SECTION 5.0

MITIGATION MEASURES

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MITIGATION MEASURES

5.1 INTRODUCTION

The Council on Environmental Quality (CEQ) NEPA Regulations require that mitigation measures be developed for all of a proposal's effects on the environment where it is feasible to do so (CEQ 46 Fed. Reg. 18026, 19a; 40 C.F.R. §§ 1502.14(f) and 1502.16(h)). The NEPA Regulations define mitigation as "avoiding the impact altogether by not taking a certain action or parts of an action, minimizing impacts by limiting the degree or magnitude of the action and its implementation, rectifying the impact by repairing, rehabilitating, or restoring the affected environment, reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, compensating for the impact by replacing or providing substitute resources or environments" (40 C.F.R. § 1508.20). These principles have been applied to guide design and siting criteria for the alternatives and in negotiating Memorandums of Understanding (MOUs) with affected jurisdictions. Where potential effects on the environment were identified in early stages of project design and EIS preparation, appropriate changes in the project description were made to minimize or eliminate them. Other applications of mitigation have been incorporated into the design of the alternatives and have been mentioned throughout the EIS. In addition to the mitigation measures that have been incorporated into the design of the alternatives, the following section provides measures to mitigate specific effects identified in the preparation of the EIS. Mitigation measures have been identified where feasible to address specific effects regardless of whether they are considered "significant" (CEQ 46 Fed. Reg. 18026, 19a). The inclusion of mitigation measures for a particular alternative do not constitute endorsement of or preference for the alternative. The mitigation measures recommended for a particular alternative would apply only if the alternative is chosen by the National Indian Gaming Commission (NIGC) in its Record of Decision (ROD).

5.2 MITIGATION MEASURES

5.2.1 LAND RESOURCES

The following mitigation measures are recommended for Alternatives A, B, C, D, E, F, and G:

SOIL

- A. The following mitigation measures shall be implemented to ensure a less than significant impact to the development from expansive soils:
 - a. For structures with a light to moderate bearing load (one to three stories) a shallow, spread footing foundation system would be sufficient to provide support under expansive soil conditions (see **Appendix K** for more details and optional systems). However, a shallow foundation system shall be designed to reduce the potential for seasonal moisture variation under the buildings by providing continuous perimeter strip footings that extend below the depth of seasonal moisture variation (typically 18 inches or deeper).
 - b. For structures with a high bearing load, either a post-tensioned concrete slab, or heavily reinforced structural mat slab (shallow foundation systems), or a deep foundation system such as a drilled piers would be necessary to provide support under expansive soil conditions (see **Appendix K** for more detail). Shallow system designs applied to high bearing load structures will also be designed to reduce the potential for seasonal moisture variation.
 - c. To mitigate impacts to pavement caused by expansive soil, one or a combination of the following measures shall be required:
 - i. Removal and replacement with non-expansive soils.
 - ii. Lime treatment of soils.
 - iii. Design of pavement sections to withstand potential swelling pressures.
- B. Construction of facilities will adhere to the Uniform Building Code (UBC). Specifically, Chapter 16 of the 1997 UBC addresses structural design requirements for buildings and other structures (including hazardous materials storage facilities) that are consistent with rational analyses and well-established principles of mechanics. Division IV covers earthquake design, which has provisions to safeguard against major structural failures and loss of life. In this regard, the 1997 UBC design requirements include seismically induced characterization and an examination of near-source attenuation effects. Use of the 1997 UBC would allow for ground shaking-related hazards to be managed from a geologic, geotechnical, and structural standpoint such that risks to the health and safety of workers or members of the public would be reduced to a less than significant level.

Implementation of the above mitigation will reduce land resources impacts to a less than significant level.

5.2.2 WATER RESOURCES

SURFACE WATER

The following measures are recommended for Alternatives A, B, C, D, E, F and G:

Construction Impacts

- A. During construction, surface water quality shall be protected by using Best Management Practices (BMP's) as listed in the Erosion Control recommendations in **Appendix F**. These BMP's would be included in the Stormwater Pollution Prevention Plan to be filed with either the Environmental Protection Agency or the Regional Water Quality Control Board, as appropriate.
- B. A sampling and monitoring program shall be developed and implemented to assess the quality of surface water entering and leaving development sites. At a minimum, sampling sites shall include: a location upstream at an elevation above all proposed development; and a location downstream of all development, yet at an interception point prior to surface waters entering the Laguna de Santa Rosa. Analyses shall include total suspended solids (TSS), oils and grease.
- C. If the on-site wastewater treatment option is operated and discharge is to be made into the Bellevue-Wilfred Channel or Laguna de Santa Rosa, construction of the discharge's outfall structure shall be undertaken during the dry season under permit from the Department of the Army, Corps of Engineers, if required. Bioengineered rip-rap and habitat restoration of the agricultural ditch is proposed to offset construction impacts to existing bank vegetation. The ditch is currently vegetated with non-native weeds and grasses.

Implementation of the above mitigation will reduce the impacts of construction on surface water to a less than significant level.

The following measures are recommended for Alternatives A, B, C, D, E, and F:

Operational Impacts

February 2007

- D. Application of fertilizer shall be limited to the minimum amount necessary and shall be adjusted for the nutrient levels in the water used for irrigation. Fertilizer shall not be applied immediately prior to anticipated rain.
- E. The garbage bin area shall be covered. Any runoff or drainage from the garbage bin area shall be directed to the sewer system and treated by the WWTP.

5-3

- F. Landscape irrigation shall be adjusted based on weather conditions and shall be reduced or eliminated during the wet portion of the year in order to prevent excessive runoff.
- G. Water conservation measures including use of reclaimed water for landscape watering and toilets shall be implemented. Potable water conservation measures shall be adopted including limits on drinking water served in the casino and hotel restaurants and electronic dispensing devices in faucets.

Implementation of the above mitigation will reduce the operational impacts of the project on surface water to a less than significant level.

The following measure is recommended for Alternative G:

Operational Impacts

H. A stormwater detention basin(s) shall be included on-site to ensure that stormwater discharges are reduced to pre-project levels.

Implementation of the above mitigation will reduce the operational impacts of the project on surface water to a less than significant level.

Wastewater

The following measures are recommended for Alternative A if the on-site wastewater treatment option is chosen; and for Alternatives B, C, D, E, and F:

- I. Effluent temperature shall be reduced by storing effluent in tanks and holding ponds to the extent possible without impairing the operation of the wastewater treatment facility.
- J. The Tribe shall restrict discharge of effluent to the Laguna de Santa Rosa from May 14 to September 30 each year, or other period as specified in the National Pollutant Discharge Elimination System (NPDES) permit.
- K. The discharge of effluent to surface waters shall not be allowed until the Russian River flow reaches 1000 cubic feet per second (cfs) measured at the Hacienda Bridge, or as otherwise specified in the NPDES permit.
- L. Effluent shall be discharged to land via sprayfields during the period when effluent may not be discharged to surface waters due to conditions of the NPDES permit (see Mitigation Measures I and J).
- M. 50 gpm of treated wastewater shall be designated for use by the casino and hotel, in order to maintain the water balance described in **Section 4.3.1**.

The following measure is recommended for Alternative A if the off-site wastewater treatment option is chosen:

N. Tribe shall also enter into an agreement with the subregional wastewater disposal system, to allow for conveyance of the project's wastewater to a treatment plant operated by the system, and treatment of the project's wastewater at such treatment plant. The Tribe shall also enter into an agreement to purchase 50 gpm of recycled water, in order to maintain the water balance described in **Section 4.3.1**. The Tribe shall implement all conditions of the agreements.

Implementation of the above mitigation will reduce the wastewater impacts of the project on surface water to a less than significant level.

REGIONAL GROUNDWATER

Operation of on-site groundwater wells is expected to result in a less than significant regional groundwater impact for Alternatives A-E. In order to further reduce these less than significant impacts, the following measures are recommended for Alternatives A, B, C, D, and E:

- O. Existing on-site wells shall be abandoned and sealed. On the Wilfred site, two wells shall be abandoned and capped. On the Stony Point site, one well shall be abandoned and capped. The well on the Stony Point site is estimated to have had an original capacity in excess of 300 gallons per minute.
- P. The Tribe shall implement water conservation measures (if applicable), including use of low flow faucets and showerheads, recycled water for toilets, and voluntary towel re-use by guests in the hotel; use of low flow faucets, recycled water for toilets, and pressure washers and brooms instead of hoses for cleaning, in public areas and the casino; use of garbage disposal on-demand, re-circulating cooling loop for water cooled refrigeration and ice machines where possible, and service of water to customers on request, in restaurants; use of recycled and/or gray water for cooling, checking steam traps and ensuring return of steam condensate for boiler reuse, and limitation of boiler blowdown, in the Central Plant; and use of recycled water for irrigation (HydroScience, 2006b).
- Q. The Tribe shall consider participation in or creation of an off-site artificial recharge project, such as purchasing a groundwater well in the sub-basin and removing the well from service in order to offset a portion of the groundwater used by implementation of the project (in lieu recharge).
- R. The Tribe shall work with the City of Rohnert Park and SCWA to find and deliver more surface water, aiding in the City's compliance with the City's settlement with the South County Resource Preservation Committee.

- S. The Tribe shall contribute to the current study of the groundwater basin conducted jointly by SCWA and USGS, if funding is needed. The Tribe shall also participate in future regional water planning activities.
- T. As part of the Tribe's Memorandum of Understanding with the City of Rohnert Park, the Tribe will contribute to help establish or support ongoing water conservation measures city-wide in Rohnert Park.

Implementation of the above mitigation will reduce the already less than significant regional impacts from Alternatives A, B, C, D, and E to the groundwater basin or sub-basin.

Operation of on-site groundwater wells on the Lakeville Site are expected to result in a potentially significant regional groundwater impact for Alternatives F. In order to reduce impacts to the groundwater basin, the following measures are recommended for Alternative F:

- U. The Tribe shall implement water conservation measures (if applicable), including use of low flow faucets and showerheads, recycled water for toilets, and voluntary towel re-use by guests in the hotel; use of low flow faucets, recycled water for toilets, and pressure washers and brooms instead of hoses for cleaning, in public areas and the casino; use of garbage disposal on-demand, re-circulating cooling loop for water cooled refrigeration and ice machines where possible, and service of water to customers on request, in restaurants; use of recycled and/or gray water for cooling, checking steam traps and ensuring return of steam condensate for boiler reuse, and limitation of boiler blowdown, in the Central Plant; and use of recycled water for irrigation (HydroScience, 2006b).
- V. The Tribe shall participate in or create an off-site artificial recharge project, such as purchasing a groundwater well in the sub-basin and removing the well from service in order to offset a portion of the groundwater used by implementation of the project (in lieu recharge).
- W. The Tribe shall work with the Cities of Rohnert Park and Petaluma and SCWA to find and deliver more surface water, reducing pressures on the Cities to pump additional groundwater.
- X. The Tribe shall contribute to the current study of the groundwater basin conducted jointly by SCWA and USGS, if funding is needed. The Tribe shall also participate in future regional water planning activities.
- Y. The Tribe shall implement a pump test and monitoring plan as described below under Localized Groundwater and in **Appendix G**. Groundwater levels and signs of seawater intrusion shall be monitored. The Tribe shall provide monitoring results annually to a qualified independent consultant or to a qualified governmental agency to examine the

results for signs of seawater intrusion. Should seawater intrusion be detected, the Tribe shall consult with the San Francisco Bay Regional Water Quality Control Board, USGS, and Sonoma County to devise a plan for eliminating seawater intrusion that is acceptable to all parties (assuming all parties are acting in good faith and are not unreasonably withholding their agreement to a particular plan). The plan may include the injection of Title 22, tertiary treated wastewater to the aquifer between production wells and the source of seawater intrusion. Should Alternative F be chosen, the Tribe shall sign a legally binding agreement, prior to opening the hotel/casino resort to the public, agreeing not to operate their facility in such a way to cause seawater intrusion and agreeing to comply with the terms of a seawater intrusion elimination plan as described above should signs of seawater intrusion be detected.

Implementation of the above mitigation will reduce the regional impacts from Alternative F to the groundwater basin or sub-basin to a less than significant level.

LOCALIZED GROUNDWATER

Operation of on-site groundwater wells may cause neighboring water supply wells to experience a substantially lowered water table, negatively and in some cases significantly affecting well operations. In order to reduce these potential impacts to a less than significant level, the following measures are recommended for Alternatives A, B, C, D, E, and F:

- Z. The Tribe shall implement a groundwater monitoring program preceded by a pump test (see **Appendix G** for a detailed description of the recommended pump test and monitoring program) as soon as feasible after project approval and preferably at least one year before opening of the project facilities to the public (to allow for baseline monitoring).
- AA. The Tribe shall implement a program to compensate neighboring well owners for impacts to well operation based on interference drawdown caused by project pumping. The actual amount of interference drawdown associated with the project shall be estimated from the proposed pumping test and groundwater level monitoring program (see above and **Appendix G**). At least one year of baseline data and one year of data after project pumping begins should be collected prior to implementation of the following well impact compensation program:
 - a. Well Usability (Impacts 1 and 2) The tribe shall reimburse the owners of wells that become unusable within 3 years of the onset of project pumping for a portion of the prevailing, customary cost for well replacement, rehabilitation or deepening. The mitigation method for which reimbursement is made shall be the lowest-cost customary and reasonable method to restore the lost well capacity.

The percentage of the cost reimbursed by the tribe shall depend upon the degree to which the impact is caused by project pumping vs. pumping by other nearby operators of high capacity wells. Reimbursement shall be for replacement inkind; that is, for a well of similar construction, but deepened so as to restore the lost well capacity. A depreciation allowance shall be subtracted from the reimbursement amount for wells or pumps that have condition issues. In order to be eligible, the well owner must provide the Tribe with documentation of the well location and construction (diameter, depth, screened interval, pump type, etc.), and that the well was constructed and usable before project pumping was initiated.

- b. Groundwater level falling near or below pump intake (Impact 3) The Tribe shall reimburse the owners of wells with pumps that require lowering within 3 years of the onset of project pumping for a portion of the prevailing, customary cost for this service. The percentage of the cost reimbursed by the Tribe shall take into consideration the degree to which the impact is caused by project pumping vs. pumping by other nearby operators of high capacity wells, and the degree to which a well's capacity may have been reduced in the absence of project pumping due to shallow placement of the pump intake. Replacement discharge piping shall not be reimbursed, and replacement of pumps shall not be reimbursed unless the pump was damaged due to project-related interference drawdown. In order to be eligible, the well owner must provide the Tribe with documentation of the well location and construction, including pump intake depth, and that the well was constructed and usable before project pumping was initiated. The Tribe must be made aware of the cost reimbursement claim prior to lowering of the pump intake, so that the need for possible well deepening, replacement or rehabilitation can be assessed. At the Tribe's discretion, compensation may be paid toward well deepening, replacement or rehabilitation in lieu of toward lowering the pump intake.
- c. Increased Electrical and Maintenance Cost (Impact 4) The Tribe shall reimburse well owners pumping more than 100 acre-feet/year for their additional annual electrical costs at the prevailing electrical rate based on the following formula:

KWhr/year = (gallons Pumped/year) x (feet of interference drawdown) 1,621,629

5-8

In order to qualify for reimbursement, the well owner must provide proof of the actual annual volume of water pumped and/or the electrical usage associated

- with the pumping. As an alternative to annual payments, a one-time lump sum payment of a mutually agreeable amount could be made.
- d. No reimbursement would be made available for wells installed after operation of the project wells commences.
- e. For any of the above impacts, the Tribe may choose at its discretion to provide the well owner with a connection to a local public or private water supply system in lieu of the above mitigation measures, at reduced cost in proportion to the extent the impact was caused by project pumping.
- f. The known owners of identified wells within 2 miles of the project pumping well(s) shall be notified of the well impact compensation program outlined above before project pumping begins.
- g. We recommend that the tribe contract with a third party, such as Sonoma County, to oversee this well impact compensation program.
- BB. The proposed storm water detention basin shall retain a portion of the storm water runoff, where it will percolate into the ground, if possible without compromising primary stormwater flow control objectives.

Implementation of the above mitigation will reduce the localized impacts from the project on neighboring groundwater wells to a less than significant level.

5.2.3 AIR QUALITY

CONSTRUCTION-RELATED EMISSIONS

The following mitigation measures are recommended for Alternatives A, B, C, D, E, F, and G:

- A. The generation of construction-related PM₁₀ and PM_{2.5} emissions would cause a less than significant impact. Therefore, no mitigation measures are required. However, implementation of Basic Control Measures and Enhanced Control Measures from Table 2 of the BAAQMD CEQA Guidelines Assessing the Air Quality Impacts of Projects and Plans (BAAQMD, 1999) is recommended during the construction of any of the project alternatives.
 - a. The contractor shall designate an on-site Air Quality Construction Mitigation Manager (AQCMM) who shall be responsible for directing compliance with mitigation measures for the construction project.
 - b. Basic Control Measures include the following:
 - i. Water all active construction areas at least twice daily.

- ii. Cover all truckloads hauling soil, sand, and other loose materials or require all truckloads to maintain at least two feet of freeboard.
- iii. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers to all unpaved access roads, parking areas and staging areas at construction sites.
- iv. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- v. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- c. Enhanced Control Measures include the following:
 - i. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
 - ii. Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
 - iii. Limit traffic speeds on unpaved roads to 15 mph.
 - iv. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
 - v. Replant vegetation in disturbed areas as quickly as possible.
- B. The generation of ROG and NO_X emissions from construction equipment would cause a less than significant impact. Therefore, no mitigation measures are required. However, implementation of some basic measures is recommended during the construction of any of the project alternatives in order to further reduce the effects from construction activities.
 - a. To the extent that equipment and technology is available and cost effective, the contractor shall use catalyst and filtration technologies
 - b. All diesel-fueled engines used in construction of the project shall use ultra-low sulfur diesel fuel containing no more than 15-ppm sulfur, or a suitable alternative fuel.
 - c. All construction diesel engine, which have a rating of 50 hp or more, shall meet the tier 2 California Emission Standards for off-road compression-ignition engines, unless certified by the AQCMM that such engine is not available for a particular use. In the event that a Tier II engine is not available, Tier I compliant

- or 1996 or newer engines will be used preferentially. Older engines will only be used if the AQCMM certifies that compliance is not feasible.
- d. All diesel fueled engines used in construction of the project will have clearly visible tags or other suitable means of identification showing that engine meets the above requirements
- e. Idling time shall be minimized to 5 minutes when the equipment is not in use unless safety requirements or manufacturers specifications indicate that more time is required.
- f. Heavy duty diesel equipment will be maintained in optimum running condition

 Implementation of the above mitigation will further reduce already less than significant construction air quality impacts.

OPERATIONAL EMISSIONS

The following mitigation measures are recommended for Alternatives A, B, C, D, E, and F:

- C. In coordination with the local transportation agency, the Tribe shall provide the following to support regularly-scheduled community transit or shuttle service to and from the nearest mutually-acceptable major transit node:
 - a. Transit shelter benches,
 - b. Street lighting,
 - c. Route signs and display, and
 - d. Bus turnouts.
- D. The Tribe shall implement feasible travel demand management (TDM) measures for a project of this type. This would include but not limited to:
 - a. Designation of an on-site TDM coordinator.
 - b. Provisions to encourage bicycle commuting.
 - c. Provision of transit use incentives, provision of information, printed schedules and commuter promotions.
 - d. Carpool incentives.
 - e. Installation of secure bicycle parking facilities at commercial areas.
- E. Buses shall comply with the California Air Resource Board's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (California Code of Regulations, Title 13, Division 3, Article 1, Chapter 10, Section 2485) which requires

5-11

- that the driver of any diesel bus shall not idle for more than 5 minutes at any location, except in the case of passenger boarding where a ten minute limit is imposed, or when passengers are onboard.
- F. The Tribe shall encourage and facilitate the use of 'carpools' by construction workers and facility employees, and tour buses by casino patrons to reduce vehicular use and air pollution.
- G. The Tribe shall ensure that buildings are oriented to take advantage of solar heating and natural cooling, and use passive solar designs.
- H. The Tribe shall ensure use of solar, low-emission, central, or tankless water heaters and install wall insulation that meets or exceeds Title 24 requirements.
- I. The Tribe shall purchase offset credits for VOC, PM_{2.5}, and PM₁₀ if available, so that the total direct and indirect emissions of the project are less than or equal to the significance thresholds stated in Section 4.4. It should be noted that NOx emissions will be fully offset through emissions credits purchased and retired as required by the conformity process.

The following measures are recommended for Alternative E:

- J. The Tribe shall ensure that the project will provide multiple and/or direct pedestrian access (i.e. defined paths, "crow flies" access, etc.) to adjacent, complementary land uses and throughout the project.
- K. The Tribe shall ensure that setback distance is minimized between development and existing/designated transit/pedestrian shelters.

The following measures are recommended for Alternative G:

- L. The developer shall implement feasible travel demand management (TDM) measures for a project of this type. This would include but not limited to:
 - a. Designation of an on-site TDM coordinator.
 - b. Provisions to encourage bicycle commuting.
 - Provision of transit use incentives, provision of information, printed schedules and commuter promotions.
 - d. Carpool incentives.
 - e. Installation of secure bicycle parking facilities at commercial areas and parks.

- M. The developer shall ensure that the project will provide multiple and/or direct pedestrian access (i.e. defined paths, "crow flies" access, etc.) to adjacent, complementary land uses and throughout the project.
- N. The developer shall ensure that setback distance is minimized between development and existing/designated transit/pedestrian shelters.
- O. The developer shall ensure that buildings are oriented to take advantage of solar heating and natural cooling, and use passive solar designs.

The following measures are recommended for Alternatives A, B, C, D, and F:

P. A parking structure is proposed in Alternatives A, B, C, D, and F. If mechanical ventilation is included in the parking structure design, the exhaust shall be vented in a direction away from inhabited areas. Directing the exhaust away from inhabited areas would reduce the impacts of parking structure-generated CO from Alternatives A, B, C, D, and F to a less than significant level.

This natural dispersal of CO shall be directed away from the sensitive receptors by partially enclosing the parking structure and installing a mechanical ventilation system. Directing the dispersal of CO away from nearby sensitive receptors would be accomplished by focusing the enclosure on the east side of the parking structure, and by directing the ventilation system exhaust vertically and away from inhabited areas.

Q. The Tribe shall ensure that all shift changes occur during non-peak hours.

The following measure is recommended for Alternatives A, B, C, and D:

R. A Conformity Determination shall be conducted for emissions of NO_X and CO that exceed *de minimis* levels. A draft Conformity Determination is contained in **Appendix**W. A final Conformity Determination will be issued upon evidence of conformance with the State Implementation Plan (SIP) for NO_X and CO.

The following measure is recommended for Alternative F:

S. A Conformity Determination shall be conducted for emissions of NO_X that exceeds *de minimis* levels. A draft Conformity Determination is contained in **Appendix W**. A final Conformity Determination will be issued upon evidence of conformance with the State Implementation Plan (SIP) for NO_X.

An estimation of reduced operational emissions for the Alternatives A, B, C, D, F, and G were generated by the URBEMIS mitigation component and are presented in **Table 5-1**. Whereas

TABLE 5-1NEAR-TERM OPERATIONAL MITIGATED EMISSIONS AND SIGNIFICANCE

Project Alternatives	RO	G	NO	x	PN	1 10	PN	l _{2.5}
	ppsd	tpy	ppsd	tpy	ppd	tpy	ppd	tpy
Alternative A - Proposed Project								
Mitigated Emissions	362	74	697	149	744	136	738	135
Offset Credits	282	59	697	149	664	121	N/A	35
Final Mitigated Emissions	80	15	0	0	80	15	N/A	100
Significance Effect?	No	No	No	No	No	No	N/A	No
Alternative - Northwest Stony Point Casing)							
Mitigated Emissions	364	74	697	149	744	136	738	135
Offset Credits	284	59	697	149	664	121	N/A	35
Final Mitigated Emissions	80	15	0	0	80	15	N/A	100
Significance Effect?	No	No	No	No	No	No	N/A	No
Alternative C - Northeast Stony Point Casin	าด							
Mitigated Emissions	364	74	697	149	744	136	738	135
Offset Credits	284	59	697	149	664	121	N/A	35
Final Mitigated Emissions	80	15	0	0	80	15	N/A	0
Significance Effect?	No	No	No	No	No	No	N/A	No
Alternative D - Reduced Intensity								
Mitigated Emissions	252	58	486	104	521	95	517	94
Offset Credits	172	43	486	104	441	80	N/A	0
Final Mitigated Emissions	80	15	0	0	80	15	N/A	94
Significance Effect?	No	No	No	No	No	No	N/A	No
Alternative E - Business Park								
Mitigated Emissions	58	11	66	14	66	12	65	12
Offset Credits	0	0	0	0	0	0	N/A	0
Final Mitigated Emissions	58	11	66	14	66	12	N/A	12
Significance Effect?	No	No	No	No	No	No	N/A	No
Alternative F - Lakeville Casino								
Mitigated Emissions	364	74	698	149	746	136	740	135
Offset Credits	284	59	698	149	662	121	N/A	35
Final Mitigated Emissions	80	15	0	0	80	15	N/A	0
Significance Effect?	No	No	No	No	No	No	N/A	No
Alternative G - No Action								
Mitigated Emissions	135	26	129	27	114	21	113	21
Offset Credits	55	11	49	12	34	6	N/A	0
Final Mitigated Emissions	80	15	80	15	80	15	N/A	21
Significance Effect?	No	No	No	No	No	No	N/A	No

NOTES: Emissions shown are for mobile sources and area sources. Source for significance thresholds are BAAQMD 1999 and 40 CFR 93.153 (b)(1). Significance threshold amount is 15 tpy and 80 ppd for ROG, NO_X , and PM_{10} , and 100 tpy for $PM_{2.5}$. Mitigation is outlined under Operational Emission, Mitigation for Alternatives A, B, C, D, E, and F, letter I.

SOURCE: KDA 2004, AES 2007.

these reduced emissions do not comprehensively represent all mitigation measures presented, the results demonstrate that regional air quality impacts from Alternatives A, B, C, D, F, and G would be reduced, but not to a level that is less than significant for ROG, NO_X, or PM₁₀. However, with the purchase of offsets for ROG, NO_X, and PM₁₀, as stated in mitigation measure I, regional air quality impacts from Alternatives A, B, C, D, F, and G would be less than significant.

Odor Impacts

To avoid/reduce potential adverse odor effects associated with potential wastewater treatment and disposal facility, the Tribe shall implement the following measures for Alternatives B, C, D, E, and F and Alternative A, if the onsite wastewater treatment option is chosen:

- U. The wastewater treatment plant shall be constructed with comprehensive odor control facilities, including the injection of odor control oxidants at the sewage lift station and construction of a covered headworks with odor scrubber at the wastewater treatment plant.
- V. Spray drift from the wastewater treatment plant or spray disposal field shall not be allowed to migrate out of the plant's property boundaries.
- W. Spray field irrigation will cease when winds exceed 30 mph.

The Tribe shall implement the following measure for Alternative E only:

X. The Tribe shall obtain a letter from the EPA confirming that the proposed use will not create an objectionable odor.

Adoption of the above mitigation will reduce the adverse odor air quality impacts of the alternatives to a less than significant level.

Toxic Air Contaminants Impacts

To avoid/reduce potential adverse toxic air contaminant effects associated with this facility, the Tribe shall ensure the following measures are included in the design and operation of the project for Alternatives A, B, C, D, E, F, and G:

Y. Proposed commercial land uses (e.g., loading docks) that have the potential to emit toxic air emissions shall be located as far away as feasibly possible from existing and proposed sensitive receptors in accordance with ARB's Air Quality and Land Use Handbook.

5-15

Z. Air intakes associated with the heating and cooling system for buildings shall not be located next to potential TAC-emitting locations (e.g., loading docks) in accordance with ARB's Air Quality and Land Use Handbook.

The Tribe shall implement the following measures for Alternative E only:

- AA. The Tribe shall provide an adequate buffer between any dry cleaning operation and any sensitive receptors (e.g., schools, households, etc.).
- BB. The Tribe shall provide an adequate buffer between any gasoline dispensing facility and any sensitive receptors (e.g., schools, households, etc.).

The developer shall implement the following measures for Alternative G only:

- CC. The developer shall provide an adequate buffer between any dry cleaning operation and any sensitive receptors (e.g., schools, households, etc.).
- DD. The developer shall provide an adequate buffer between any gasoline dispensing facility and any sensitive receptors (e.g., schools, households, etc.).

Adoption of the above mitigation will reduce the toxic air contaminant air quality impacts of the alternatives to a less than significant level.

Indoor Air Quality

The following measures are recommended for Alternatives A, B, C, D, E, and F (except where otherwise noted):

- EE. The Tribe shall ensure that ventilation of outdoor air is consistent with ASHRAE Standard 62-1999¹ under all operating conditions.
- FF. To limit public exposure to environmental tobacco smoke, the Tribe shall provide non-smoking areas, or "smoke-free zones" in the casino gaming area (except for alternatives that do not include a casino gaming area).
- GG. The Tribe shall provide non-smoking rooms in the hotel (except for alternatives that do not include a hotel).
- HH. The Tribe shall ensure that comfort levels are acceptable to most occupants, and consistent with ASHRAE Standard 55-1992², under all operating conditions.

ASHRAE Standard 62-1999, *Ventilation for Acceptable Indoor Air Quality*, is the generally accepted standard for commercial buildings in the United States.

- II. Signage shall be prominently displayed alerting patrons and employees of areas that permit smoking, noting that environmental tobacco smoke has been found to be deleterious to health, and noting the availability of a brochure(s) describing the health effects of exposure environmental tobacco smoke.
- JJ. A brochure(s) describing the health effects of exposure to environmental tobacco smoke shall be made available to casino patrons in common areas that permit smoking.
- KK. Prospective employees shall be informed, prior to their hire, that indoor smoking is permitted in portions of the buildings where they may be employed.
- LL. Prospective employees shall be given a brochure(s) describing the health effects of exposure to environmental tobacco smoke.
- MM. The Tribe shall ensure that significant expected sources of pollutant emissions are isolated from occupants using physical barriers, exhausts, and pressure controls.
- NN. The Tribe shall ensure that outdoor air entering the building is protected from contamination from local outdoor sources and from building exhausts and sanitation vents.
- OO. The Tribe shall ensure that provisions are made for easy access to HVAC equipment requiring periodic maintenance.
- PP. The Tribe shall ensure that occupant exposure to construction contaminants is minimized using protocols for material selection, preventive installation procedures, and special ventilation and pressure control isolation techniques.
- QQ. The Tribe shall ensure the use of low-emitting building products pursuant to Integrated Waste Management Board's Section 01350³ where feasible.

The following measures are recommended for Alternative G:

RR. The developer shall ensure that ventilation of outdoor air is consistent with ASHRAE Standard 62-1999 under all operating conditions.

ASHRAE Standard 55-1992, *Thermal Environmental Conditions for Human Occupancy*, identifies many factors that influence thermal comfort and the perception of thermal conditions. Among them are temperature, radiation, humidity, air movement, vertical, and horizontal temperature differences, temperature drift, personal activity, and clothing.

Section 01350 contains specification language on environmental and public health considerations for building projects. This specification establishes goals and provides an overview of special environmental requirements. It covers guidelines for energy, materials, and water efficiency, indoor air quality (IAQ), nontoxic performance standards for cleaning and maintenance products, and sustainable site planning and landscaping considerations, among other measures.

(http://www.ciwmb.ca.gov/greenbuilding/specs/section01350/default.htm)

- SS. The developer shall ensure that comfort levels are acceptable to most occupants, and consistent with ASHRAE Standard 55-1992, under all operating conditions.
- TT. The developer shall ensure that significant expected sources of pollutant emissions are isolated from occupants using physical barriers, exhausts, and pressure controls.
- UU. The developer shall ensure that outdoor air entering the building is protected from contamination from local outdoor sources and from building exhausts and sanitation vents.
- VV. The developer shall ensure that provisions are made for easy access to HVAC equipment requiring periodic maintenance.
- WW. The developer shall ensure that occupant exposure to construction contaminants is minimized using protocols for material selection, preventive installation procedures, and special ventilation and pressure control isolation techniques.
- XX. The developer shall ensure the use of low-emitting building products pursuant to Integrated Waste Management Board's Section 01350 where feasible.

Implementation of the above mitigations will reduce indoor air quality impacts to less than significant, except for Alternative G, which would result in a less than significant impact with or without the above mitigation.

5.2.4 BIOLOGICAL RESOURCES

The following mitigation measures are recommended for Alternatives A, B, C, D, E, F, and G (unless otherwise noted):

A. For impacts to wetlands or other waters of the United States, authorization from the U.S. Army Corps of Engineers (USACE) is required. Replacement of directly affected wetlands at a ratio approved by the USACE is required. Clean Water Act Section 401 water quality certification will also be required from the U.S. Environmental Protection Agency (USEPA).

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⁴ ASHRAE Standard 62-1999, *Ventilation for Acceptable Indoor Air Quality*, is the generally accepted standard for commercial buildings in the United States.

ASHRAE Standard 55-1992, *Thermal Environmental Conditions for Human Occupancy*, identifies many factors that influence thermal comfort and the perception of thermal conditions. Among them are temperature, radiation, humidity, air movement, vertical, and horizontal temperature differences, temperature drift, personal activity, and clothing.

Section 01350 contains specification language on environmental and public health considerations for building projects. This specification establishes goals and provides an overview of special environmental requirements. It covers guidelines for energy, materials, and water efficiency, indoor air quality (IAQ), nontoxic performance standards for cleaning and maintenance products, and sustainable site planning and landscaping considerations, among other measures.

(http://www.ciwmb.ca.gov/greenbuilding/specs/section01350/default.htm)

- B. Wetland mitigation shall be accomplished through creation/restoration of seasonal wetlands onsite and/or within an open space preserve. This creation/restoration will provide an increase in the inventory of seasonal wetlands for the area. The proposed 1.5:1 ratio of seasonal wetland restoration to impacted acreage will be sufficient to satisfy the ratio of replacement to impacted acreage required by regulatory agencies based on wetland functions and values present on the Stony Point site or the Lakeville site. A detailed mitigation plan shall be designed that includes monitoring and reporting requirements, responsibilities, performance success criteria, reporting procedures and contingency requirements.
- C. A detailed plan shall be developed and implemented to conserve ecological resources in the 182-acre southern portion of the Wilfred and Stony Point sites (note that this would not be required for Alternatives F or G). The plan shall address management activities to ensure maintenance of breeding, refugial, and dispersal habitats for California tiger salamander (CTS); and should provide a grazing regimen that will conserve populations of Sonoma sunshine and Burke's goldfields. Mitigation for rare plant impacts according to the Programmatic Consultation would require preservation at a 2:1 ratio for direct impacts to habitat in which presence is assumed or demonstrated through surveys. Preservation at a 1:1 ratio would be required for direct impacts to habitat in which surveys are conducted with negative results. The mitigation requirements for each of the eight additional options of Alternatives A-E are shown in **Table 5-2**.

TABLE 5-2
MITIGATION REQUIREMENTS FOR IMPACTS TO LISTED PLANT SPECIES OF THE SANTA ROSA PLAIN

Option	Alt. A, Opt. 2 (acres)	Alt. A, Opt. 3 (acres)	Alt. B, Opt. 1 (acres)	Alt. B, Opt. 2 (acres)	Alt. C, Opt. 1 (acres)	Alt. C, Opt. 2 (acres)	Alt. D, Opt. 1 (acres)	Alt. D, Opt. 2 (acres)	Alt E, Opt. 1 (acres)	Alt. E, Opt. 2 (acres)
Preservation acreage	1.60	1.60	22.52	27.81	23.17	27.08	21.15	23.29	21.07	22.34
Creation acreage	1.60	1.60	21.14	26.43	21.79	25.70	19.77	21.91	19.69	20.96

Source: The Huffman-Broadway Group, Inc., 2006.

D. Development impacts on aestivation habitat for the CTS on the Wilfred site (Alternative A, Options 2 and 3) have been previously evaluated in a Section 7 Biological Opinion for a different project on the same site. The USFWS issued a Biological Opinion on August 5, 2005 related to a Section 7 consultation conducted as part of the Corps permit application process for a mixed use project (commercial, residential and light industrial) proposed by Redwood Equities, L.P. This approved BO for the mixed-use project

5-19

requires mitigation for CTS aestivation habitat at a ratio of 0.5:1. For the project evaluated in the BO, this would require the purchase of approximately 41.5 acres of existing CTS habitat from a mitigation bank or the purchase of farm land that is existing CTS habitat, then placing the habitat within a conservation easement with a third party non-profit conservation management group in order to manage and protect the property in perpetuity.

For the preferred Alternative A, it is expected that either the previous BO would need to be amended for the proposed gaming facility use of the site or a new BO would need to be processed. Until an Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service is completed as part of the required Corps permit process, it is not clear whether the required mitigation ratios would be as recommended in May 16, 2006 USFWS/CDFG interim guidance related to mitigation of CTS in the Santa Rosa Plain or a lesser amount as determined appropriate by the USFWS consistent with the previously-issued BO. The May 16, 2006 USFWS/CDFG interim guidance requires mitigation at a ratio of 3:1 for projects that are within 500 feet of a breeding site; 2:1 for projects that are greater than 500 feet and within 2200 feet of a known breeding site, and projects beyond 2200 feet from a known breeding site but within 500 feet of an adult occurrence; and 1:1 for projects that are greater than 2200 feet and within 1.3 miles of a known breeding site. As development under either Alternative A option would be between 2200 feet and 1.3 miles of a known breeding site, a 1:1 mitigation of CTS habitat could be suggested for this project pursuant to the May 16, 2006 USFWS/CDFG interim guidance.

In the case of the FWS requiring the issuance a new BO, and with 68.42 acres of impact to CTS habitat, Alternative A, Option 2 would require 68.42 acres of existing CTS habitat be purchased form a mitigation bank, or alternatively that 68.42 acres of farm land providing habitat for CTS be purchased and placed in conservation easement as above. With impacts to 82.17 acres of CTS habitat, Alternative A, Option 3 would require similar purchase of 82.17 acres in a mitigation bank or of farmland purchase and placement under conservation easement. Impacts to CTS aestivation habitat shall be mitigated off-site and shall consist of purchase of CTS credits from an approved mitigation bank or purchase of farm land providing suitable habitat for CTS (where CTS are known to occur) and placement of the land under conservation easement.

Spraying of reclaimed wastewater is proposed within the 180-acre parcel under either Alternative A Option 2 or 3, within the area east of the Bellevue–Wilfred channel. Under Alternative A Option 2, no spraying would occur within 250 feet of any wetland in this area, resulting in an area of 78 acres of spray fields. Under Alternative A Option 3, 111.4 acres of spray fields would be laid out such that a 50-foot buffer would be provided from any wetland located in this area.

Biological monitors would be present during construction of the project and during excavation associated with wetland creation to remove the animals from the work area and relocate them to suitable habitat approved by the USFWS.

Calculations of impacts to CTS habitat from Alternatives B through E (the 360-acre site) and mitigation requirements based on the May 16, 2006 USFWS/CDFG interim guidance related to mitigation of CTS in the Santa Rosa Plain are shown in **Table 5-3**. Mitigation for this level of impact to the CTS would be required and developed as part of a Section 7 consultation that would be initiated by the USACE as part of its process for completing a federal permit for filling on-site wetlands. All CTS mitigation would be accomplished off-site and would consist of purchase of CTS credits from an approved mitigation bank or purchase of farm land providing suitable habitat for CTS (actually where CTS are known to occur) and placing the area under conservation easement. Mitigation plans shall also include relocation of CTS from development areas (including locations of created wetlands), use of biological monitors on a daily basis during construction and or excavation activities, and fencing to exclude the CTS from entering the construction zone. Prior to construction work beginning each morning, the biological monitor will check equipment for animals and CTS under construction equipment and stored pipes.

TABLE 5-3
IMPACTS AND MITIGATION REQUIREMENTS FOR CTS

Alternative	Option	Approximate Acreage of Relevant Site (acres)	Impacts of Development to CTS Habitat (acres) (graded footprint and sprayfields)	-	CTS Mitigation ation) (acres) May 16, 2006 Agency Guidance	Approximate Ungraded On-Site Open Space Preserve (acres) (little-to-no CTS habitat)	Portion of Open Space to be used as Spray Fields (acres)	Wetland Preservation in On Site Open Space Preserve (acres)
Α	2	253	68.42	34.26	68.42	185	78.0	16.36
Α	3	253	82.17	48.17	82.17	169	111.4	16.07
В	1	360	83.97		151.00	277	78.0	39.75
В	2	360	100.43		167.46	261	111.4	34.46
С	1	360	86.90		152.25	259	78.0	38.19
С	2	360	98.30		162.59	238	111.4	31.70
D	1	360	66.92		133.91	281	57.0	41.11
D	2	360	99.77		166.65	269	101.0	38.94
E	1	360	48.36		106.76	283	19.0	41.36
E	2	360	55.03		113.42	277	37.0	40.08

Source: The Huffman-Broadway Group, Inc., 2006.

The biological monitor shall also check all steep-walled holes and trenches greater than one foot deep for any CTS. The biological monitor shall remove CTS as needed from equipment and construction-related features (i.e., trenches, holes, etc.). Purchase of credits at an off-site mitigation bank may be implemented if determined to be appropriate by USFWS during the Section 7 consultation process.

- E. A pre-construction survey for burrowing owls shall be conducted to ensure impacts to burrowing owls, if present in the construction area, do not occur during the nesting season. The pre-construction survey shall be conducted within 30 days prior to initiation of construction activity. If active nest sites are found, passive relocation measures, that include the creation of two natural or artificial burrows, shall be provided for each burrow in the area of the Stony Point site or the Lakeville site, as appropriate, that is considered to be biologically unsuitable. Daily monitoring will be implemented until the owls have been relocated to the new burrows. This measure will reduce potential impacts to burrowing owl species. Other mitigation measures, in lieu of the proposed mitigation, include avoidance or passive relocation with one-way doors, as outlined in the "Staff Report on Burrowing Owl Mitigation" (California Department of Fish and Game, 1995).
- F. Pre-construction surveys for nesting birds shall be conducted within 30 days prior to initiation of construction activity. Construction and tree removal (grubbing, vegetation removal) should be timed to take place during late summer months and through winter, ideally from September through February, to avoid impacting nesting birds and other sensitive wildlife species. The nesting season extends approximately February through September with a peak nesting period taking place from March through June. If construction or grubbing activities are to take place between late February and late June, then a pre-construction survey shall be performed by a qualified biologist to identify any active nests or other special-status species, at least two weeks prior to the start of construction. If bird nests are found, appropriate buffer zones shall be established around all active nests to protect nesting adults and their young from construction disturbance. Size of buffer zones shall be determined in consultation with wildlife agency staff based on site conditions and species involved. If construction is delayed for more than two weeks, a second survey shall be performed.
- G. All grading and clearing shall be conducted after April 15 and before October 15 of any year, depending on rainfall and/or site conditions to minimize erosion. Access roads and routes will be limited, as well as the construction staging area, to the minimum size required to achieve the goals of the project. A speed limit of 15 mph on dirt roads shall be maintained. These practices will limit erosion and dust borne particles.

- H. During construction, vegetation shall only be cleared from the permitted construction footprint and necessary lay-down and assembly areas. Areas cleared of vegetation, pavement, or other substrates shall be stabilized as quickly as possible and Best Management Practices (BMP's) applied (erosion fencing, straw and other material applied to soils) to prevent erosion and runoff that could affect steelhead fish in the Laguna de Santa Rosa.
- I. Hazardous materials including fuels, oils, solvents, etc., shall be stored in sealed containers in a designated location at a minimum of 200 feet from aquatic environments. All fueling and maintenance of equipment will be done at a minimum of 200 feet from aquatic environments.
- J. All food items and food-related trash shall be sealed in containers prior to leaving the construction site at the end of the workday; these items shall be removed from the site once every three days. This measure will limit attraction of wildlife and eliminate trash pollution in the Laguna de Santa Rosa.
- K. Where appropriate, vegetation removed as a result of project activities shall be replaced with native species that are of value to local wildlife. Native plants have a significant cultural value, are generally more valuable as wildlife food sources, and require less irrigation, fertilizers, and pesticides than exotic species.
- L. Treatment of wastewater to remove phosphates, nitrates, and endocrine wastes, shall occur to the extent technically feasible during spring discharge from March 20 to May 15 each year. This mitigation will reduce the effects of wastewater discharge on Threatened and Endangered Species of fish, and reduce the amounts of biostimulatory substances in tertiary-treated wastewater to less than significant levels during the critical spring months. In addition to treatment of the wastewater, the temperature of the released wastewater shall not exceed a 5 degree (°F) variation from the receiving water body. All discharges will be consistent with the requirements of the NPDES permit.
- M. Turn off as many exterior and interior lights as possible during the peak bird migration hours of midnight to dawn to reduce potential building collisions with migration birds.
- N. Install downcast lights with top and side shields to reduce upward and sideways illumination. This will reduce potential disorientation affects from non-directed shine to birds and wildlife species.
- O. Section 7 Consultation shall be initiated with the NOAA Fisheries (also known as National Marine Fisheries Service, or NMFS) regarding potential impacts to steelhead if treated wastewater is to be discharged into the Laguna de Santa Rosa.

Implementation of the above mitigation will reduce the impacts of the project on biological resources to a less than significant level.

The following mitigation measures are recommended for each option of Alternative F:

- A. A management plan shall be developed for the north and west sections of the Lakeville site. The plan shall be developed to conserve ecological resources in that area and to provide necessary mitigation for possible impacts to sensitive species resulting from development. The plan shall address management activities to ensure maintenance of breeding, refugial, and dispersal habitats for California red-legged frog; habitats for both larval and adult stages of Callipe Silverspot and Myrtle's Silverspot butterflies; breeding and foraging habitat for burrowing owl; foraging area for raptor species of concern; and shall provide a grazing regimen that will conserve populations of saline clover.
- B. Development plans for the Middle section of the Lakeville site shall be designed with appropriate setbacks from California red-legged frog breeding sites, i.e., 300 feet or greater. Habitat for this species shall be enhanced in the Northern portion of the site in coordination with the USFWS to compensate for any indirect effects to habitat.
- C. Isolated populations of saline clover may be affected on the Lakeville site if development occurs in the Middle section or eastern portion. A mitigation plan will be developed to transplant the plants or collect seed, as appropriate. Transplant individuals or seed may be planted in appropriate protected habitat or open space preserves established in the project area.
- D. Systematic plant surveys of the site shall be conducted during the early spring flowering period to document presence or absence of early blooming species (e.g., Sonoma sunshine and dwarf downingia).
- E. Appropriate setbacks from the Middle section of the Lakeville site shall be implemented to prevent indirect impacts to raptors (red-tailed hawk and great-horned owl), which are known to nest in the adjacent eucalyptus groves.
- F. Pre-construction surveys for burrowing owls must be completed to ensure that this species is not present in the construction area. Pre-construction surveys must be completed 30 days prior to the initiation of construction activity. The presence of nests of this species would require the delay of construction until after the young have fledged.
- G. A pre-construction survey for the California horned lark and loggerhead shrike shall be conducted to ensure that the construction area is not nesting habitat. Pre-construction surveys must be completed 30 days prior to the initiation of construction activity. The presence of nests of either species would require the delay of construction until after the young have fledged.

- H. Turn off as many exterior and interior lights as possible during the peak bird migration hours of midnight to dawn to reduce potential building collisions with migration birds.
- Install downcast lights with top and side shields to reduce upward and sideways
 illumination. This will reduce potential disorientation affects from non-directed shine
 to birds and wildlife species.
- P. Section 7 Consultation shall be initiated with the NOAA Fisheries (also known as National Marine Fisheries Service, or NMFS) regarding potential impacts to green sturgeon, tidewater goby, Delta smelt, river lamprey, Pacific lamprey, Coho salmon, steelhead, Chinook salmon, Sacramento splittail, and long-fin smelt, if treated wastewater is to be discharged into the Petaluma River.

Implementation of the above mitigation will reduce the impacts of the project on biological resources to a less than significant level.

5.2.5 CULTURAL AND PALEONTOLOGICAL RESOURCES

The following mitigation measures are recommended for Alternatives A, B, C, D, E, and F:

- A. The Tribe will implement all mitigation measures concurred upon by the State Historic Preservation Officer (SHPO) during the Section 106 consultation process, including but not limited to, the following:
 - a. The following mitigation shall be conducted and the Section 106 process concluded prior to the public release of the FEIS:
 - i. Alternatives B, D, and E: Section 106 concurrence of *no historic* properties are effected by SHPO is required prior to any ground disturbance if these sites are selected as the Preferred Alternative.
 - ii. Alternative F: (CA-SON-204): Permanent fencing shall be installed to provide a buffer zone of 100 feet in width around the site to ensure there are no adverse impacts to the site during construction or project operation. Security guards shall also regularly monitor the site to ensure the fence has not been breached
- B. To avoid potential impacts to previously unknown cultural resources, including subsurface resources, the Tribe shall include the following requirement in construction contract specifications for the project:

- a. In the event of any inadvertent discovery of archaeological resources during construction-related earth-moving activities, all such finds shall be subject to Section 106 of the National Historic Preservation Act (NHPA) as amended (36 CFR 800). Once the land has been taken into trust for the Tribe, the inadvertent discovery of archaeological resources is also subject to the Native American Graves Protection and Repatriation Act (NAGPRA) (25 USC 3001 et seq.) and the Archaeological Resources Protection Act (ARPA) of 1979 (16 U.S.C. 470 aamm). Specifically, procedures for post review discoveries without prior planning pursuant to 36 CFR 800.13 shall be followed. The following shall apply to the inadvertent discovery of both archaeological or paleontological resources: All work within 50 feet of the find shall be halted until a professional archaeologist, or paleontologist as appropriate, can assess the significance of the find. If any find is determined to be significant by the archaeologist, or the paleontologist, then representatives of the Tribe and BIA shall meet with the archaeologist, or paleontologist, to determine the appropriate course of action.
- b. If human remains are discovered during ground-disturbing activities on Tribal lands, pursuant to NAGPRA, Section 10.4 Inadvertent Discoveries, the County coroner, the Tribal Official, and representatives from the BIA and NIGC shall be contacted immediately. No further disturbance shall occur until the County coroner, the Tribal Official, and the BIA and NIGC representatives have made the necessary findings as to the origin and disposition.

Implementation of the above mitigation will reduce cultural resources and paleontological impacts to a less than significant level.

5.2.6 SOCIOECONOMIC CONDITIONS

The following mitigation measures are recommended for Alternatives A, B, and C:

- A. The Tribe shall negotiate a MOU with Sonoma County that provides annual payments of at least \$43,596 to mitigate for fiscal impacts to the County. The County and the Tribe are free to negotiate payments greater than this amount, however the MOU must at least provide for annual payments of \$43,596 in order to mitigate fiscal impacts to a less than significant level.
- B. In order to maximize the effectiveness of MOU payments to treatment and prevention programs, the organization that receives the payments for problem gambling treatment must serve the Sonoma County region, and be accessible to County residents.
- C. The Tribe shall prominently display materials describing the risk and signs of problem and pathological gambling behaviors. Materials shall also be prominently displayed that

provide available programs for those seeking treatment for problem and pathological gambling disorders.

The following mitigation measures are recommended for Alternative D:

- D. The Tribe shall negotiate a MOU with Sonoma County that provides annual payments of at least \$35,212 per year to mitigate for fiscal impacts to the County. The County and the Tribe are free to negotiate payments greater than this amount, however the MOU must at least provide for annual payments of \$35,212 in order to mitigate fiscal impacts to a less than significant level.
- E. In order to maximize the effectiveness of MOU payments to treatment and prevention programs, the organization that receives the payments for problem gambling treatment must serve the Sonoma County region, and be accessible to County residents.
- F. The Tribe shall prominently display materials describing the risk and signs of problem and pathological gambling behaviors. Materials shall also be prominently displayed that provide available programs for those seeking treatment for problem and pathological gambling disorders.

The following mitigation measure is recommended for Alternative E:

G. The Tribe shall negotiate a MOU with Sonoma County that provides annual payments of at least \$33,535 per year to mitigate for fiscal impacts to the County. The County and the Tribe are free to negotiate payments greater than this amount, however the MOU must at least provide for annual payments of \$33,535 in order to mitigate fiscal impacts to a less than significant level.

The following mitigation measures are recommended for Alternative F:

- H. The Tribe shall negotiate a MOU with Sonoma County that provides up to \$1,000,000 towards the development of a fire station near the Lakeville Site and annual payments of at least \$181,724 per year to mitigate for fiscal impacts to the County. The County and the Tribe are free to negotiate payments greater than these amounts, however the MOU must at least provide for one-time payments of \$1,000,000 and annual payments of \$43,596 in order to mitigate fiscal impacts to a less than significant level.
- I. The Tribe shall negotiate a MOU in which it agrees to provide payments to problem gambling treatment programs of at least \$41,526 per year.
- J. In order to maximize the effectiveness of MOU payments to treatment and prevention programs, the organization that receives the payments for problem gambling treatment must serve the Sonoma County region, and be accessible to County residents.

K. The Tribe shall prominently display materials describing the risk and signs of problem and pathological gambling behaviors. Materials shall also be prominently displayed that provide available programs for those seeking treatment for problem and pathological gambling disorders.

Implementation of the above mitigation will reduce socioeconomic impacts to a less than significant level.

5.2.7 RESOURCE USE PATTERNS

TRANSPORTATION

Mitigation for Intersections

Recommended intersection mitigation measures identified in the traffic impact study for Alternatives A through E are identified in **Table 5-4**. **Figure 5.2.7-1** shows the location of the Alternatives A through E mitigated intersections. **Figures 5.2.7-2** through **5.2.7-5** provide a close-up view of the intersections. Recommended intersection mitigation measures identified in the traffic impact study for Alternative F are identified in **Table 5-5**. **Figure 5.2.7-6** shows the location of the mitigated intersections in Alternative F. **Figures 5.2.7-7** and **5.2.7-8** provide close-up views of mitigation intersections for Alternative F. Additional detail on recommended mitigation measures is contained in **Appendix O**.

Each mitigation measure recommends that the Tribe pay for either a proportionate share of the mitigation cost or the full mitigation cost. A proportionate share is recommended when the LOS at the study intersection is recorded as an unacceptable LOS without the addition of project trips. In such cases, the Tribe shall be responsible for the incremental impact that the added project trips generate, calculated as a percentage of the costs involved for construction of the mitigation measure. The proportionate share is derived from the percentage that the added project trips contribute to the new total trips at the study intersection. In most cases, a full share is recommended when the LOS at the study intersection is recorded as an acceptable LOS without the addition of project trips. An exception to this general recommendation are situations where the project's contribution to operation of an intersection may be relatively small, but sufficient to cause an intersection that is on the verge of operating unacceptably to operate at an unacceptable LOS.

TABLE 5-4INTERSECTION IMPROVEMENTS – ALTERNATIVES A - E

Inter- section	Intersection Improvements				2008	}					202	0	
Number	Intersection Improvements	Α	В	С	D	E	Share	Α	В	С	D	E	Share
1	Wilfred/Stony Point	,	,				•						
	Signalize	Х	Х	Х	Х	Х	Р	Х	Х	Х	Х	Х	Р
	Add NB right and change through-right to through			Х			Р			Х			Р
	Lengthen WB right turn bay to 150 feet									Х			Р
	Extend WB right turn bay to 75 feet	Х					Р	Х					Р
	Widen Wilfred to 3 lanes (add WB left) ⁴		Х	Х			Р		Х	Х			Р
2	Wilfred/Primrose												
	Signalize		Х		Х		F		Х		Х	Х	F
	Widen Wilfred to 3 lanes (add EB left and WB left) ⁴		Х	Х			F		Х	Х			F
	Add 2 NB rights and change all shared to through-left		Х				F		Х	Х			F
3	Wilfred/Whistler												
	Add two NB rights and change all shared to through-left			Х			F			Х			F
	Widen Wilfred to 3 lanes (add EB left and WB left) ⁴		Х	Х			F		Х	Х			F
	Add WB left			Х			F			Χ			F
	Signalize			Х			F			Χ			F
4	Langner/Wilfred												
	Signalize			Х			F	Χ					F
	Widen Wilfred to 3 lanes (add EB left and WB left) ⁴		Х	Х			F		Х	Х			F
	Add WB right and change through- right to through			Х									
	Add SB right and change all-shared to left-through									Х			F
	Add NB left and change all shared to through-right	Х					F	Χ					F
5	Labath/Wilfred												
	Signalize	Χ	Χ	Х	Х	Х	Р	Х	Х	Χ	Х	Χ	Р
	Widen Wilfred to 3 lanes (add EB left and WB left) ⁴		Х	Х			Р						
	Add WB left and change WB all shared to through-right	Х					Р						
	Add NB right and change NB all shared to left-through	Х			Х		Р		Х		х	Х	Р

					2008	<u> </u>					202	20	
	Add NB right and NB left and change NB all shared to left-through									Х			Р
	Add SB left and change SB all shared to through-right				Х		Р						Р
	Add NB left and change NB all shared to through			Х			Р						Р
	Add 2 nd WB through			Х			Р						
	Add 1 SB left and change SB all shared to through right								Х	Х	Х	Х	Р
	Add 2 nd NB rights and change NB all shared to through-left							Х					Р
6	Dowdell/Wilfred	-											
	Signalize	Х	Х	Х	Х	Х	Р	Х	Х	Χ	Х	Х	Р
	Add WB left											Х	Р
	Widen Wilfred to 3 lanes (add EB right and WB left) ⁴			Х			Р						
	Widen Wilfred to 3 lanes (add EB left and WB left) ⁴		Х				Р						
	Add 2 nd WB left								Χ	Х	Χ		Р
	Add EB right turn bay and change the EB through-right to through								Х				Р
	Add WB left and change WB all shared to through right	Х			Х		Р						
	Add SB left and change SB all shared to through-right										Х	Χ	Р
	Add SB left turn bay and SB right turn bay and change all shared to through								Х	Х			Р
	Add EB left and change EB all shared to through-right	Х					Р						
	Add NB left and 2 NB rights and change all shared to through										Х		Р
	Add NB left turn bay and NB right turn bay and change all shared to throughright								Х	Х			Р
	Add 2 NB rights and change NB all shared to though-left											Х	Р
7	Wilfred/Redwood												
	Add WB left and change WB through- left to through		Х	Х	Х	Х	F	Х	Х	Х	Х	Х	Р
	Change WB left-through to WB left and change one WB right to WB through	Х					F						
	Change phasing east-west to protected from split	Х	Х	Х	Χ		F	Х	Х	Х	Х	Х	Р

					2008						202	0	
	Change phasing east-west to protected and permitted from split					Х	F						
	Change NB through to NB through-left								Х	Χ			Р
	Add WB through			Х	Х		F	Х	Х	Χ	Х	Х	F
	Add EB through			Х			F						
	Add EB right and change EB through- right to through					Х	F						
	Add EB left and EB right and change NB all shared to left-through	Х					F						
	Add EB left and EB right and change EB all shared to right-through			Х			F						
	Add EB left and through and change EB all-shared to through-right		Х				F						
	Add EB through-right and change all- shared to through-left				Х		F						
	Add EB through and change all shared to through-right					X	F						
8	Wilfred/US-101 SB Ramps												
	Extend SB left turn bay to 575 feet	Χ					F	Х					F
	Extend SB left turn bay to 500 feet		Х	Х	Х		F		Х	Χ	Х		F
	Extend SB left turn bay to 400 feet					Х	F					Х	F
	Add EB right and change EB through- right to through							Х	Х	Х	Х		F
9	Golf Course/Commerce												
	Relocate the Commerce Blvd/Golf Course Dr. intersection to the east and relocate the Roberts Lake Rd./Golf Course Dr. intersection to the west closer to the railroad crossing. The two intersections on either side of the railroad crossing will operate as one intersection. ¹		×	x	X	X	F		x	X	X	Х	P
0	Golf Course Dr./Roberts Lake Rd.												
	Relocate the Commerce Blvd/Golf Course Dr. intersection to the east and relocate the Roberts Lake Rd./Golf Course Dr. intersection to the west closer to the railroad crossing. The two intersections on either side of the railroad crossing will operate as one intersection. ¹		X	X	×	Х	F		x	X	X	Х	F
11	Commerce Blvd./US-101 NB Ramps		ı			r							
	Change SB through to through-right ²	Χ	Χ	Х	Χ	Х	F	Х	Х	Χ	Х	Χ	Р
	Add NB loop off-ramp that drops traffic onto WB Wilfred Ave. ^{2 3}	Х	Х	Х	Х		F	Х	Х	Х	х	Χ	F
	Optimize signal timing		l							Х	1 1		Р

Signalize						2008	<u> </u>					202	0	
right to through		Signalize		Х		Χ	Χ	F		Х		Χ	Χ	F
Siony Point Rd./Rohnert Park Expwy. Add WB 600 Foot right turn bay and extend existing turn bay to 600 feet. X				Х		Χ	Х	F		Х		Х	Х	F
Add WB 600 foot right turn bay and extend existing turn bay to 400 feet X		Add WB left out of project driveway		Х		Х	Χ	F		Х		Χ	Х	F
extend existing turn bay to 600 feet. X	13	Stony Point Rd./Rohnert Park Expwy		•					•					
Extend WB right turn bay to 500 feet X				Х				F		Х				F
Extend WB right turn bay to 275 feet		Extend WB right turn bay to 450 feet			Х			F			Χ			F
Labath Ave_Rohnert Park Expwy. Change SB through-right to all-shared X		Extend WB right turn bay to 500 feet				Х		F				Х		F
Change SB through-right to all-shared X		Extend WB right turn bay to 275 feet					Х	F					Χ	F
Change NB/SB passing from protected to split passing Extend SB left turn bay to 350 feet	14	Labath Ave./Rohnert Park Expwy.												
Extend SB left turn bay to 350 feet		Change SB through-right to all-shared	Χ					F	Х					F
Extend NB right turn bay to 200 feet			Х					F	Х					F
Extend SB left turn bay to 300 feet		Extend SB left turn bay to 350 feet	Χ					F	Х					F
Extend SB left turn bay to 250 feet		Extend NB right turn bay to 200 feet		Х	Х	Х		F			Χ			F
Optimize signal timing		Extend SB left turn bay to 300 feet		Х	Х	Х		F		Х	Χ	Х		F
Redwood Dr./Rohnert Park Expwy.		Extend SB left turn bay to 250 feet					Χ	F					Х	F
Optimize signal timing		Optimize signal timing							Х	Х				F
Extend EB left turn bay to 325 feet	15	Redwood Dr./Rohnert Park Expwy.		•				•						
Extend EB left turn bay to 250 feet		Optimize signal timing	Χ	Х	Х	Х	Χ	Р		Х	Χ	Χ	Х	F
Add 2 nd WB right US-101 SB Ramps/Rohnert Park Expwy. Extend SB left turn lane bay to 700		Extend EB left turn bay to 325 feet	Χ					Р						F
US-101 SB Ramps/Rohnert Park Expwy.		Extend EB left turn bay to 250 feet		Х	Х	Х		Р		Х	Χ	Х		P
Extend SB left turn lane bay to 700		Add 2 nd WB right						Р	Х					F
feet Extend SB left turn lane bay to 600 feet Extend SB left turn lane bay to 550 feet X F X F X X F X X F X X IT US-101 NB Ramps/Rohnert Park Expwy. Extend NB left turn lane bay to 400 feet X X F X X F X X F X X F X X	16	US-101 SB Ramps/Rohnert Park Exp	wy.					_						
feet Extend SB left turn lane bay to 550 feet 17 US-101 NB Ramps/Rohnert Park Expwy. Extend NB left turn lane bay to 400 feet Extend NB left turn lane bay to 425 feet Extend NB left turn lane bay to 350 feet X F X X			Х					F	Х					F
feet Solution Sol				Х	Х			F		Х	Х			F
Extend NB left turn lane bay to 400						Χ		F				Х		F
feet Extend NB left turn lane bay to 425 feet Extend NB left turn lane bay to 350 Extend NB left turn lane bay to 350 feet Commerce Blvd./Rohnert Park Expwy. Optimize signal timing Modify signal timing to include an EB	17	US-101 NB Ramps/Rohnert Park Exp	wy.			1								
feet Extend NB left turn lane bay to 350 feet Commerce Blvd./Rohnert Park Expwy. Optimize signal timing Modify signal timing to include an EB			Х			Χ		F	Х			Х		F
feet				Х				F		Х				F
Optimize signal timing X X X F X X X Modify signal timing to include an EB		-			Х			F			Х			F
Modify signal timing to include an EB	18	Commerce Blvd./Rohnert Park Expwy	y .											
Modify signal timing to include an EB right turn overlap phase		Optimize signal timing		X	Х			F	X	Х	X			F
		Modify signal timing to include an EB right turn overlap phase									_		X	F

					2008	3					202	0	
	Add a second SB left turn bay							Х					F
	Add an EB right turn bay for 100 feet							Х					F
20	Redwood Drive/SR-116												
	Optimize signal timing		Х	Х	Х	Х	F		Х	Χ	Х		F
	Extend SB left turn lane bay to 375 feet		Х	х	Х	х	F		х	Х	х	Х	F
21	US-101 SB Ramps/SR-116	1											
	Optimize signal timing		Х	Х	Х		F		Х	Х	Х		F
22	Millbrae/Stony Point	•			•			•					•
	Signalize	Χ	Х	Х	Χ	Х	Р	Х	Х	Χ	Х	Х	Р

NOTE: F = full cost of mitigation measure, P = proportionate cost of mitigation measure, NB = northbound, SB = southbound, EB = eastbound, WB = westbound

SOURCE: Kimley-Horn and Associates 2007; AES 2007.

Implementation of the mitigation identified in **Tables 5-4** and **5-5** would result in the improvement of the LOS at each intersection. **Table 5-6** shows the resulting LOS in 2008 after mitigation for Alternatives A-E and **Table 5-7** shows the resulting LOS after mitigation in 2020. The resulting LOS after mitigation in 2008 and 2020 for Alternative F is shown in **Table 5-8**.

As shown in **Tables 5-6**, **5-7**, and **5-8**, the recommended mitigation measures would mitigate intersection impacts to a less than significant level except for the following impacts:

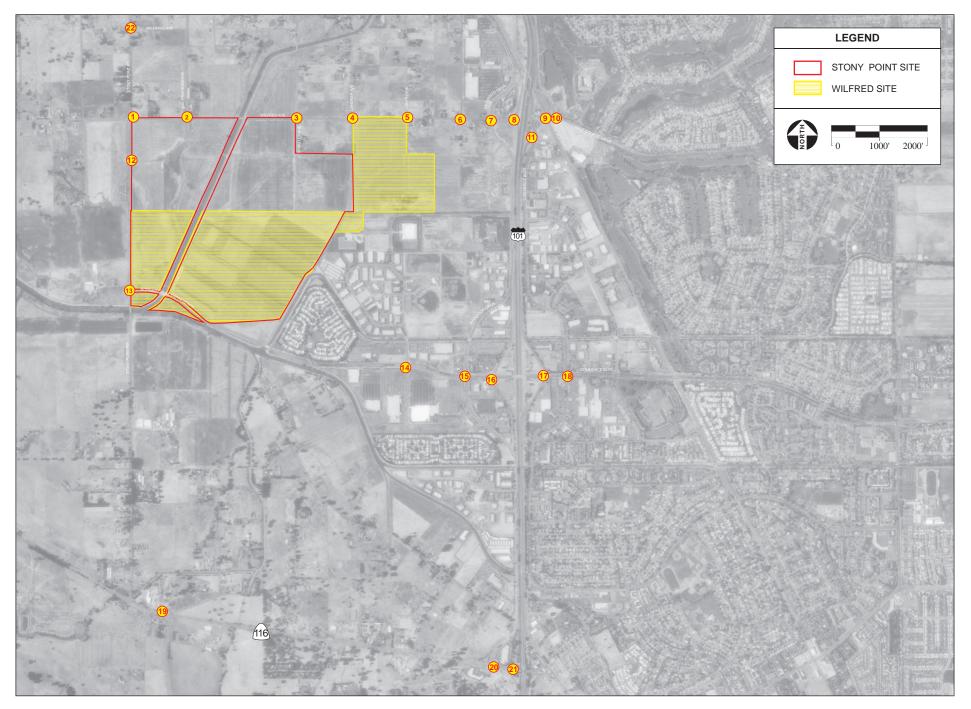
- Under Alternative B in 2008 and 2020, after mitigation, an unacceptable LOS would remain at the Whistler Ave./Wilfred Ave. and the Languer Ave./Wilfred Ave. intersections.
- Under Alternative C in 2008 and 2020, after mitigation, an unacceptable LOS would remain at the Langner Ave./Wilfred Ave. intersection.
- Under Alternative F in 2008, after mitigation, an unacceptable LOS would remain at the Rohnert SR-121/SR-116 intersection and at the SR-29/SR-37 EB Off-Ramp.
- Under Alternative F in 2020 after mitigation, an unacceptable LOS would remain at the SR-121/SR-116 intersection, at the Walnut Avenue/SR-37 EB Ramps, at the Wilson Avenue/SR37 EB Ramps, at the SR-29/SR-37 EB Off-Ramp, and at the SR-29/SR-37 WB Off-Ramp.

¹See **Appendix O** for additional information.

²May require other structural improvements. See **Appendix O** for additional information.

³May obstruct access to the proposed SMART station from Commerce Blvd vis Golf Course Dr – access will be provided from Commerce Blvd via Redwood Dr.

⁴In summary, widen Wilfred Ave. to 3 lanes from Stony Point Rd. to the Urban Growth Boundary



SOURCE: Aerial Photography August 2002; AES, 2007

Graton Rancheria Casino and Hotel EIS / 203523 ■

Figure 5.2.7-1



Intersection #1



Intersection #3



Intersection #5



Intersection #2



Intersection #4



Intersection #6



Intersection #7



Intersection #9



Intersection #11



Intersection #8



Intersection #10



Intersection #12



Intersection #13



Intersection #15



Intersection #17



Intersection #14



Intersection #16



Intersection #18



Intersection #19



Intersection #21



Intersection #20



Intersection #22

TABLE 5-5INTERSECTION IMPROVEMENTS – ALTERNATIVE F

Intersection Number	Improvements	2008	Share	2020	Share
1	Lakeville Highway/SR-37			•	
	Install full interchange	X	F	Х	F
2	SR-29/SR-37 EB Off-Ramp	•			
	Add a second WB right turn	Χ	Р	Х	Р
	Add a second EB right turn			Х	Р
3	SR-29/SR-37 WB Off-Ramp				
	Add a third NB through lane			Х	Р
4	Walnut Avenue/SR-37 EB Ramps				
	Signalize			Х	Р
5	Wilson Avenue/SR-37 EB Ramps				
	Signalize			Х	Р
6	Wilson Avenue/SR-37 WB Off-Ramp				
	Add EB right and change EB through-shared-right to through			Х	Р
7	Lakeville Highway/SR-116				
	Signalize	Х	Р	Х	Р
8	SR-116/SR-121	I.		U	
	Signalize	Χ	Р		
	Extend SB left turn bay to 400 feet			Х	Р
	Add EB left and change EB all shared to through-right	Х	Р	Х	Р
9	Lakeville Highway/Main Project Access		•	•	
	Signalize	Χ	F	Χ	F
	Add SB right (drop lane)	Χ	F	Χ	F
	Widen Lakeville Highway to 2 lanes in each direction	Х	F		
	Add 2 NB lefts (turn bays = 300 feet)	Х	F	Х	F
	Add 2 EB rights (turn bay = 250 feet) and change all to shared left	Х	F		
	Add EB right			Х	F

NOTE: F = full cost of mitigation measure, P = proportionate cost of mitigation measure, NB = northbound, SB = southbound, EB = eastbound, WB = westbound

SOURCE: Kimley-Horn and Associates 2007; AES 2007.





Intersection #1



Intersection #3



Intersection #5



Intersection #2



Intersection #4



Intersection #6



Intersection #7



Intersection #9



Intersection #8

TABLE 5-6INTERSECTION LOS AFTER MITIGATION – ALTERNATIVES A-E (2008)

		Signal	Alt A	Mitigated	Alt B	Vitigated	Alt C	Mitigated	Alt D Mitigated		Alt E Mitigated	
Intersection	Criteria	Control	LOS	Delaya	LOS	Delaya	LOS	Delaya	LOS	Delaya	LOS	Delaya
Wilfred/Stony Point	D	TWSC	С	25.0	С	25.1	С	29.3	С	23.4	В	16.6
Wilfred/Primrose	D	TWSC	В	13.7	С	34.9	С	24.4	D	46.7	С	17.1
Wilfred/Whistler	D	TWSC	В	13.7	F	51.0	D	42.3	D	27.3	С	16.1
Wilfred/Lagner	D	TWSC	С	23.5	F	50.2	F	130.3	D	27.0	С	16.0
Wilfred/Labath	D	TWSC	D	52.8	С	30.9	С	33.3	С	27.7	В	17.9
Wilfred/Dowdell	D	TWSC	В	12.4	D	51.1	D	37.2	D	52.1	С	24.4
Wilfred/Redwood	D	TS	D	43.1	D	38.2	С	34.8	D	44.6	D	47.8
Redwood/Commerce	С	TS	С	26.8	С	26.6	С	26.5	С	26.6	С	26.6
Wilfred Ave / US-101 SB Ramps	D	TS	D	37.8	D	50.9	D	53.7	D	38.5	С	32.2
Golf Course Dr/ Commerce Blvd	D	TS	D	44.1	D	38.0	D	37.0	D	36.7	D	37.1
Golf Course Dr /Roberts Lake Rd	С	TS	В	18.3	D	38.0	D	37.0	D	36.7	D	37.1
US-101 NB Ramps/Commerce Boulevard	D	TS	С	27.4	С	26.9	D	39.5	С	27.1	С	29.8
Project Driveway/ Stony Point	D	TWSC	Α	0.0	В	14.2	Α	0.0	В	10.6	Α	6.8
Business Park Dr /Labath Ave	D	_b	В	10.5	_b	_b	-b	_b	_b	_b	_b	_b
Business Park Dr /Redwood Dr	D	TWSC	D	26.5	D	26.5	D	26.5	D	26.5	D	26.5
Rohnert Park Exp /Stony Point Road	D	TS	С	24.0	С	27.6	D	36.8	D	43.8	С	26.8
Rohnert Park Exp /Labath Avenue	С	TS	С	31.8	С	33.9	С	34.1	С	33.9	С	33.5
Rohnert Park Exp /Redwood Drive	С	TS	С	35.5	С	26.7	С	32.8	С	33.2	С	32.4
Rohnert Park Exp /US-101 SB Ramps	D	TS	С	25.4	С	24.1	С	24.8	С	21.5	С	24.4
Rohnert Park Exp /US-101NB Ramps	D	TS	С	22.8	С	23.7	В	19.2	С	21.8	В	16.5
Rohnert Park /Commerce Blvd	С	TS	С	33.9	С	33.2	С	30.7	С	29.7	С	34.0
SR-116/Stony Point	D	TS	D	38.1	D	46.1	D	39.3	D	40.9	D	38.0
SR-116/ Redwood Dr	D	TS	С	28.5	С	32.4	С	27.7	С	24.9	С	31.9
SR-116/ SB US-101 SB Ramps	D	TS	В	17.6	С	23.4	В	15.9	С	22.7	С	21.0
SR-116/ NB US-101 Off Ramp	D	TS	В	19.2	С	25.2	С	21.1	С	22.9	В	17.8
Millbrae Avenue/Stony Point Road	D	TWSC	С	21.2	В	18.6	С	21.6	С	21.1	С	21.3
Millbrae Avenue/Primrose Road	D	TWSC	В	11.6	В	11.4	В	11.6	В	11.4	В	11.4
Millbrae Avenue/ Whistler Ave	D	TWSC	В	11.7	В	11.5	В	11.5	В	11.5	В	11.5
Millbrae Avenue/ Langner Ave	D	TWSC	В	10.9	Α	9.9	Α	9.9	Α	9.9	Α	9.9
Millbrae Ave/ Labath Ave	D	TWSC	В	11.4	В	11.2	В	11.2	В	11.2	В	11.2
Millbrae Ave and Dowdell Ave	D	TWSC	В	11.3	В	11.3	В	11.3	В	11.3	В	11.3

5-43

NOTE: ^a Delay in seconds

^b Intersection only exists under Alternative A with project.

Bold text denotes LOS unacceptable after mitigation.

SOURCE: Kimley-Horn and Associates, 2007; AES, 2007.

TABLE 5-7INTERSECTION LOS AFTER MITIGATION – ALTERNATIVES A-E (2020)

		Signal	Alt A	Mitigated	Alt B	Vitigated	Alt C	Mitigated	Alt D	Mitigated	Alt E I	Mitigated
Intersection	Criteria	Control	LOS	Delay	LOS	Delav	LOS	Delav	LOS	Delav	LOS	Delav ^a
Wilfred/Stony Point	D	TWSC	С	31.0	C	29.6	С	31.0	C	23.9	C	20.5
Wilfred/Primrose	D	TWSC	С	16.1	D	36.8	С	28.0	D	39.9	В	18.2
Wilfred/Whistler	D	TWSC	С	15.7	F	63.8	D	41.4	D	32.2	С	18.1
Wilfred/Lagner	D	TWSC	С	30.7	F	63.8	F	184.5	D	32.2	С	18.1
Wilfred/Labath	D	TWSC	С	33.1	D	38.9	D	41.7	D	36.9	D	35.5
Wilfred/Dowdell	D	TWSC	D	46.4	D	43.0	D	53.7	D	47.0	D	39.1
Wilfred/Redwood	D	TS	D	47.2	D	47.2	D	50.8	D	41.7	D	51.3
Redwood/Commerce	С	TS	_b	- b	_b	_b	-b	_b	_b	-b	_b	, b
Wilfred Ave / US-101 SB Ramps	D	TS	D	48.5	D	49.0	D	51.4	D	38.6	D	38.9
Golf Course Dr/ Commerce Blvd	D	TS	С	36.5	D	53.2	D	53.2	D	50.8	D	48.1
Golf Course Dr /Roberts Lake Rd	С	TS	В	13.1	D	53.2	D	53.2	D	50.8	D	49.1
US-101 NB Ramps/Commerce Boulevard	D	TS	С	29.7	D	39.2	D	42.9	С	32.9	С	31.7
Project Driveway/ Stony Point	D	TWSC	Α	0.0	В	14.6	А	0.0	Α	9.6	Α	6.8
Business Park Dr /Labath Ave	D	_c	В	10.2	_c	_c	_c	-c	_c	_c	_c	_c
Business Park Dr /Redwood Dr	D	TWSC	С	21.8	С	16.5	С	16.5	С	16.5	С	16.5
Rohnert Park Exp /Stony Point Road	D	TS	С	27.1	С	29.2	С	31.4	D	36.1	С	24.5
Rohnert Park Exp /Labath Avenue	С	TS	С	29.7	С	29.3	С	33.9	С	33.5	С	33.3
Rohnert Park Exp /Redwood Drive	С	TS	С	35.3	С	34.3	С	33.3	С	33.7	С	32.8
Rohnert Park Exp /US- 101 SB Ramps	D	TS	С	24.9	С	25.3	С	24.7	С	24.8	С	24.4
Rohnert Park Exp /US- 101NB Ramps	D	TS	С	23.7	С	24.1	С	20.0	С	22.3	В	17.7
Rohnert Park /Commerce Blvd	С	TS	С	35.1	С	34.9	С	33.3	С	34.9	С	33.5
SR-116/Stony Point	D	TS	D	42.0	D	48.7	D	42.2	D	43.9	D	40.8
SR-116/ Redwood Dr	D	TS	С	32.3	D	40.4	D	36.1	D	36.7	D	38.0
SR-116/ SB US-101 SB Ramps	D	TS	В	18.0	С	32.1	С	27.5	С	29.2	С	20.2
SR-116/ NB US-101 Off Ramp	D	TS	С	20.9	С	30.1	С	23.0	С	25.4	В	19.3
Millbrae Avenue/Stony Point Road	D	TWSC	С	21.3	В	19.4	С	22.3	С	21.8	С	21.9
Millbrae Avenue/Primrose Road	D	TWSC	В	12.1	В	12.4	В	12.6	В	12.4	В	12.4
Millbrae Avenue/ Whistler Ave	D	TWSC	В	12.3	В	12.4	В	12.6	В	12.4	В	12.4
Millbrae Avenue/ Langner Ave	D	TWSC	В	11.3	В	11.2	В	11.2	В	11.2	В	11.2
Millbrae Ave/ Labath Ave	D	TWSC	В	12.5	В	13.5	В	13.5	В	13.5	В	13.5
Millbrae Ave and Dowdell Ave	D	TWSC	В	11.3	В	11.6	В	11.6	В	11.6	В	11.6

NOTE: ^a Delay in seconds

^bIntersection no longer exists due to planned roadway improvement.

^cIntersection only exists under Alternative A with project.

Bold text denotes LOS unacceptable after mitigation.

SOURCE: Kimley-Horn and Associates, 2007; AES, 2007.

TABLE 5-8INTERSECTION LOS AFTER MITIGATION – ALTERNATIVE F (2008 AND 2020)

			Alt. F Mitigated							
		Signal	2	800		2020				
Intersection	Criteria		LOS	Delay*	LOS	Delay*				
Atherton Avenue / Harbor Drive & SR-37 EB Off-Ramp	С	AWSC	В	10.8	В	10.8				
Atherton Avenue / Glen Lane & SR-37 WB Ramps	С	TWSC	С	16.8	С	16.8				
Lakeville Highway / SR-37	С	TS	_**	_**	-**	_**				
Lakeville Highway / Main Project Access	D	TWSC	С	31.2	С	31.5				
Lakeville Highway / SR-116	С	TWSC	С	25.5	В	10.8				
SR-121 / SR-116	С	TS	D	51.4	E	64.4				
SR-121 / SR-37	С	TS	С	26.2	С	28.6				
Walnut Avenue / SR-37 EB Ramps	С	TWSC	Α	9.7	F	288.0				
Mare Island / SR-37 WB Ramps	С	TWSC	А	9.0	Α	9.0				
Wilson Avenue / SR-37 EB Ramps	O	TWSC	С	18.2	F	192.9				
Wilson Avenue / SR-37 WB Off-Ramp	С	AWSC	В	11.3	С	24.0				
SR-29 / SR-37 EB Off-Ramp	С	TS	D	53.3	F	84.2				
SR-29 / SR-37 WB Off-Ramp	С	TS	С	25.4	E	79.0				

NOTES: *Delay in seconds.

**This intersection would be converted to a freeway interchange after mitigation.

Bold text denotes unacceptable LOS after mitigation.

SOURCE: Kimley-Horn and Associates 2007; AES 2007.

Mitigation for Freeway Segments and Ramps

The following freeway/ramp mitigation measures are recommended by the traffic study (**Appendix O**) for Alternatives A-E (except where otherwise noted) (due to the regional nature of freeways and highways, a proportionate share responsibility is recommended for each measure):

- Since Caltrans' funding is limited, the Tribe shall pay for a proportionate share of the costs to implement the Caltrans HOV projects along US-101 between Wilfred Avenue and Old Redwood Highway, thereby assisting in a more expedited and timely construction schedule (2008).
- The Tribe shall support efforts to complete the US-101 HOV lane project so that it can become operational prior to the scheduled completion as estimated by Caltrans (2008).
- The Tribe shall contribute to the construction of the Wilfred Avenue interchange project, including HOV lanes, ramp metering, and auxiliary lanes and support efforts related to the completion of the project in a timely fashion (2008).
- The ramp metering shall be adjusted to account for the additional project traffic at the Wilfred Avenue interchange in the long term (2020).
- Alternative A The Tribe shall contribute to the construction of an additional traffic lane in the southbound direction from Santa Rosa Avenue to south of Gravenstein Highway (SR-116) as well as an additional traffic lane in the northbound direction from south of Gravenstein Highway (SR-116) to Gravenstein Highway (SR-116) in the long-term (2020).
- Alternatives B and C The Tribe shall contribute to the construction of an additional traffic lane in the southbound direction from Santa Rosa Avenue to Wilfred Avenue and from Gravenstein Highway (SR-116) to south of Gravenstein Highway (SR-116) as well as an additional traffic lane in the northbound direction from south of Gravenstein Highway (SR-116) to Gravenstein Highway (SR-116) in the long-term (2020).
- Alternative D The Tribe shall contribute to the construction of an additional traffic lane in the southbound direction from Santa Rosa Avenue to Wilfred Avenue and from Gravenstein Highway (SR-116) to south of Gravenstein Highway (SR-116) as well as an additional traffic lane in the northbound direction from Wilfred Avenue to Santa Rosa Avenue in the long-term (2020).

Alternative E – The Tribe shall contribute to the construction of an additional traffic lane
in the southbound direction from Santa Rosa Avenue to Wilfred Avenue and from
Gravenstein Highway (SR-116) to south of Gravenstein Highway (SR-116) in the longterm (2020).

The following freeway/ramp mitigation measures are recommended by the traffic study (**Appendix O**) for Alternative F (due to the regional nature of freeways and highways, a proportionate share responsibility is recommended for each measure):

- The Tribe shall contribute to the widening of SR-37 to three lanes in the eastbound direction between Atherton Avenue and Lakeville Highway in the near-term (2008) when the casino and hotel open. The Tribe shall also contribute to further widening of SR-37 to three lanes in the eastbound direction between Lakeville Highway and SR-121 and to four lanes in the eastbound direction between Walnut Avenue and Wilson Avenue in the long-term (2020).
- The Tribe shall contribute to the widening of Lakeville Highway to two lanes in each direction in the near-term (2008) when the casino and hotel open.
- The Tribe shall contribute to the widening SR-121 to two lanes in each direction in the near-term (2008) when the casino and hotel open.
- The Tribe shall contribute to the addition of ramp metering at the Wilson Avenue westbound on-ramp in the year 2020.
- The Tribe shall contribute a proportionate share of 9% to the widening of SR-37 (2008).

Table 5.9 represents the level of service for freeway segments for Alternatives A-E after mitigation; **Table 5.10** represents the level of service regarding freeway segments for Alternative F after mitigation. Note that no mitigation measures are recommended in 2008 for Alternatives A or E and is therefore not included in **Table 5-9**.

As shown in **Tables 5-9** and **5-10**, the recommended mitigation measures would mitigate freeway and ramp impacts to a less than significant level except for the following impact:

 Under Alternative F in 2020, after mitigation, an unacceptable LOS would remain at the Wilson Avenue EB Off-Ramp.

TABLE 5-9FREEWAY/ RAMP SEGMENT LOS AFTER MITIGATION – ALTERNATIVES A-E (2008 AND 2020)

		Alt. A	Mitigated 020	Alt. B	Mitigated 2008	Alt. B	Mitigated 2020	Alt. C	Mitigated 2008	Alt. C	Mitigated 2020	Alt. D	Mitigated 2008	Alt. D	Mitigated 2020		Mitigated 2020
US-101 Section/Ramp	Criteria																
Northbound	Criteria	LOS	Density*	LOS	Density*	LOS	Density*	LOS	Density*	LOS	Density*	LOS	Density*	LOS	Density*	LOS	Density*
US-101 South	Е	Е	38.4	С	25.1	Е	38.4	С	25.1	Е	38.4	С	23.1	D	33.4	D	26.4
of SR-116 SR-116 Off-	Е	D	29.1	D	33.7	D	29.3	D	31.8	D	29.3	D	31.8	Е	39.4	D	34.8
ramp SR-116 On-	E	E	40.4	E	35.2	E	42.1	D	33.4	E	39.3	D	33.4	E	39.1	D	33.3
ramp US-101	-		40.4	_	00.2	_	72.1		00.4	_	00.0		00.4	_	00.1		00.0
between SR- 116 and Rohnert Park Expressway (NB)	E	E	40.4	D	28.8	E	42.1	D	28.8	E	39.3	D	27.0	E	39.1	D	33.3
Rohnert Park Expressway NB Off-Ramp	Е	Е	40.4	D	34.2	Е	42.1	D	32.5	Е	39.3	D	32.5	Е	39.1	D	33.3
Rohnert Park Expressway NB On-Ramp (Loop Ramp)	Е	С	25.9	С	21.8	С	26.7	D	31.4	E	38.6	D	31.4	D	34.7	Е	36.2
Rohnert Park Expressway NB On-Ramp	Е	Е	39.1	D	29.1	Е	37.4	D	30.4	Е	38.6	D	26.8	D	34.7	D	29.5
US-101 between Rohnert Park Expressway and Wilfred Ave (NB)	Е	E	39.1	D	29.1	E	37.4	D	30.4	E	38.6	D	26.8	D	34.7	D	29.5
Wilfred Ave NB Off-Ramp	Е	Е	39.1	D	29.1	Е	37.4	D	30.4	Е	38.6	D	26.8	D	34.7	D	29.5
Wilfred Ave	Е	Е	41.0	D	33.9	Е	43.0	D	33.9	Е	43.0	D	32.8	D	29.7	Е	42.1
NB On-Ramp US-101 between Wilfred Ave and Santa Rosa Avenue	E	Е	41.0	D	33.9	E	43.0	D	33.9	E	43.0	D	32.8	D	29.7	E	42.1
Santa Rosa Avenue NB Off-ramp	Е	Е	41.0	D	33.9	E	43.0	D	33.9	E	43.0	D	32.8	D	29.7	Е	42.1
US-101 North of Santa Rosa Avenue (NB)	Е	D	32.6	С	23.8	D	32.6	С	23.8	D	32.6	С	23.2	D	31.7	D	31.0
Southbound											ı				ı		
US-101 North of Santa Rosa Avenue (SB)	E	D	31.2	D	26.1	D	31.2	D	26.1	D	31.2	С	25.5	D	30.3	D	28.8
Santa Rosa Avenue SB On-ramp	Е	/**	/**	/**	/**	/**	/**	/**	/**	/**	/**	/**	/**	/**	/**	/**	/**
US-101 between Santa Rosa Avenue and Wilfred Ave (SB)	E	С	24.8	E	39.3	O	24.8	E	36.2	С	24.8	D	31.0	С	24.4	С	23.6
Wilfred Ave SB Off-Ramp	Е	D	33.0	Е	40.8	D	34.1	Е	40.8	D	32.7	Е	40.2	D	32.2	D	64.0
Wilfred Ave SB On-Ramp	Е	D	34.2	D	33.6	Е	43.0	Е	52.2	Е	43.0	D	33.8	Е	43.0	Е	42.7
US-101 between Rohnert Park Expressway and Wilfred Ave (SB)	E	D	34.2	D	33.6	E	43.0	Е	52.2	Е	43.0	D	33.8	E	43.0	Е	42.7
Rohnert Park Expressway SB Off-Ramp	Е	D	34.2	D	33.6	Е	43.0	Е	52.2	Е	43.0	D	33.8	Е	43.0	Е	42.7
Rohnert Park Expressway SB On-Ramp (Loop Ramp)	E	С	26.1	D	34.5	E	39.8	D	33.4	E	40.7	D	33.4	Е	38.1	E	36.2

5-48

Rohnert Park Expressway SB On-Ramp	E	D	40.0	D	34.1	E	39.8	D	32.8	E	40.7	D	32.8	E	38.1	E	36.2
US-101 between Rohnert Park Expressway and SR-116 (SB)	Ш	D	40.0	D	27.1	Е	39.8	D	27.1	Е	40.7	С	25.5	E	38.1	Е	36.2
SR-116 SB Off-ramp	Е	D	40.0	D	34.0	Е	39.8	D	32.5	ш	40.7	D	32.5	E	38.1	Е	36.2
SR-116 SB On-ramp	Е	D	29.7	Е	37.2	D	29.1	Е	35.7	D	29.1	E	35.7	D	28.2	С	26.9
US-101 South of SR-116 (SB)	E	С	23.5	D	27.4	С	23.5	D	27.4	С	23.5	С	25.5	E	41.4	E	35.6

NOTE: *pc/mi/ln = passenger cars per mile per lane.

**Intersection no longer exists due to planned roadway improvement.

SOURCE: Kimley-Horn and Associates 2007; AES 2007.

TABLE 5-10FREEWAY/ RAMP SEGMENT LOS AFTER MITIGATION – ALTERNATIVE F (2008 AND 2020)

				202	20 + Alt F
		2008 + Alt	F Mitigated	М	itigated
Highway Section/Ramp	Criteria	LOS	MOE*	LOS	MOE*
Eastbound / Northbound					
Atherton Avenue EB Off-Ramp	С	С	27.6	В	19.8
SR-37 between Atherton Avenue and	С	В	18.0	С	18.5
Lakeville hwy (EB)	J	Ь	10.0	C	10.5
Lakeville Highway between SR-37 and SR-	С	_	_	_	_
116 (NB)	0		_		
Lakeville Highway between SR-37 and Site	С	С	21.0	С	21.4
(NB)	0	Ŭ	21.0		21.7
Lakeville Highway between Site and SR-116	С	В	12.4	В	12.6
(NB)			12		12.0
SR-37 between Lakeville Highway and SR-	С	С	25.5	В	17.9
121 (EB)					
SR-121 between SR-37 and SR-116 (NB)	С	A	9.3	A	10.1
Walnut Avenue EB Off-Ramp	С	В	19.6	С	20.4
Walnut Avenue EB On- Ramp	С	В	18.5	В	17.4
Wilson Avenue EB Off- Ramp	С	В	18.8	D	29.1
Wilson Avenue EB On- Ramp	С	В	20.0	В	15.5
SR-29 EB Off- Ramp	С	В	15.2	С	27.2
Westbound / Southbound					
SR-29 WB Off- Ramp	С	Α	0.7	В	18.3
SR-29 WB On- Ramp (loop)	С	В	15.2	С	21.6
SR-29 WB On- Ramp	С	В	17.0	С	21.5
Wilson Avenue WB Off- Ramp	С	В	14.8	С	26.0
Wilson Avenue WB On- Ramp	С	В	19.1	D	35.0
Walnut Avenue WB Off- Ramp	С	A	8.9	С	25.7
Walnut Avenue WB On- Ramp	С	В	19.3	С	21.6
SR-121 between SR-116 and SR-37 (SB)	С	Α	7.1	Α	7.1
SR-37 between SR-121 and Lakeville Hwy (WB)	С	С	21.3	С	21.3
Lakeville Highway between SR-116 and SR- 37 (SB)	С	-	-	-	-
Lakeville Highway between SR-37 and Site (SB)	С	В	13.2	А	6.0
Lakeville Highway between Site and SR-116		1	1		
(SB)	С	А	5.7	В	13.8
SR-37 between Lakeville Highway and	С	В	15.0	В	15.0
Atherton (WB)	,		10.0	<i>D</i>	10.0
Atherton Avenue WB Off-Ramp	С	В	17.3	В	17.3
Atherton Avenue WB On-Ramp	С	В	16.3	В	16.3

NOTE: Bold text denotes unacceptable LOS

*Measure of Effectiveness (MOE) for two lane highways = percent time following & average travel speed (mi/hr)

*MOE for multi-lane highways & ramps = density (pc/mi/ln)

SOURCE: Kimley-Horn & Associates, 2007; AES, 2007.

Other Mitigation

Additionally, the following mitigation measures are recommended for Alternatives A-F (unless otherwise noted):

- A traffic management plan shall be prepared in accordance with standards set forth in the *Manual on Uniform Traffic Control Devices for Streets and Highways* (USDOT FHWA, 2003). The traffic management plan shall be submitted to each affected local jurisdiction and/or agency. Also, prior to construction, the Tribe shall work with emergency service providers to avoid obstructing emergency response service. Police, fire, ambulance, and other emergency response providers shall be notified in advance of the details of the construction schedule, location of construction activities, duration of the construction period, and any access restrictions that could impact emergency response services. Traffic management plans shall include details regarding emergency service coordination. Copies of the traffic management plans shall be provided to all affected emergency service providers.
- Flagging done in consultation with the California Highway Patrol (CHP), Caltrans, and the County's Sheriff's Department, shall be provided when necessary to assist with traffic control.
- Importation of construction material shall be scheduled outside of the areawide commute peak hours.
- Preferential carpool or vanpool spaces shall provided at the site to encourage ridesharing by employees and patrons.
- The Tribe shall sponsor charter buses from destinations such as Marin County and the south Bay.
- For Alternatives A-D, the Tribe shall provide a shuttle between the casino and Rohnert Park transit hubs that would operate on half hour rotational basis during busy hours and on a on call basis in the times when the frequency of employees and patrons arriving or leaving busy is low.

- Where feasible, lane closures or obstructions associated with the construction of the project shall be limited to off-peak hours to reduce traffic congestion and delays.
- Prior to construction, the Tribe shall work to notify all potentially affected parties in the immediate vicinity of the Wilfred site, the Stony Point site or the Lakeville site, as appropriate. Notification shall include a construction schedule, location of construction activities, the duration of construction period, and alternative access provisions.
- Emergency service providers shall be notified as to the areas that have the greatest
 potential for unusual traffic delays as a result of project construction activities. Specific
 detours would be recommended to circumvent any area that might suffer traffic delays.
- The Tribe shall coordinate with the Green Music Center during outdoor events that will generate high traffic levels. During that period, traffic control services at the Rohnert Park Expressway interchange may be necessary. Thus, the Tribe shall provide funding for special event traffic monitoring at the Rohnert Park Expressway interchange to identify conflicts during outdoor events generating high traffic levels. Should conflicts occur, the Tribe shall provide traffic management coordination between the project and the Green Music Center in consultation with the CHP and Caltrans.
- Debris along construction vehicle routes shall be monitored daily during construction and the roadways cleaned as necessary.
- The Tribe shall provide a shuttle service that runs between the casino and the two Rohnert Park transfer stations as well as the rail station (if developed). The shuttle could run throughout the day and/or could be available on an on-call basis (2008).

Implementation of the above mitigation will reduce transportation impacts to a less than significant level, except where otherwise noted above.

LAND USE

No mitigation is recommended.

AGRICULTURE

The following mitigation measure is recommended for Alternatives A, B, C, D, E, and F in order to further reduce less than significant effects to agriculture:

The Tribe shall enact a "right to farm" ordinance that preserves the policy of the Tribe to respect and preserve area agricultural operations and creates a presumption that ongoing, standard farming practices are not a nuisance to development operations occurring on the Tribe's development site.

5.2.8 PUBLIC SERVICES

WASTEWATER SERVICE

The following mitigation measure is recommended for Alternative A:

A. If the Tribe disposes wastewater off-site to the Laguna Wastewater Treatment Plant (WWTP), the Tribe would coordinate with the WWTP and the City of Rohnert Park to pay appropriate connection fees and ongoing service. The Tribe would also pay the fair share cost of future expansion/improvements to increase wastewater capacity of the Laguna WWTP.

SOLID WASTE

Construction

The following mitigation measures are recommended for Alternatives A, B, C, D, E and F:

- B. Construction waste will be recycled to the fullest extent practicable by diverting green waste and recyclable building materials away from the solid waste stream.
- C. Environmentally preferable materials shall be used to the extent practical for construction of facilities.

Operation

The following mitigation measures are recommended for Alternatives A, B, C, D, E and F:

- D. The Tribe shall install a trash compactor for cardboard and paper products.
- E. The Tribe shall install recycling bins throughout the facilities for glass, cans and paper products.
- F. Decorative trash and recycling receptacles will be placed strategically throughout the area of the Wilfred Site, Stony Point site, or the Lakeville site, as appropriate, to encourage people not to litter at the facilities.
- G. Security guards shall be trained to discourage littering on site.
- H. The Tribe shall pay all standard fees for trash collection and disposal.

ELECTRICITY AND NATURAL GAS

The following mitigation measures are recommended for Alternatives A, B, C, D, E and F:

- The project's air conditioning and refrigeration systems shall utilize environmentally friendly refrigerants. Energy efficient chillers shall be utilized.
- J. The air handling systems shall utilize outside air economizer cycles to take advantage of ambient cooling when the outside air temperature is below 55 degrees F. Economizer cycles, may be able to reduce cooling requirements by 20 to 30 percent.
- K. For applicable alternatives, hotel and casino buildings shall be equipped with a direct digital energy management and control system to perform energy conservation measures such as optimum start/stop, duty cycling and demand limiting. This management system will ensure that the project will not consume any more energy than is necessary.

PUBLIC HEALTH AND SAFETY

The following mitigation measure is recommended for Alternatives A, B, C, D, and F:

L. The Tribe shall make an agreement with the applicable City or County to address inspection, maintenance, and operation of any swimming pools available to patrons. The terms of the agreement shall include that one design inspection occur prior to operation of applicable swimming pools and at least one annual inspection occur thereafter. The agreement shall include standards for design, maintenance, and operation similar to those followed by non-tribally owned businesses in the City or County, as applicable.

The following mitigation measure is recommended for Alternatives E:

M. The Tribe shall make an agreement with the applicable City or County to address building inspection, and food safety inspections prior to public use of facilities. The terms of the agreement shall include that one design inspection occur prior to public use and that ongoing inspections occur, with similar frequency to non-tribally owned businesses. The terms of the agreement shall include that the buildings adhere to either the Uniform Fire Code or California Fire Code, depending on the agency inspecting facilities.

Law Enforcement

The following mitigation measures are recommended for Alternatives A, B, C, D, E, and F:

N. The Tribe shall provide on-site security to reduce and prevent criminal and civil incidents.

- O. The Tribe shall ensure staff that serves alcohol is trained to identify the signs of intoxication and to cease serving alcohol to persons exhibiting those signs.
- P. The Tribe shall support local law enforcement efforts in conducting DUI checkpoints and other programs known to reduce the impacts of alcohol on the community.
- Q. All parking areas shall be well lit and monitored by parking staff and/or security guards. This will aid in the prevention of auto theft and other related criminal activity.
- R. The Tribe shall provide traffic control with appropriate signage and the presence of peak-hour traffic control staff. This will aid in the prevention of off-site parking, which could create possible security and safety issues.
- S. The Tribe shall pass an ordinance creating a standard policy encouraging responsible drinking and designated driver programs. As part of this policy, the employees serving alcohol shall undergo Responsible Beverage Service Training (RBST), also known as "server training." RBST educates mangers, servers and sellers at alcohol establishments about strategies to avoid illegally selling alcohol to underage youth or intoxicated patrons. The goal of RBST is to decrease the number of illegal alcohol sales to underage youth and intoxicated patrons through education programs. Information provided in server training must at a minimum include:
 - The importance of checking age identification of customers who appear to be under age 30.
 - o How to identify fake IDs and what to do once a fake ID is confiscated.
 - How to recognize situations in which adults are buying alcohol for underage youth.
 - O How to refuse sales to individuals who may supply alcohol to underage youth.
 - How to identify intoxicated customers.
 - o How to refuse service to underage youth and intoxicated customers.

The following mitigation measures are recommended for Alternatives A, B, C, D, and F:

T. To mitigate potential impacts to law enforcement resources, the Tribe shall adopt rules prohibiting anyone under 21 years of age from gambling, adopt employee training programs and policies relating to responsible beverage services, conduct background checks of all gaming employees, provide a full complement of security personnel at the project at all times, and adopt programs and policies which discourage gang members from visiting the gaming facilities.

5-54

- U. Hotel management shall work collaboratively with school and law enforcement personnel to prevent the use of hotel rooms for parties involving minors and the hotel shall have an internal monitoring program to reduce the incidence of such parties
- V. The Tribe shall provide on-site security for casino operations to reduce and prevent criminal and civil incidents.
- W. The Tribe shall adopt employee training programs and policies relating to responsible beverage services, which would include, but not be limited to, checking patron identification and refusing service to those who have imbibed beyond their ability to function safely.
- X. Areas surrounding the gaming facilities shall have "No Loitering" signs in place, shall be well lit and shall be patrolled regularly. This will aid in the prevention of illegal loitering and loitering behavior that could potentially lead to other criminal acts.

The following mitigation measure is recommended for Alternatives A-F:

Y. Prior to operation, the Tribe shall enter into an agreement with a law enforcement service provider to provide primary law enforcement services to the project

Fire Protection/Emergency Medical Service

Construction

The following measures are recommended for Alternatives A, B, C, D, E and F:

Z. Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws. During construction, staging areas, building areas, and/or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fuel for combustion. To the extent feasible, the contractor shall keep these areas clear of combustible materials to maintain a firebreak.

Operation

The following measures are recommended for Alternatives A, B, C, D, E and F:

AA. The Tribe shall make reasonable provisions for adequate emergency, fire, medical, and related relief and disaster services for patrons and employees.

- BB. The Tribe shall use fire resistant construction materials and equip all enclosed buildings with automatic sprinkler systems. The automatic sprinkler systems shall be designed to meet or exceed the NFPA standards governing the different occupancies associated with the project structures.
- CC. The Tribe shall employ the most modern construction and fire-engineering techniques in their automatic fire containment system designs so that any fire encountered is contained to the room of origin.
- DD. Through the use of modern fire engineering technology the Tribe shall create and maintain a facility equipped with early detection systems that assures an initial response time to any fire alarm (automatic, local, or report) within three minutes. These systems would be comprised of automatic sprinkler systems in the occupied areas and smoke detection, along with automatic sprinkler systems, in the areas of the facility that are normally unoccupied, such as storerooms and mechanical areas.
- EE. If only one fire pump is provided, it will be either diesel, or provided with emergency power, thereby meeting the requirements of the CFC, UFC, and the California Building Code (CBC).
- FF. Prior to operation, the Tribe shall enter into an agreement with a fire service provider to provide primary fire protection services.

The following measure is recommended for Alternative F:

GG.Prior to operation, the Tribe shall ensure that a fire station is constructed near the Lakeville site and staffed with at least three firefighters.

Implementation of the above mitigation measures will reduce public services impacts to a less than significant level.

5.2.9 OTHER VALUES

NOISE

The following measures are recommended for Alternatives A, B, C, D, E, and F:

- A. HVAC equipment shall be shielded to reduce noise.
- B. To the extent feasible, HVAC equipment shall be located a significant distance from neighboring houses along Whistler Avenue, Wilfred Avenue, and/or Labath Avenue.
- C. The Tribe will supplement the cost of installation of dual pane windows to minimize traffic noise effects for residences adjacent to Wilfred Avenue between Redwood Drive and Stony Point Road.

- D. The Tribe will supplement the cost for the construction of raised, landscaped berms or concrete block walls to separate sources of unwanted noise from potential noise receptors along Wilfred Avenue.
- E. Unnecessary vehicle idling shall be prevented during loading dock operations occurring between the hours of 10:00 PM and 7:00 AM.
- F. Buses shall not be allowed to idle unnecessarily in areas adjacent to sensitive receptors.
- G. To the extent feasible, project construction shall not occur prior to 7:00 AM or after 10:00 PM.
- H. Pile driving, should it take place, shall not occur prior to 9:00 AM or after 5:00 PM.

The following measures are recommended for Alternative F:

- The Tribe will supplement the cost installation of dual pane windows to minimize traffic noise effects for residences adjacent to Lakeville Highway between State Route 37 and State Route 116.
- J. To the extent feasible, project construction shall not occur prior to 7:00 AM or after 10:00 PM.
- K. Pile driving, should it take place, shall not occur prior to 9:00 AM or after 5:00 PM.
- L. Unnecessary vehicle idling shall be prevented during loading dock operations occurring between the hours of 10:00 PM and 7:00 AM.

Implementation of the above mitigation measures will reduce noise impacts to a less than significant level.

HAZARDOUS MATERIALS

The following measures are recommended for Alternatives A, B, C, D, E, and F:

- M. In the event that contaminated soil and/or groundwater are encountered during construction related earth-moving activities, all work shall be halted until a professional hazardous materials specialist or a qualified environmental professional can assess the extent of contamination. If contamination is determined to be significant representatives of the Tribe shall consult with USEPA to determine the appropriate course of action, including the development of a Sampling Plan and Remediation Plan if necessary.
- N. To reduce the potential for accidental releases, fuel, oil, and hydraulic fluids shall be transferred directly from a service truck to construction equipment and shall not otherwise be stored onsite. Paint, thinner, solvents, cleaners, sealants, and lubricants used

- during construction shall be stored in a locked utility building, handled per the manufacturers' directions, and replenished as needed.
- O. Personnel shall follow written standard operating procedures (SOP's) for filling and servicing construction equipment and vehicles. The SOP's, which are designed to reduce the potential for incidents involving the hazardous materials, shall include the following:
 - a. Refueling shall be conducted only with approved pumps, hoses, and nozzles.
 - b. Catch-pans shall be placed under equipment to catch potential spills during servicing.
 - All disconnected hoses shall be placed in containers to collect residual fuel from the hose.
 - d. Vehicle engines shall be shut down during refueling.
 - e. No smoking, open flames, or welding shall be allowed in refueling or service areas.
 - f. Refueling shall be performed away from bodies of water to prevent contamination of water in the event of a leak or spill.
 - g. Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents.
 - h. Should a spill contaminate soil, the soil shall be put into containers and disposed of in accordance with local, state, and federal regulations.
 - i. All containers used to store hazardous materials shall be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas shall be inspected monthly. Results of inspections shall be recorded in a logbook that shall be maintained on-site.
 - j. Staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fuel for combustion. To the extent feasible, the contractor will keep these areas clear of combustible materials in order to maintain a firebreak.
 - k. Any construction equipment that normally includes a spark arrester shall be equipped with an arrestor in good working order.
- P. The amount of hazardous materials used in project construction and operation shall be kept at the lowest volumes needed.
- Q. The least toxic material capable of achieving the intended result shall be used to the extent practicable.

- R. A hazardous materials and hazardous waste minimization program shall be developed, implemented, and reviewed annually by the Tribe to determine if additional opportunities for hazardous materials and hazardous waste minimization are feasible, for both project construction and operation.
- S. Use of pesticides and toxic chemicals shall be minimized to the greatest extent feasible in landscaping; or less toxic alternatives shall be used.
- T. In addition to mitigation described under **Section 5.2.2** the following mitigation will be implemented: During the groundwater monitoring and pump tests, the potential for the vertical and lateral migration of contaminants from nearby leaking underground storage tank (LUST) sites should be evaluated (see **Appendix Z** for detailed recommendations). The pumping test conducted shall include taking water level measurements in wells that are screened in the Lower Intermediate Zone, Upper Intermediate Zone and uppermost portion of the saturated zone to verify the conclusions based on historical well hydrographs, refine the drawdown model for the Site, and evaluate the potential for contaminant migration using a typical wellhead protection approach.

Implementation of the above mitigation measures will reduce hazardous materials impacts to a less than significant level.

VISUAL IMPACTS

The following measures are recommended for Alternatives A, B, C, D, E, F and G:

- T. Design elements shall be incorporated into the project that minimize the impact of buildings and parking lots on the viewshed. These elements include:
 - a. Incorporation of landscape amenities to complement buildings and parking areas, including setbacks, raised landscaped berms and plantings of trees and shrubs (see Noise Mitigation Measure);
 - b. Use of earth tones in paints and coatings, and native building materials such as stone.
- U. To minimize the impacts of light and glare:
 - a. Placement floodlights on buildings shall be set so as not to cast trespassing light off-site.
 - b. Uplighting of structures has a high potential for off-site light spillage and shall be discouraged or prohibited.

- c. Shielding, such as with a horizontal shroud shall be used for all outdoor lighting so as to ensure it is downcast.
- d. Timers shall be utilized so as to minimize lighting after a certain hour.

Implementation of the above mitigation measures will ensure visual impacts are at a less than significant level under Alternatives A and G. The encroachment upon open space uses that would occur under the other alternatives could not be appropriately mitigated.

5-60