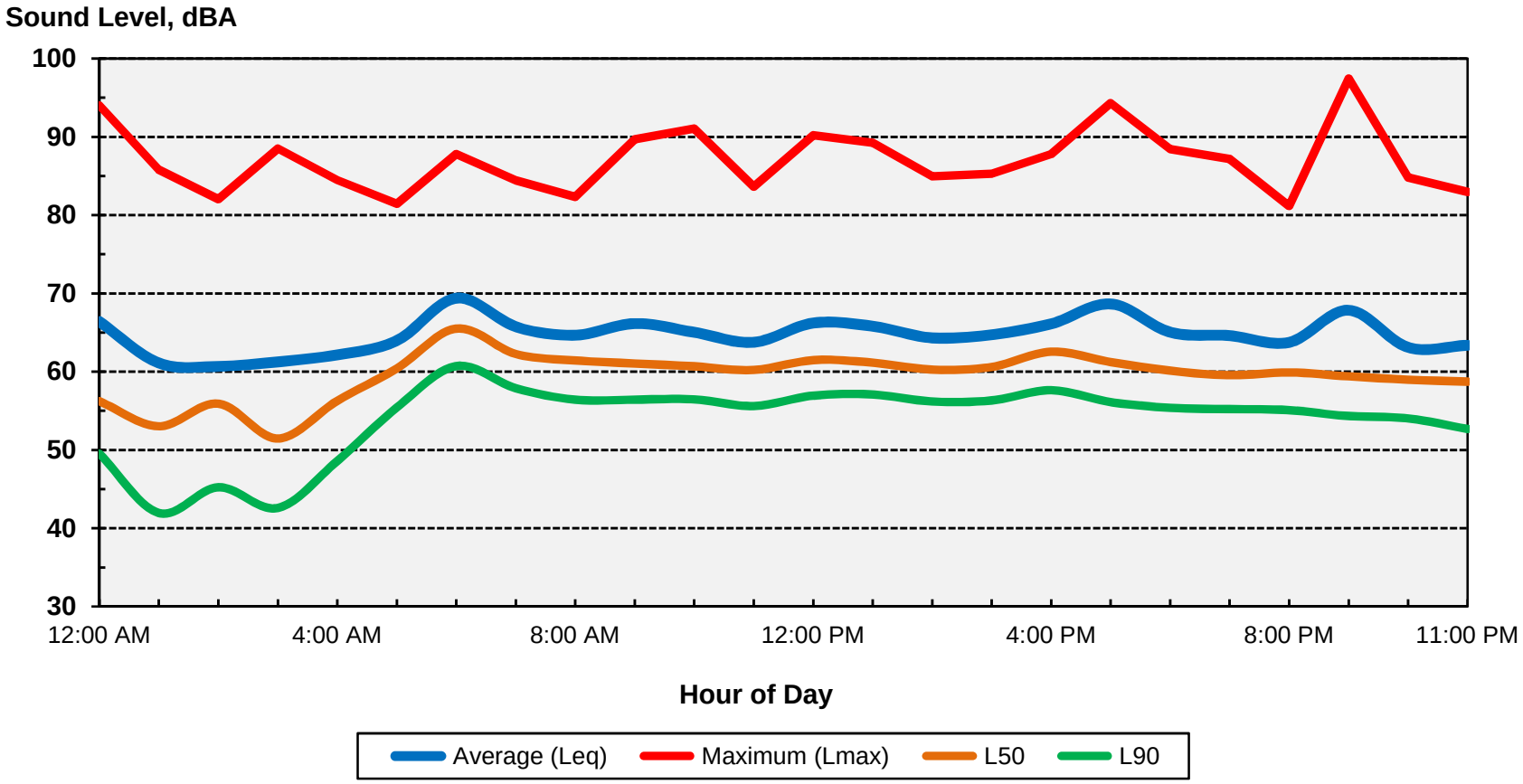
Appendix C-5
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Saturday, June 20, 2015



Ldn: 71 dB

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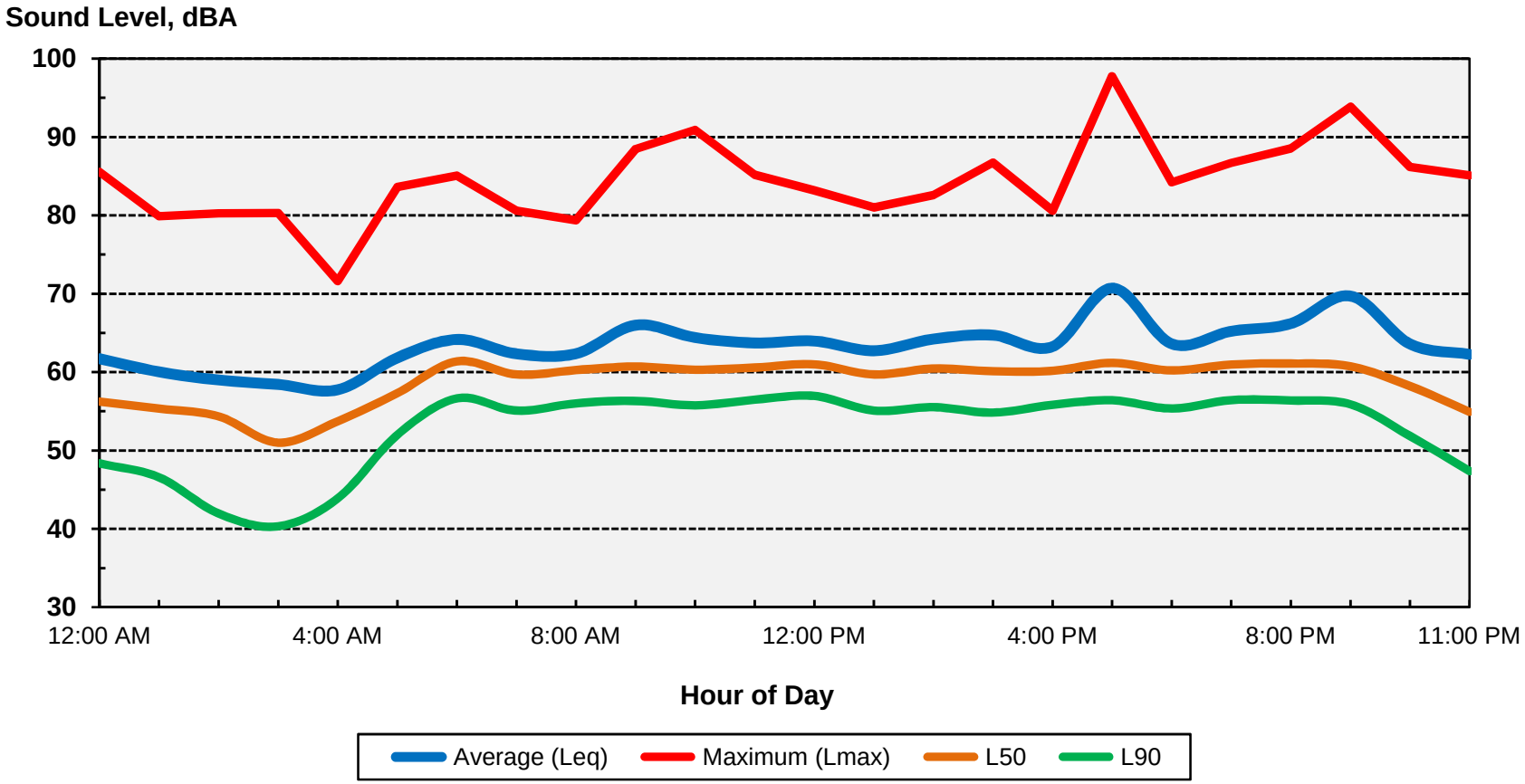
Appendix C-6
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Sunday, June 21, 2015



Ldn: 69 dB

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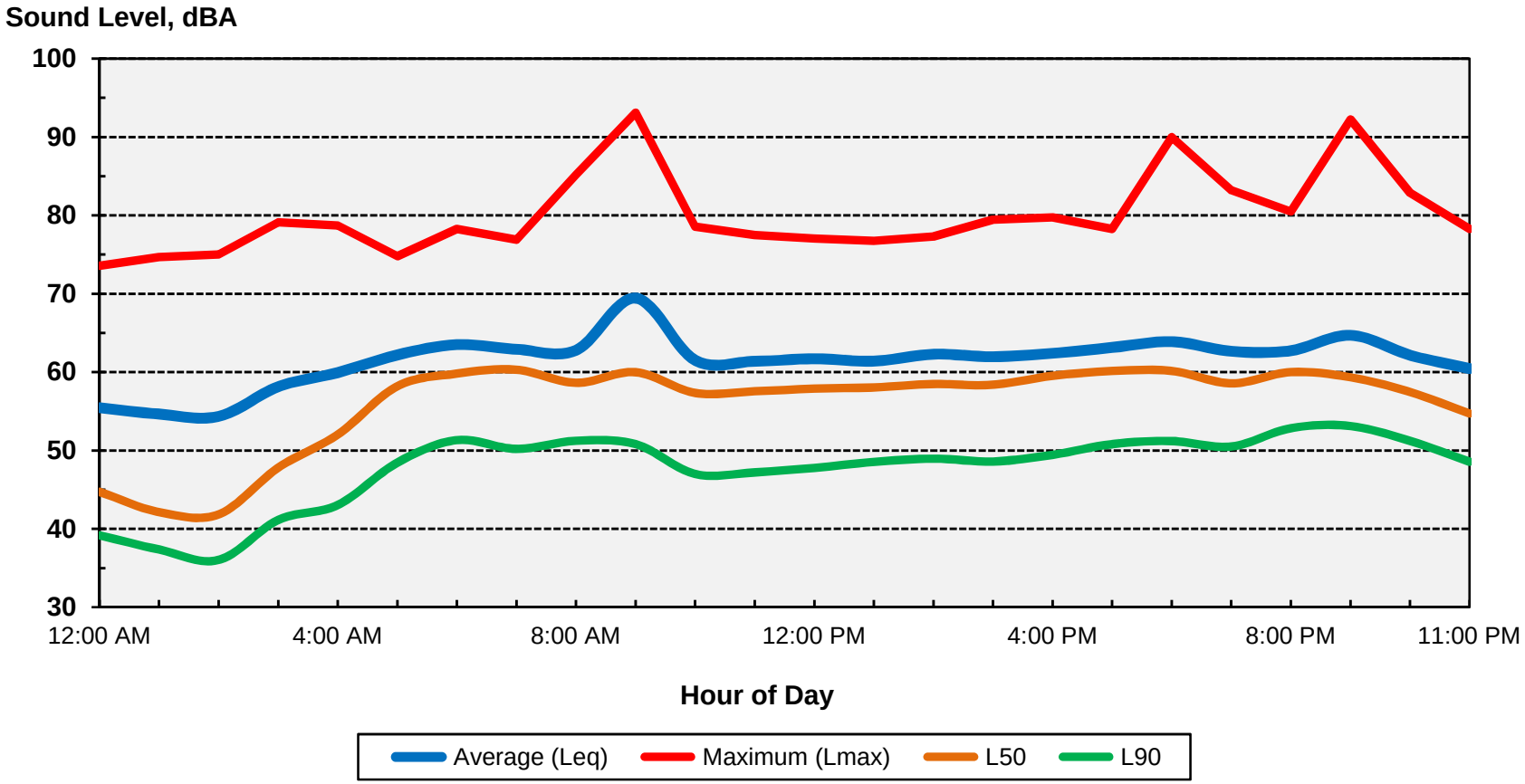
Appendix C-7
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Friday, June 19, 2015



Ldn: 67 dB

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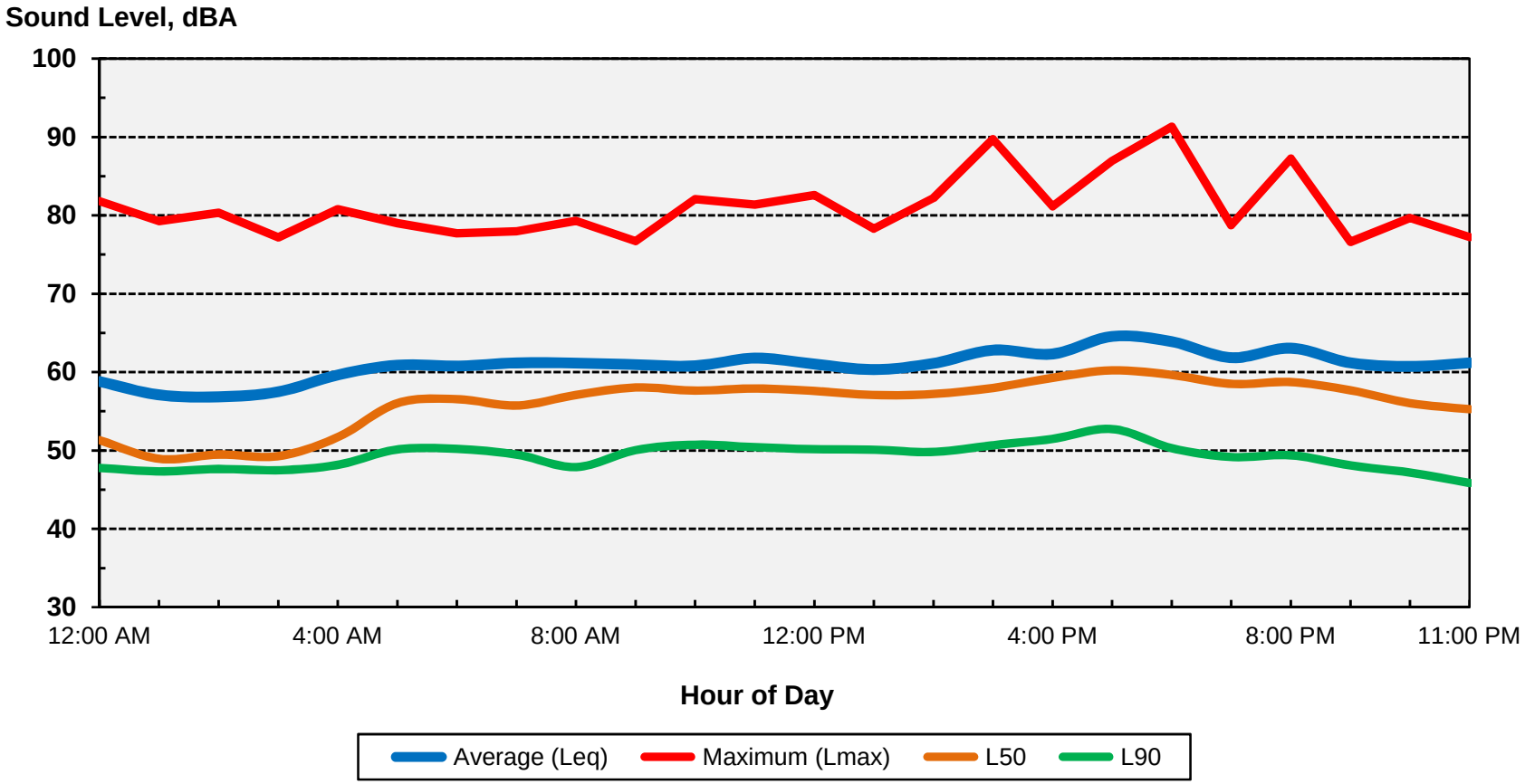
Appendix C-8
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Saturday, June 20, 2015



Ldn: 66 dB

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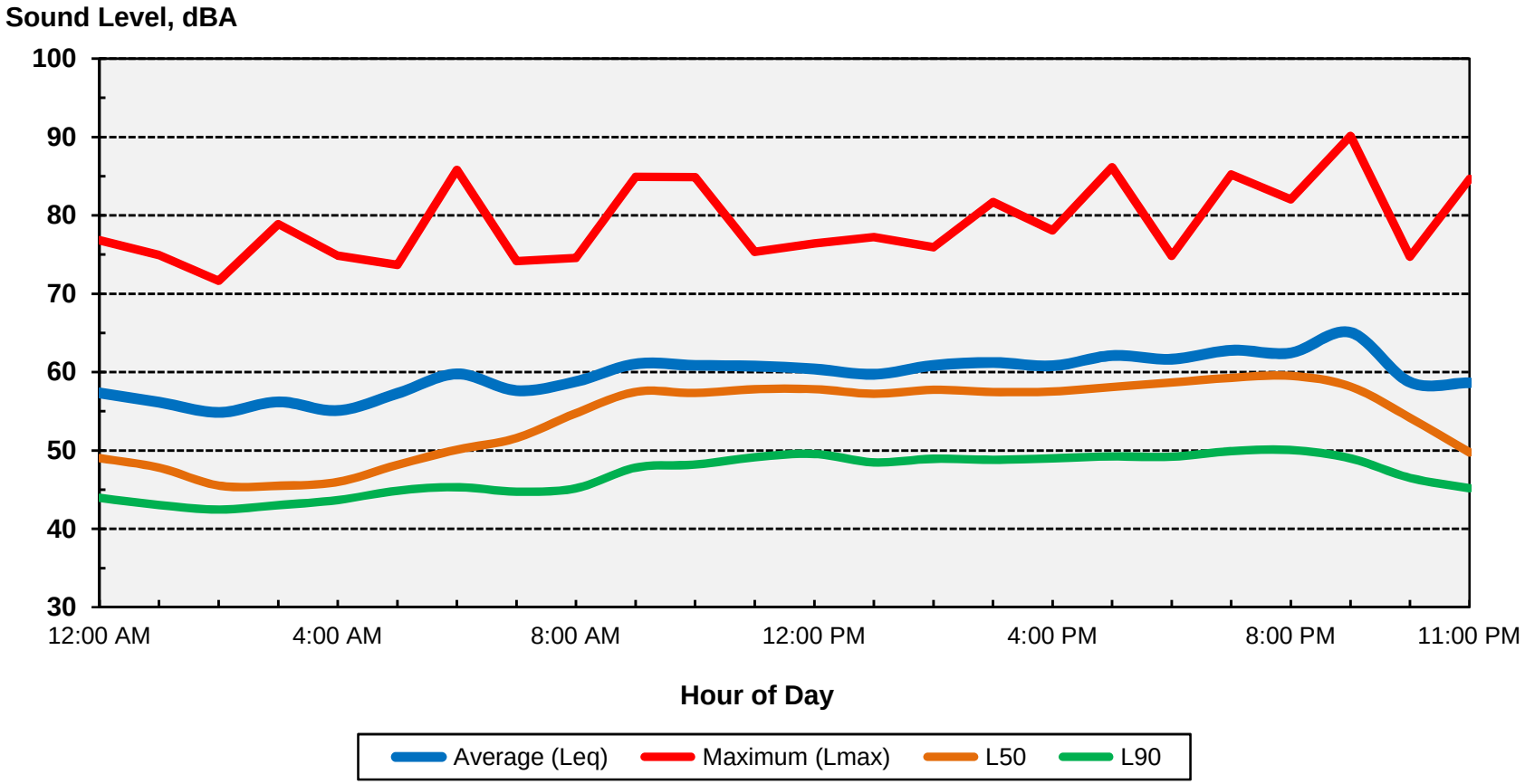
Appendix C-9
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Sunday, June 21, 2015



Ldn: 65 dB

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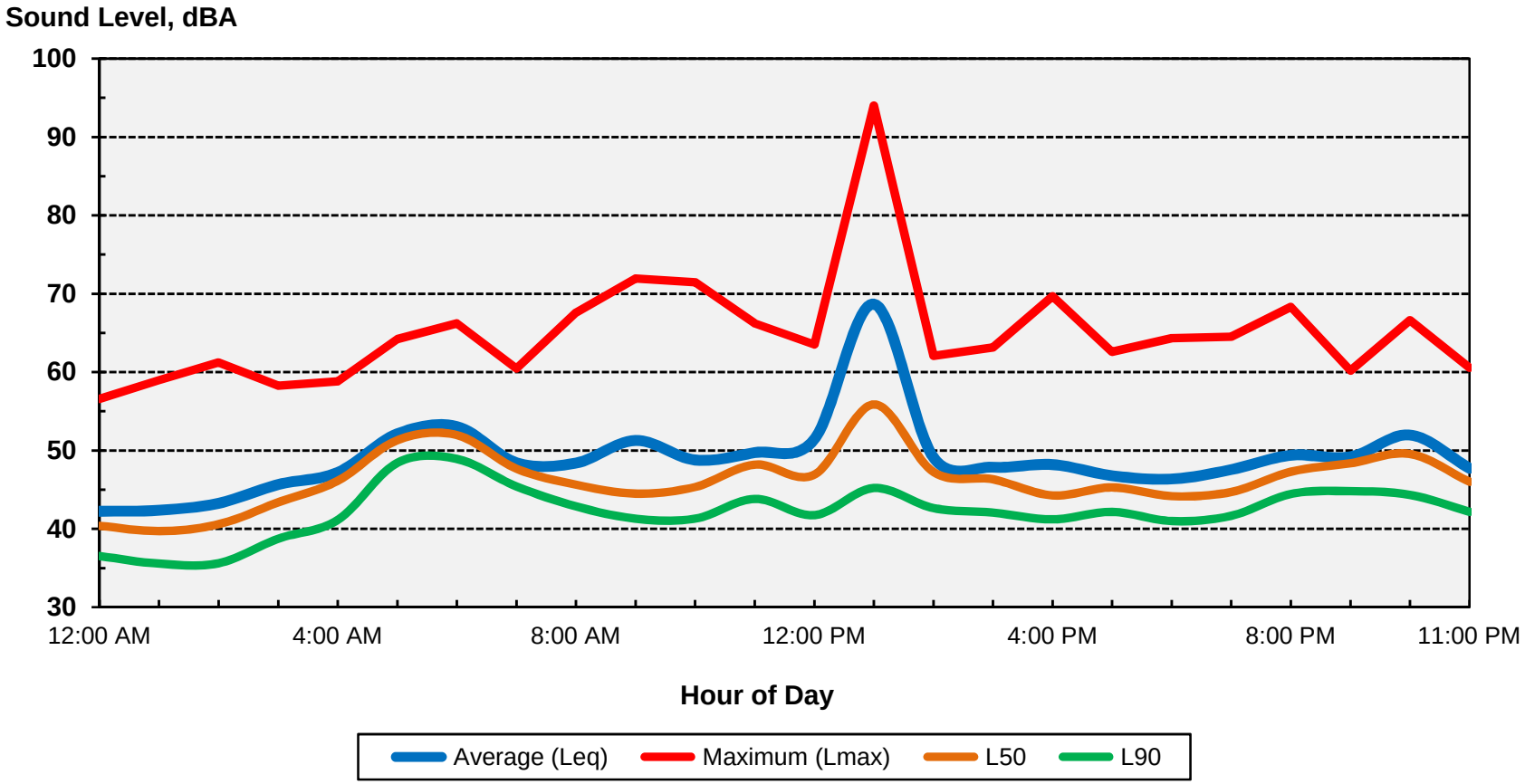
Appendix C-10
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Friday, June 19, 2015



Ldn: 58 dB

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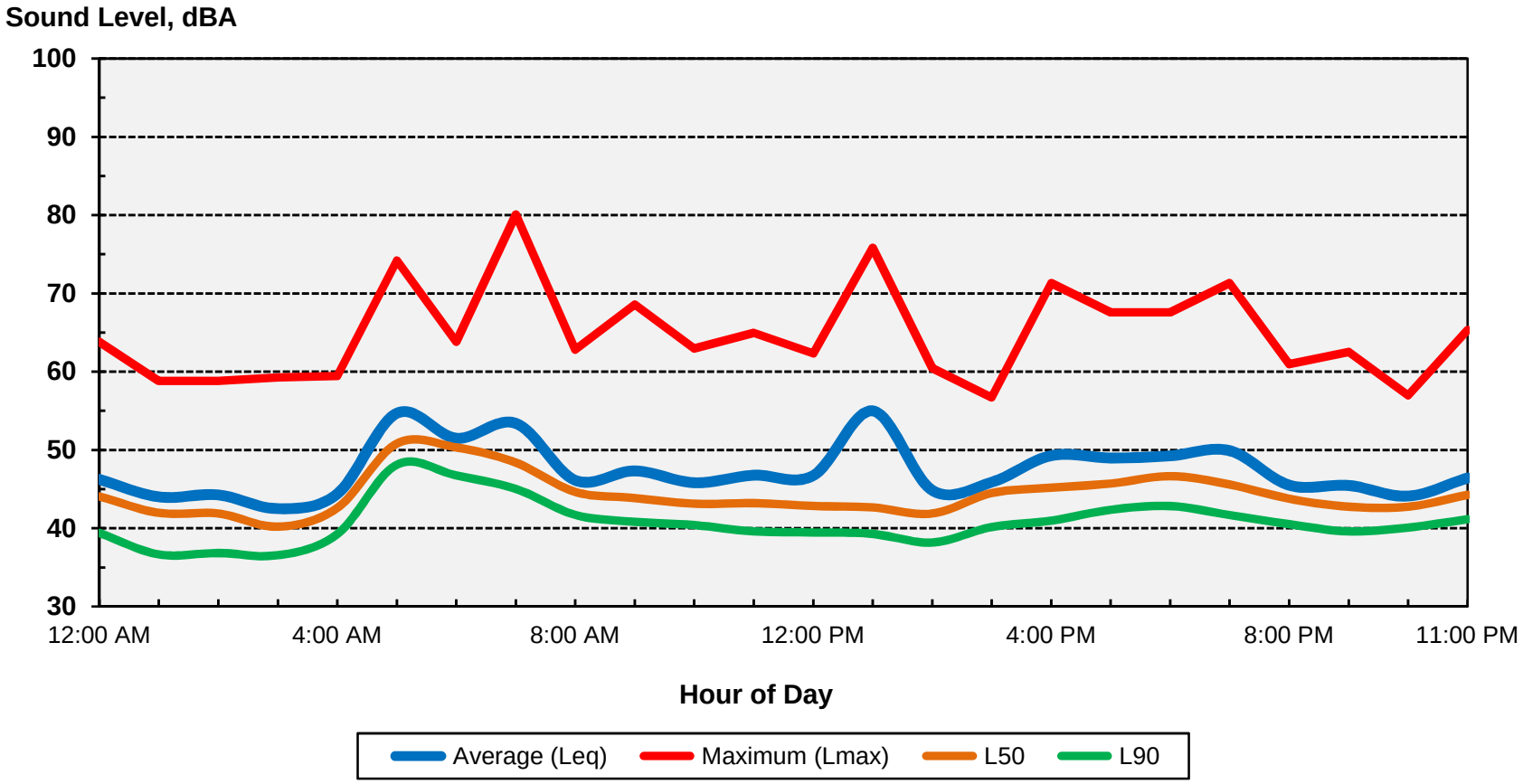
Appendix C-11
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Saturday, June 20, 2015



Ldn: 55 dB

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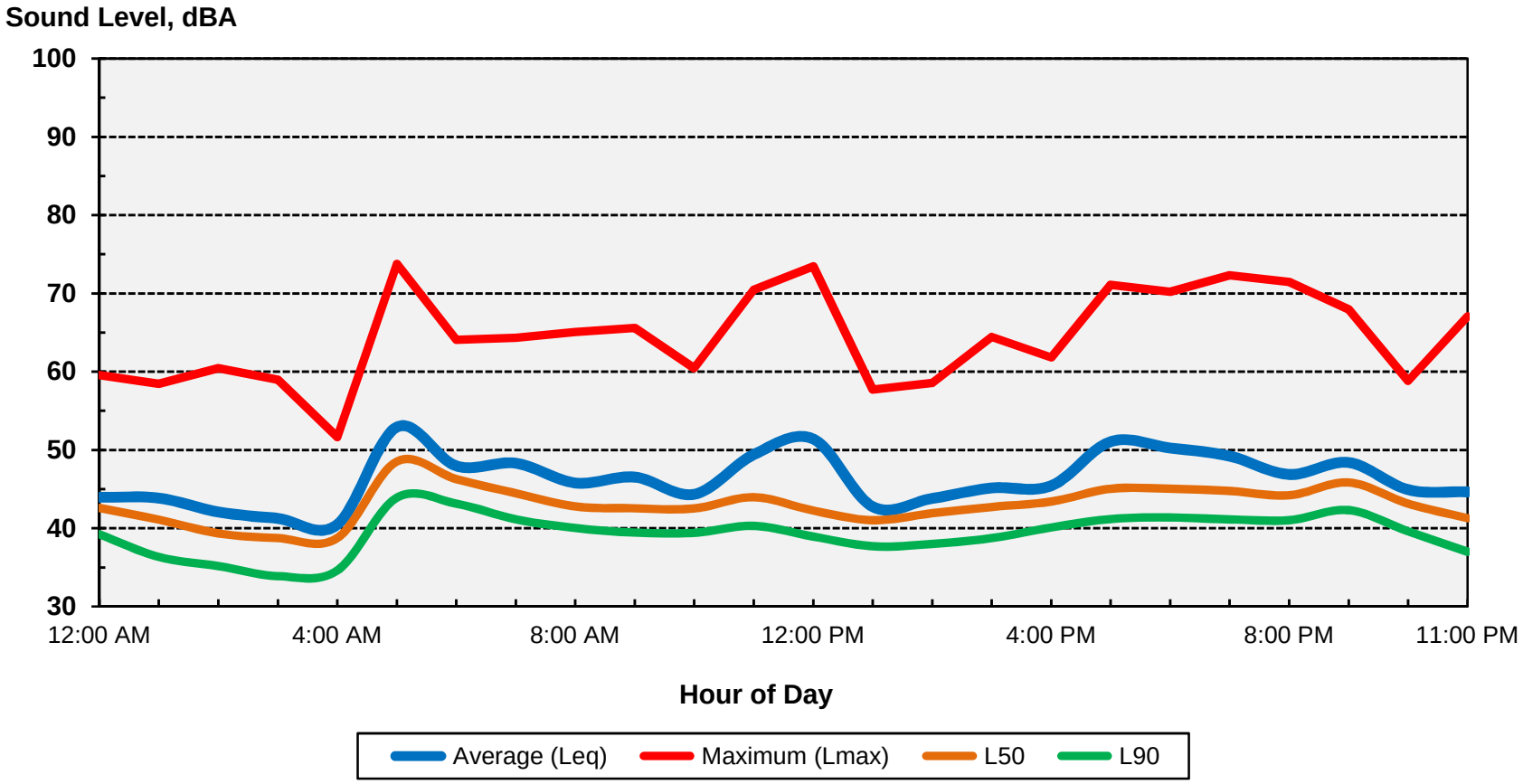
Appendix C-12
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Sunday, June 21, 2015



Ldn: 53 dB

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Appendix D

Event Simulation and Noise Monitoring Photos
The Fruit Yard Project - Stanislaus County, California

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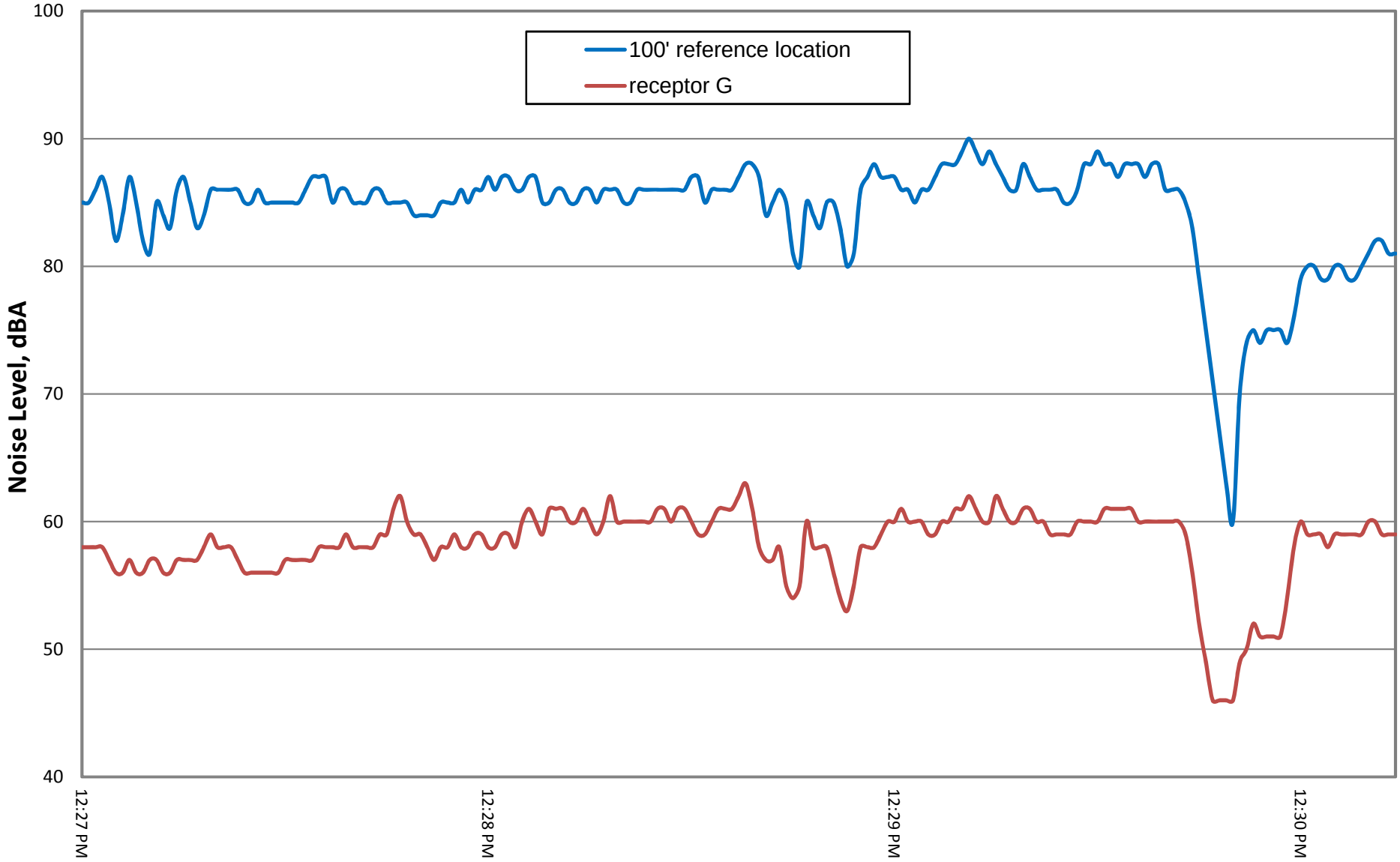
Appendix E-1
Measured Noise Levels Directly Behind Ampitheater Berm
The Fruit Yard Amphitehater Simulation - June 18, 2015



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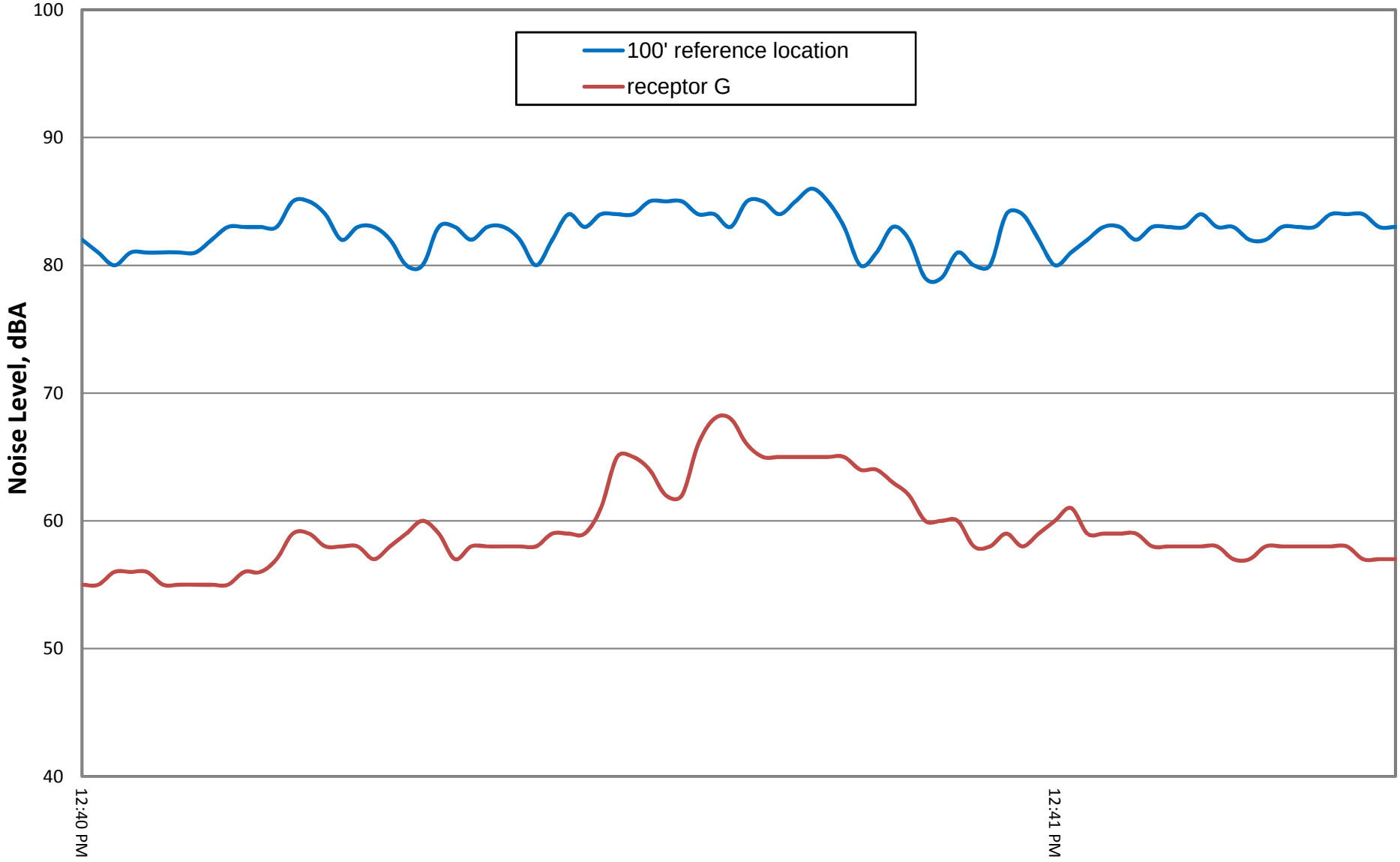
Appendix E-2
Measured Noise Levels at Receptor G (see Figure 1)
The Fruit Yard Event Ampitheater Simulation - June 18, 2015



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Appendix F-1

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2015-129 The Fruit Yard Events
Description: Existing
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Yosemite Boulevard	West of Project Site	3,533	80		20	2	1	55	100	
2	Yosemite Boulevard	East of Project Site	5,247	80		20	2	1	55	100	
3	Albers Road	North of Project Site	6,300	80		20	2	1	55	100	
4	Geer Road	South of Project Site	6,887	80		20	2	1	55	100	

Appendix F-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2015-129 The Fruit Yard Events
Description: Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Yosemite Boulevard	West of Project Site	936	80		20	1	0	55	100	
2	Yosemite Boulevard	East of Project Site	351	80		20	1	0	55	100	
3	Albers Road	North of Project Site	468	80		20	1	0	55	100	
4	Geer Road	South of Project Site	585	80		20	1	0	55	100