INITIAL STUDY/NEGATIVE DECLARATION
[Pursuant to Public Resources Code Section 21080(c) and California Code of Regulations, Title 14, Sections 15070-15071]

LEAD AGENCY: San Joaquin County Community Development Department

PROJECT APPLICANT: TACSION, ROBERT & MYRNA

PROJECT TITLE/FILE NUMBER(S): PA-1900055

PROJECT DESCRIPTION: Use Permit application for a 5,300 square foot expansion of an existing 2,416 square foot religious assembly. The expansion will include the construction of a 4,500 square foot assembly area and an 810 square foot breezeway with three (3) offices, two (2) restrooms, and a copy room. The existing 1,320 square foot religious assembly building will be converted to a fellowship hall. The proposed expansion includes an increase in the number of people from a maximum of sixty (60) people to one hundred and fifty (150) people on Sundays and services would end by 1:00 p.m. instead of 12:00 p.m.

The project site is on a fourteen (14) acre developed with a single family residence, guest house, barn, and the existing 2,416 square foot religious assembly which includes a 1,320 square foot assembly area, a 456 square foot dining area, a 380 square foot lobby, and a 260 square foot storage and restroom area. The existing religious assembly facility holds services and bible study group on Sunday from 9:00 a.m. to 12:00 p.m. with a maximum of sixty (60) participants, and a youth group on Fridays between 7:00 p.m. and 9:00 p.m.
No changes are proposed to the Friday night operations.

The project site has two (2) existing access driveways on N. Davis Road and a maximum of forty (40) vehicles are anticipated to access the site on Sundays, and a maximum of fifteen (15) vehicles are anticipated to access the site on Fridays. The project will be served by a private well, septic system, and on-site storm drainage. No commercial kitchen, day care facility, or school has been approved with this facility. (Use Type: Religious Assembly - Neighborhood)

The project site is located on the west side of N. Davis Road, 2,075 feet south of Armstrong Road, southwest of Lodi.

ASSESSORS PARCEL NO(S): 055-220-16

ACRES: 14.0

GENERAL PLAN: A/G

ZONING: AG-40

POTENTIAL POPULATION, NUMBER OF DWELLING UNITS, OR SQUARE FOOTAGE OF USE(S):
A single family residence, accessory structures, and a 7,716 square foot religious assembly facility

SURROUNDING LAND USES:

NORTH: Agricultural with scattered residences/City of Lodi
SOUTH: Agricultural with scattered residences/City of Stockton
EAST: Agricultural with scattered residences/Pixley Slough
WEST: Union Pacific Railroad/agricultural with scattered residences/City of Lodi

REFERENCES AND SOURCES FOR DETERMINING ENVIRONMENTAL IMPACTS:

Original source materials and maps on file in the Community Development Department including: all County and City general plans and community plans; assessor parcel books; various local and FEMA flood zone maps; service district maps; maps of geologic instability; maps and reports on endangered species such as the Natural Diversity Data Base; noise contour maps; specific roadway plans; maps and/or records of archeological/historic resources; soil reports and maps; etc.

Many of these original source materials have been collected from other public agencies or from previously prepared EIR's and other technical studies. Additional standard sources which should be specifically cited below include on-site visits by staff 2/28/20; staff knowledge or experience; and independent environmental studies submitted to the County as part of the project

application (Traffic Technical Memo for the Bridge Worship Center Expansion dated August 19, 2019, KD Anderson & Associates). Copies of these reports can be found by contacting the Community Development Department.

TRIBAL CULTURAL RESOURCES:

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

No

GENERAL CONSIDERATIONS:

1. Does it appear that any environmental feature of the project will generate significant public concern or controversy?

   ☐ Yes ☒ No

   Nature of concern(s): Enter concern(s).

2. Will the project require approval or permits by agencies other than the County?

   ☐ Yes ☒ No

   Agency name(s): Enter agency name(s).

3. Is the project within the Sphere of Influence, or within two miles, of any city?

   ☒ Yes ☐ No

   City: City of Stockton

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

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

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

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

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

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

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

Signature _____ Date 4/20/19

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

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

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

ISSUES:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
I. AESTHETICS.					
Except as provided in Public Resources Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publically accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒	☐

Impact Discussion:
The proposed project site is a relatively flat parcel with an existing religious assembly facility, a residence, and accessory structures. The surrounding land uses are primarily agricultural with scattered residences. The proposed structures and improvements will be required to meet the San Joaquin County Development Title requirements including maintaining minimum setbacks of buildings away from property lines. The project is not located along a scenic route and will not obstruct any views. This project will be conditioned with requirements for landscaping along roadways bordering the project parcel, and screening will be required for all outdoor storage areas. As such, the impact from the project on the existing visual character or quality of its surroundings will be less than significant.

The outdoor lighting for the proposed project will be required to be designed to confine direct rays to the premises in accordance with the San Joaquin Development Title Section 9-1015.5(g).

II. AGRICULTURE AND FORESTRY RESOURCES.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐

Impact Discussion:
The proposed project site is not under Williamson Act contract, nor are any of the adjacent properties. The use type for the project is Religious Assembly - Neighborhood which may be conditionally permitted in the AG-40 (General Agriculture, 40-acre minimum) with an approved Use Permit application. The 0.44 acre project site is located on a 14-acre parcel which is currently not farmed and will not affect any agricultural uses or Williamson Act contracts in the vicinity. Therefore, the proposed application will have no impact on agriculture and forestry resources.

III. AIR QUALITY.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	☐
d) Result in substantial emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐	☐

Impact Discussion:

The primary source of air pollutants generated by the project would involve dusts from onsite traffic. To mitigate this potential impact, the parking and circulation areas for the project will be surfaced with asphalt concrete which will prevent the generation of dust. The San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) has been established by the State in an effort to control and minimize air pollution. The applicant will be required to meet the existing requirements for emissions and dust control as established by the SJVAPCD. The project was referred to the SJVAPCD for review. As a Condition of Approval, the project will be subject to the Districts rules and regulations. As a result, any impacts will be reduced to less than significant.

IV. BIOLOGICAL RESOURCES.

Would the project:

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

Impact Discussion:
The project parcel is relatively flat and is currently developed with a religious assembly facility, a residence, and accessory structures. The Natural Diversity Database lists the following rare, endangered, or threatened species as potentially occurring in or near the project area: the vernal pool tadpole shrimp (lepidurus packardi), Swainson's hawk (buteo swainsoni), and giant garder snake (Thamnophis gigas). The San Joaquin Council of Governments (SJCOG) has reviewed the underlying project and determined that the proposed development is subject to the San Joaquin Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Participation in the SJMSCP satisfies requirements of both state and federal endangered species acts, and ensures that the impacts are mitigated below a level of significance in compliance with CEQA. The applicant has committed to participation in the SJMSCP and therefore, with this mitigation there will be a less than significant effect on biological resources. The fee, as identified by SJCOG will be required prior to issuance of any building permit and prior to disturbance of any ground.

V. CULTURAL RESOURCES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to§ 15064.5?	☐	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐	☐

Impact Discussion:

The project is developed with an existing religious assembly facility, a residence, and accessory structures. There is no evidence on the site that would conclude that archaeological or cultural resources would be encountered during the proposed development for the project. Additionally, there are no resources on the project site that are listed or are eligible for listing on a local register, the California Register of Historic Places, or National Register of Historic Places.

In the event human remains are encountered during any portion of the project, California state law requires that there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county has determined manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation (California Health and Safety Code - Section 7050.5).

VI. ENERGY.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	☐	☐	☒	☐	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐	☐

Impact Discussion:

The California Energy Code (also titled The Energy Efficiency Standards for Residential and Non-residential Buildings) was created by the California Building Standards Commission in response to a legislative mandate to reduce California's energy consumption. The code's purpose is to advance the state's energy policy, develop renewable energy sources and prepare for energy emergencies. These standards are updated periodically by the California Energy Commission. The code includes energy conservation standards applicable to most buildings throughout California. These requirements will be applicable to the proposed project ensuring that any impact to the environment due to wasteful, inefficient, or unnecessary consumption of energy will be less than significant and preventing any conflict with state or local plans for energy efficiency and renewable energy. This requirement will be enforced at time of issuance of building permits.

VII. GEOLOGY AND SOILS.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	☐
d) Be located on expansive soil and create direct or indirect risks to life or property?	☐	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐	☐

Impact Discussion:

The geology of San Joaquin County is composed of high organic alluvium, which is susceptible to earthquake movement. The project will have to comply with the California Building Code (CBC) which includes provisions for soils reports for grading and foundations as well as design criteria for seismic loading and other geologic hazards based on fault and seismic hazard mapping. All recommendations from a soils report must be incorporated into the construction plans. Therefore, impacts to seismic-related (or other) landslide hazards will be less than significant.

The project will not result in substantial soil erosion or the loss of topsoil because the project site will be paved and landscaped and no topsoil will be removed from the site. Therefore, impacts to soil erosion or loss of topsoil will be less than significant.

The project site is relatively flat terrain where landslides have not historically been an issue. A soils report will be required for grading and foundations and all recommendations from a soils report must be incorporated into the construction plans. Therefore, any risks resulting from being located on an unstable unit will be reduced to less than significant.

The project will be served by an onsite septic tank or alternative waste water disposal system for the disposal of waste water. The Environmental Health Department will require a soil suitability/nitrate loading study indicating that the area is suitable for septic system usage. The studies must be approved by the Environmental Health Department prior to issuance of building permit(s). The sewage disposal system shall comply with the onsite wastewater treatment systems standards of

San Joaquin County prior to approval. A percolation test that meets absorption rates of the manual of septic tank practice or E.P.A. Design Manual for onsite wastewater treatment and disposal system is required for each parcel. With these standards in place, only soils capable of adequately supporting the use of septic tanks will be approved for the septic system.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
VIII. GREENHOUSE GAS EMISSIONS.					
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	☐

Impact Discussion:

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO2) and, to a lesser extent, other GHG pollutants, such as methane (CH4) and nitrous oxide (N2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO2 equivalents (MTCO2e/yr).

As noted previously, the proposed project will be subject to the rules and regulations of the SJVAPCD. The SJVAPCD has adopted the *Guidance for Valley Land- use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* and the *District Policy- Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency.*[11] The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA. To be determined to have a less-than-significant individual and cumulative impact with regard to GHG emissions, projects must include BPS sufficient to reduce GHG emissions by 29 percent when compared to Business As Usual (BAU) GHG emissions. Per the SJVAPCD, BAU is defined as projected emissions for the 2002-2004 baseline period. Projects which do not achieve a 29 percent reduction from BAU levels with BPS alone are required to quantify additional project-specific reductions demonstrating a combined reduction of 29 percent. Potential mitigation measures may include, but not limited to: on-site renewable energy (e.g. solar photovoltaic systems), electric vehicle charging stations, the use of alternative-fueled vehicles, exceeding Title 24 energy efficiency standards, the installation of energy-efficient lighting and control systems, the installation of energy-efficient mechanical systems, the installation of drought-tolerant landscaping, efficient irrigation systems, and the use of low-flow plumbing fixtures.

It should be noted that neither the SJVAPCD nor the County provide project-level thresholds for construction-related GHG emissions. Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. As such, the analysis herein is limited to discussion of long-term operational GHG emissions.

[11] San Joaquin Valley Air Pollution Control District. *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*. December 17, 2009.San Joaquin Valley Air Pollution Control District. *District Policy Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. December 17, 2009.

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

Impact Discussion:

Pursuant to the Hazardous Materials Disclosure Survey submitted with the application, the project is not expected to use or store hazardous materials on site, therefore the risk of hazard due to the transportation or use of hazardous materials is expected to be less than significant

The project site is not included on the California Department of Toxic Substances Control EnviroStor database map, compiled pursuant to Government Code 65962.5 and, therefore, will have no impact on the safety of the public or the environment.

The project site is located within the Traffic Pattern Zone 7b (TPZ) of Lodi Precissi's Airpark and Zone 8 Airport Influence Area (AIA) of the Kingdon-Lodi Airport. The nearest runway of the Lodi Precissi Airpark is located 0.75 miles northeast of the project site and the nearest runway of the Kingdon-Lodi Airport is located 1.0 mile northwest of the project site. Referral letters were sent to the Lodi Precissi Airpark, the Kingdon-Lodi Airport, and the Airport Land Use Commission for review. In a response letter dated June 20, 2019, the ALUC responded that the project is in Lodi Airport Zone 7 (TPZ) and that the project is compatible with the 2018 San Joaquin County Airport Land Use Compatibility Plan. Additionally,

pursuant to the San Joaquin Airport Land Use Compatibility Plan, dated January 2018, the project site is located outside of the airport's noise exposure contours for both major and marginal effects, therefore, impacts resulting from airport noise levels to people in the project area are expected to be less than significant. The proposed project is a compatible use with the Traffic Pattern Zone and Airport Influence Area. Therefore the proposed project will have a less than significant impact on imaginary surfaces.

The scope of the proposed project indicates that no additional emergency services will be required to provide for safe evacuation and adequate access to emergency equipment. The San Joaquin County Fire Prevention Division will require Fire Apparatus Access Roads as a Condition of Approval for the project. As such, the project will not impair implementation of, or interfere with, County-adopted emergency response plans.

The project location is not identified as a Community at Risk from Wildfire by Cal Fire's "Fire Risk Assessment Program". Communities at Risk from Wildfire are those places within 1.5 miles of areas of High or Very High wildfire threat as determined from CDF-FRAP fuels and hazard data. Therefore, the impact of wildfires on the project are expected to be less than significant.

X. HYDROLOGY AND WATER QUALITY.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐	☐
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐	☐

Impact Discussion:

The project will be served by an onsite well and septic system. Construction of an individual domestic water well will be under permit and inspection by the Environmental Health Department. The sewage disposal system must comply with the onsite wastewater treatment systems standards of San Joaquin County.

The proposed project's impact on ground and surface water will be mitigated with the required Water Supply Facilities Impact Mitigation Fee. This fee will reduce any impact the project has on ground and surface water to a less than significant with mitigation incorporated.

The proposed project does not propose any substantial alteration to a drainage pattern, stream or river. All necessary drainage improvements onsite will be required as a condition of approval the construction of the project and demonstrated prior to issuance of a building permit. The project will not result in substantial soil erosion because the site will be paved and landscaped.

The proposed project plans call for storm water to be retained in an on-site. The Department of Public Works requires that drainage facilities be provided in accordance with the San Joaquin County Development Standards and the Department will determine the feasibility of the required drainage facilities. With the oversight of the Department of Public Works, any impact the project will have on storm water runoff will be less than significant.

The proposed project site is not in a tsunami or seiche zone. The project site is located in the Flood Zone X (500), which is defined as areas of 0.2% annual chance (500-year) flood; or areas of 1% annual chance (100-year) flood with average depths of less than 1 foot or with drainage areas less than 1 square mile.

XI. LAND USE AND PLANNING.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Physically divide an established community?	☐	☐	☒	☐	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	☐

Impact Discussion:

The project site is not located in an established community. The nearest community is the City of Stockton which is 1.5 miles away to the south from the project site. The proposed project is consistent with all land use policies and regulations of the County Development Code and 2035 General Plan. If the Use Permit is approved, the applicant must obtain building permits from the Building Division of the Community Development Department. The Religious Assembly-Neighborhood use type is a compatible use on agricultural zoned lands and may be conditionally permitted in the AG-40 (General Agriculture 40-acre minimum) zone subject to an approved Use Permit application.

XII. MINERAL RESOURCES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	☐
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	☐

Impact Discussion:

The project will not result in the loss of availability of a known mineral resource of a resource recovery site because the site does not contain minerals of significance or known mineral resources. San Joaquin County applies a mineral resource zone (MRZ) designation to land that meets the significant mineral deposits definition by the State Division of Mines and Geology. The project site in Linden has been classified as MRZ-1. The General Plan 2035 Volume II, Chapter 10-Mineral Resources, Table 10-7, defines MRZ-1 as "Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence." Therefore, the project will have less than a significant impact on the availability of mineral resources or mineral resource recovery sites within the region.

XIII. NOISE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project result in:					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒	☐
c) For a project within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐	☐

Impact Discussion:

The nearest conforming single family residence is located approximately 110 feet south of the project site. Development Title Section 9-1025.9 lists the Residential use type as a noise sensitive land use. Development Title Section Table 9-1025.9 Part II states that the maximum sound level for stationary noise sources during the daytime is 70 dB and 65dB for nighttime. This applies to outdoor activity areas of the receiving use, or applies at the lot line if no activity area is known. The proposed project would be subject to these Development Title standards. All activities associated with the new buildings will take place indoors, The project does not include any operations that would result in excessive ground-borne vibrations or other noise levels. Therefore, the project will not have any impact on vibrations or other noise levels.

The project site is located within the Traffic Pattern Zone 7b (TPZ) of Lodi Precissi's Airpark and Zone 8 Airport Influence Area (AIA) of the Kingdon-Lodi Airport.. The nearest runway of the Lodi Precissi Airpark is located 0.75 miles northeast of the project site and the nearest runway of the Kingdon-Lodi Airport is located 1.0 mile northwest of the project site. In response letter dated June 20, 2019, the Airport Land Use Commission stated that the project is compatible with the 2018 San Joaquin County Airport Land Use Compatibility Plan, a document developed to provide guidance intended to minimize the public's exposure to excessive noise and safety hazards. As a result, impacts to people in the project area are expected to be less than significant.

XIV. POPULATION AND HOUSING.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐

Impact Discussion:

The project will not induce substantial population growth in the area either directly or indirectly as it does not create a significant number of new jobs. The proposed project would not displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere because the project site is currently undeveloped.

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

Impact Discussion:

The San Joaquin County Fire Division states that the California Fire Code (CFC) will be applicable to the proposed project and there will be no substantial increase on public services. No additional public facilities will be required.

XVI. RECREATION.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐	☐

Impact Discussion:

This project will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, because the project will not generate any new residential units and the impacts to parks generated by the employees of this project will be minimal. This project does not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment, because the type of project proposed will not result in an increased demand for recreational facilities.

XVII. TRANSPORTATION.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?	☐	☒	☐	☐	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☐	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐	☐

Impact Discussion:
The religious assembly facility is located on the west side of N. Davis Road, and will operate two (2) days per week with four (4) employees and 150 customers. A referral was sent to the San Joaquin County Department of Public Works and California Department of Transportation (Caltrans) on May 24, 2019.

A traffic technical memo dated August 19, 2019 was prepared by KD Anderson & Associates and submitted to the Department of Public Works for review. In a response letter dated December 17, 2019, the Department of Public Works concluded that the proposed expansion to the existing religious assembly will not significantly increase the traffic levels in the area as the development project is not expected to exceed fifty vehicles during any hour.

The Department of Public Works includes in its conditions, the recommendation that the N. Davis Road driveway design shall be improved in accordance with the requirements of San Joaquin County Improvements Standards Drawing No. R-17 prior to issuance of the occupancy permit. (Development Title Section 9-1145.5). With these conditions from the Department of Public Works, any hazards from curves or intersections will be reduced to less than significant.

The proposed project has a twenty five (20) foot wide two-way access driveway from N. Davis Road and will provide for adequate access for emergency equipment.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
XVIII. TRIBAL CULTURAL RESOURCES.					
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐	☐

Impact Discussion:

The project is developed with an existing religious assembly facility, a residence, and accessory structures. Therefore, it does not appear that tribal cultural resources would be encountered during the proposed development for the project. The proposed project is not within an area of any known tribal cultural resource with cultural value to a California Native American Tribe. A referral was sent on May 24, 2019 to Katherine Perez of the North Valley Yokuts Tribe, the United Auburn Indian Community, the California Miwok Tribe, the California Tribal Tanf Partnership, and the California Native Heritage Commission for review. No response has been received. At the time development, if Human burials are found to be of Native American origin, the developer shall follow the procedures pursuant to Title 14, Division 6, Chapter 3, Article 5, Section 15064.5(e) of the California State Code of Regulations.

If, in the course of development, concentrations of prehistoric or historic-period materials are encountered, all work in the vicinity of the find shall halt until an archaeologist can evaluate the materials and make recommendations for further action. If human remains are encountered, all work shall halt in the vicinity and the County Coroner shall be notified immediately. At the same time, a qualified archaeologist shall be contacted to evaluate the finds. If Human Burials are found to be of Native American origin, steps shall be taken pursuant to Section 15064.5(e) of Guidelines of the California Environmental Quality Act.

XIX. UTILITIES AND SERVICE SYSTEMS.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐	☐

Impact Discussion:

The project will utilize an onsite well, a private septic system, and onsite storm water drainage facilities, therefore the project will not require new public facilities.

The project will utilize an individual domestic water well which will be constructed under permit and inspection by the San Joaquin County Environmental Health Department at the time of development. Compliance with these requirements ensure that the proposed project's impact on these resources will be less than significant.

The project will utilize an onsite sewage disposal system that will comply with the onsite wastewater treatment systems standards of San Joaquin County built under permit and inspection of the Environmental Health Department.

The proposed project will be required to comply with state and local statutes and regulations related to solid waste so there will be no significant impact in this area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed In The Prior EIR
XX. WILDFIRE.					
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒	☐

Impact Discussion:

The project will have no impact on wildland fires as the project is located outside of a wildfire hazard area.

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

Impact Discussion:

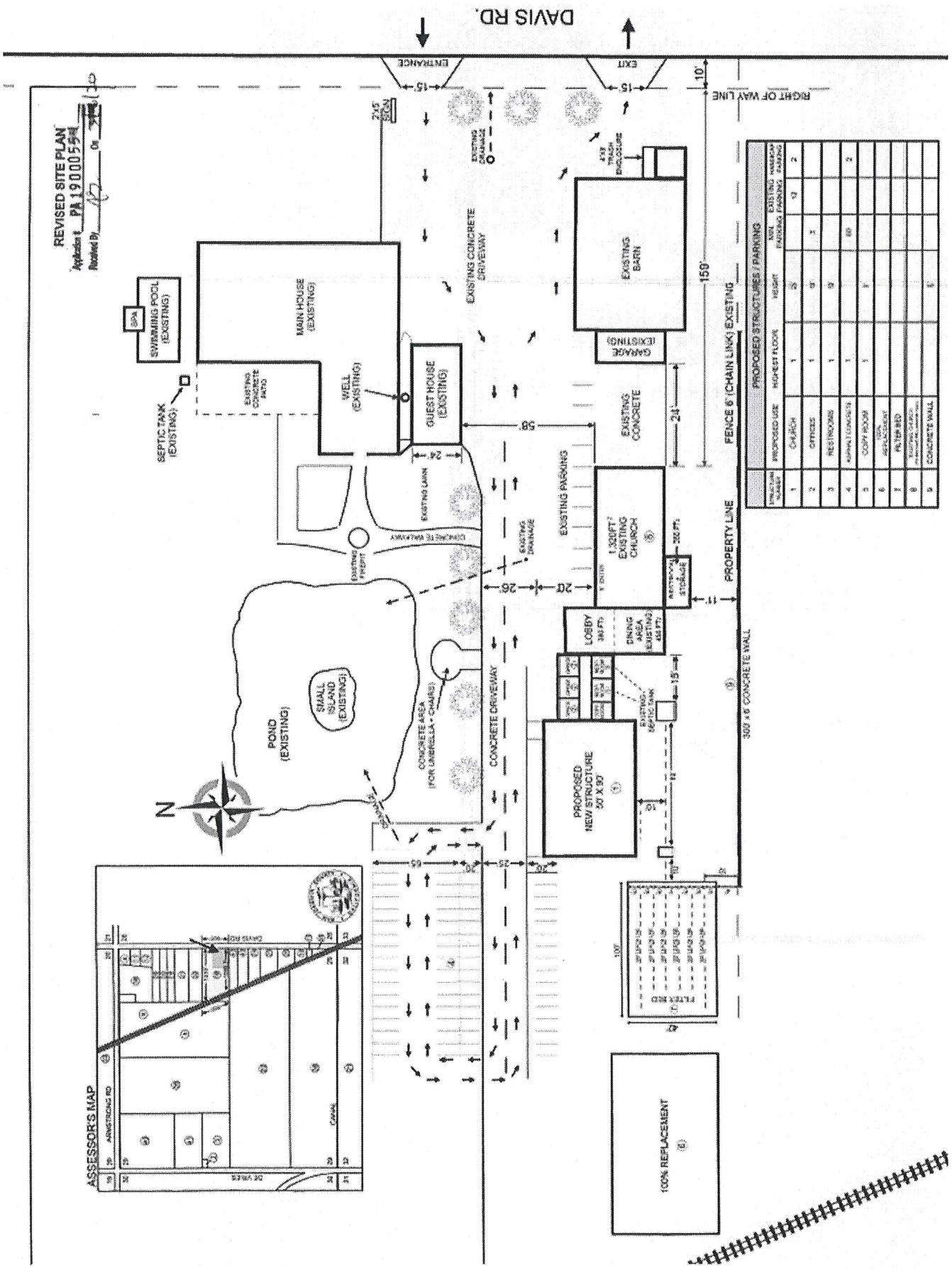
The proposed project does not appear to have the potential to significantly degrade the overall quality of the region's environment, or substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. There are no identified historic or prehistoric resources identified on this site. No archaeological or paleontological resources have been identified in the project area.

The project is not expected to have cumulatively considerable impacts. Less than significant impacts to air quality, biological resources, traffic, and hydrology have been identified. Any impacts will be adequately addressed through conditions of approval.

The project does not have environmental effects which will cause substantial adverse effects on human beings.

Note: Authority cited: Sections 21083, 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080, 21083.05, 21095, Pub. Resources Code; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

ATTACHMENT: (MAP[S] OR PROJECT SITE PLAN[S])



K.D. Anderson & Associates, Inc.
Transportation Engineers

August 19, 2019

Mr. Robert Tacsion
The Bridge Worship Center
11757 N. Davis Road
Lodi, CA 95242-9599

RE: TRAFFIC TECHNICAL MEMO FOR THE BRIDGE WORSHIP CENTER EXPANSION ON DAVIS ROAD, SAN JOAQUIN COUNTY (PA – 1900055)

Dear Mr. Tacsion:

Thank you for selecting our firm for services relating to **The Bridge Worship Center Expansion** you propose in San Joaquin County. As we are aware, the church is located at 11757 N. Davis Road between Lodi and Stockton. The "project" involves constructing new church buildings and increasing the attendance for Sunday services from 60 persons to 150 persons.

San Joaquin County staff have considered the project's potential traffic impacts and reached a preliminary conclusion of no significant impact. Under County guidelines a *Traffic Technical Memorandum* has been requested in order to provide the evidence needed to support the County's preliminary conclusions. This letter summarizes the traffic assessment prepared under the County's December 2012 guidelines.

Background Conditions

N. Davis Road. The Bridge Worship Center is located on the west side on N. Davis Road between Armstrong Road to the north and Eight Mile Road to the south. In this area N. Davis Road is two-lane road with 12-foot travel lanes and paved shoulders that typically range from 2 to 4 feet in width. The alignment of the road is generally straight and level. N. Davis Road crosses the UPRR at a gated crossing roughly ½ mile south of the project. The posted speed limit is 55 mph. N. Davis Road is classified as a Major Collector in the San Joaquin County General Plan but is not included in the Regional Congestion Management Program. The General Plan EIR (Table 4.D-B4) indicates that N. Davis Road carried a weekday 24-hr volume of 3,800 vehicles per day (vpd) in 2008 and that the maximum daily volume acceptable under the County's minimum Level of Service (LOS C) policy is 7,000 vpd. The GP EIR (Table 4.D-B5) indicates that in 2035 the daily volume will increase to 6,100 vpd north of Eight Mile Road. Typically weekend daily traffic volumes are lower than the corresponding weekday count.

Off-site Intersections. In general, the overall flow of traffic can be governed by the operation of major intersections. In this area traffic conditions on N. Davis Road are governed by the operation of the Armstrong Road intersection to the north and the Eight Mile Road intersection to the south. The Armstrong Road intersection is ½ mile north of the project, has single approach lanes and is controlled by an all-way stop. The Eight Mile Road intersection is about 1½ miles south of the project and is controlled by a traffic signal. That intersection has separate left turn lanes on each approach as well as separate right turn lanes on the south, east and west legs of the intersection.

New intersection turning movement counts were made at both intersections for use in calculating the current operating Level of Service. These counts (attached) were conducted on Sunday during the hours when The Bridge Worship Center members would be traveling to and from the church (i.e., 12:00 noon to 2:00 p.m.), and the highest volume 60 minute period was identified for analysis as the "peak hour". The current Level of Service at each location was calculated using the methods contained in the Highway Capacity Manual, 6th Edition (HCM). That data revealed that the N. Davis Road / Armstrong Road operated at LOS A with an average delay of 8.7 seconds per vehicle (spv). The observed peak hour volumes fall far below the level that might justify a traffic signal based on review of Manual of Uniform Traffic Control Devised (MUTCD) peak hour warrants. The N. Davis Road / Eight Mile Road intersection operated at LOS C with an average delay of 27.8 spv. Conditions at both locations satisfy the applicable San Joaquin County or City of Stockton minimum requirement.

Project Access. The site occupied by The Bridge Worship Center has two driveways onto N. Davis Road located roughly 75 feet apart (centerline to centerline). A drainage ditch lies along the west side of N. Davis Road. The site plan (attached) indicates that the more northerly driveway is the project's entrance and the southern driveway is the exit. Each is roughly a minimum of 15 feet wide with additional width available from tapers that were installed at the direction of San Joaquin County when the church was granted its current permit. The available sight distance at each location was reviewed, and because the road is straight the view in each direction satisfies the minimum requirements for stopping sight distance presented in the Caltrans Highway Design Manual (HDM) for 55 mph (i.e., 500 feet). Based on the Sunday traffic counts made for this analysis we estimate that the peak hour volume on N. Davis Road along the project frontage is about 115 vph.

Traffic Impacts

Trip Generation. The planned expansion will add automobile traffic to N. Davis Road. The amount of additional traffic has been estimate based on "trip generation" rates published by the Institute of Transportation Engineers (ITE). The ITE is a national organization that compiles information regarding the travel characteristics of various land uses for use in transportation planning. Data is available for churches, and the average rate identified on a "per seat" basis have been employed and applied to the permitted attendance.

As indicated in Table 1, the current worship services likely generate about 73 daily trips (i.e., ½ inbound and ½ outbound) on Sundays. Increasing the permitted attendance would be expected to increase the daily trip generation by about 109 trips, with an increase of 49 trips during the peak hour.

TABLE 1
APPLICABLE TRIP GENERATION RATES / FORECASTS

ITE Code	Description	Unit	Sunday Daily	Sunday Peak Hour		
				Inbound	Outbound	Total
560	Church	Seat	1.21	49%	51%	0.54
The Bridge Worship Center - Existing		60	73	16	16	32
The Bridge Worship Center - Proposed		150	182	40	41	81
Net Change		90	109	24	25	49

Trip Distribution. The directional distribution of the new trips will likely reflect the location of current and future church member residences. We understand today that most of the church membership generally resides north of the site towards Lodi. For this analysis we have assumed that 2/3 of the new trips will be oriented in that direction. This would result in roughly 73 more daily trips on N. Davis Road to the north and 36 more to the south.

Level of Service Assessment. The relatively small volume of traffic added to the study area roadway system would be unlikely to have a significant impact under the criteria adopted by San Joaquin County. The daily traffic added by the expansion would not result in N. Davis Road carrying volumes that exceed the LOS C standard now or in the future. The peak hour traffic added to study intersections would not cause any change in the current operating Level of Service, and applicable minimum standards will be met.

Access. The project will add perhaps 16 to 33 vph to Sunday peak hour traffic on N. Davis Road. While this represents a traffic increase of 15% to 30% above the current volume of 109 vph, the increase would not result in appreciable congestion or delay at this location. However, the following actions should be taken to ensure that public safety is maintained.

1. Continue to monitor the growth of landscaping along the project frontage and trim trees and bushes to ensure that adequate sight lines are maintained.
2. Install signs indicating the use of each driveway for entering and exiting traffic to ensure that concurrent inbound and outbound travel does not occur.

Conclusions

The proposed church expansion will add a small amount of vehicular traffic to N. Davis Road and to key intersections north and south of the sight. However, current operating conditions satisfy minimum adopted standards, and the small traffic increase will not result in a change to Level of Service or the need for capacity improvements.

With continuing attention to the landscaping along the project site to maintain adequate sight lines and the provision of signs indicating one-way flow at the driveways, sight access will remain adequate with the expansion.

Thank you again for contacting our firm for this assignment. Please feel free to call me if you have any questions or need additional information

Sincerely,

KD Anderson & Associates, Inc.

Kenneth D. Anderson, P.E.
President

Enc: Traffic counts, LOS worksheets

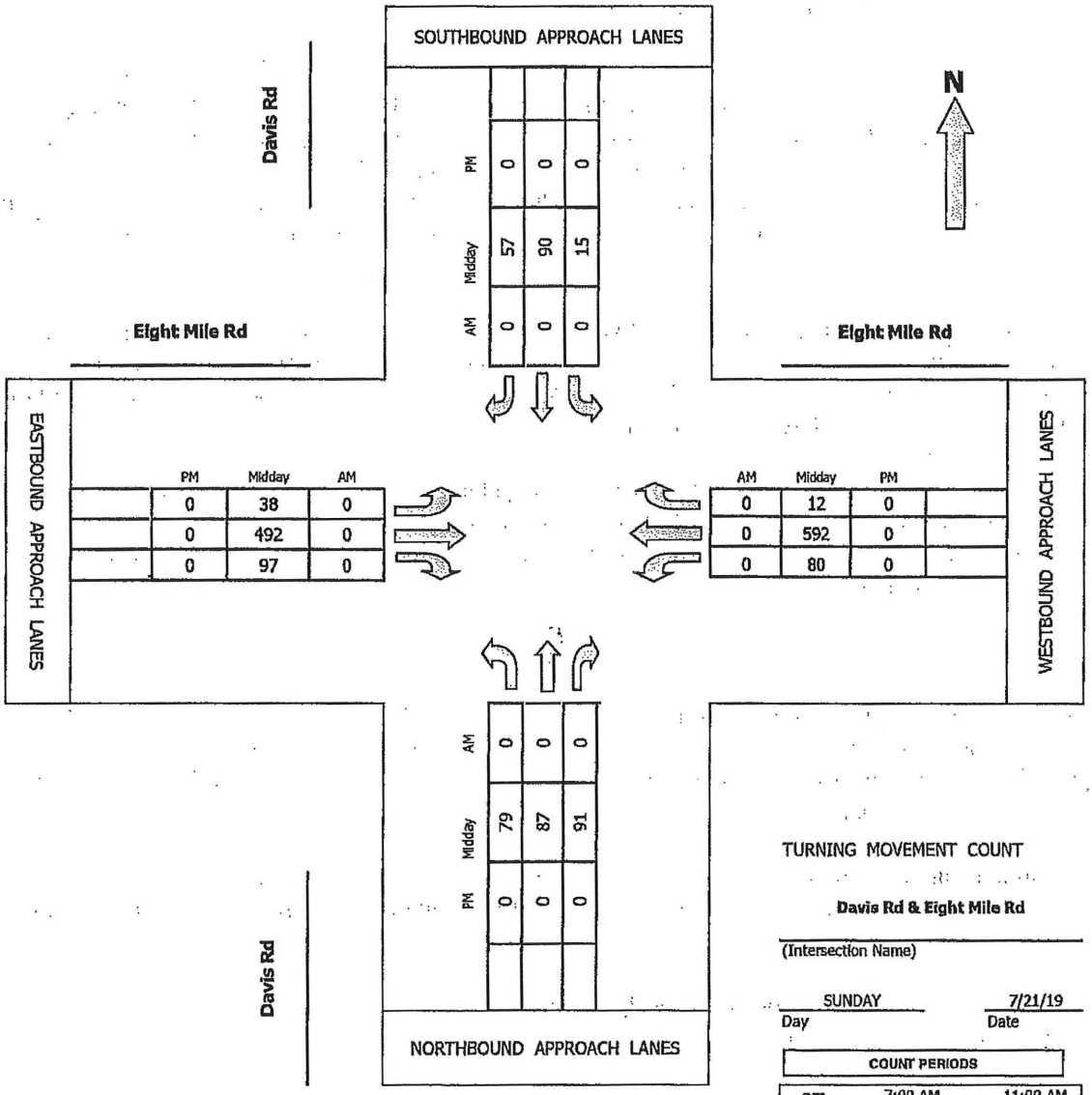
The Bridge Worship Center ltr

Intersection Turning Movement

Prepared by:
KD Anderson Associates, Inc.

TMC Summary of Davis Rd/Eight Mile Rd

Project #: 7372-01



TURNING MOVEMENT COUNT

Davis Rd & Eight Mile Rd
(Intersection Name)

SUNDAY — Day
7/21/19 — Date

COUNT PERIODS			
am	7:00 AM	-	11:00 AM
noon	12:00 AM	-	2:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	0 AM
NOON PEAK HOUR	1245 PM
PM PEAK HOUR	0 AM

Intersection Turning Movement

Prepared by:

N-S STREET: Davis Rd DATE: 7/21/19 LOCATION: Lodi

E-W STREET: Eight Mile Rd DAY: SUNDAY PROJECT# 7372-01

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
12:00 PM	15	25	24	5	21	12	11	133	13	27	145	2	433
12:15 PM	22	19	18	0	19	21	17	126	11	15	143	3	414
12:30 PM	17	23	11	2	25	10	11	111	20	17	120	1	368
12:45 PM	17	16	16	2	19	14	5	110	29	14	160	8	410
1:00 PM	29	22	32	3	23	17	9	144	28	22	160	2	491
1:15 PM	11	17	25	5	23	15	7	100	21	26	125	0	375
1:30 PM	22	32	18	5	25	11	17	138	19	18	147	2	454
1:45 PM	13	16	27	7	18	20	10	115	22	21	121	1	391
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
TOTAL VOLUMES =	146	170	171	29	173	120	87	977	163	160	1121	19	3336

NOON Peak Hr Begins at: 1245 PM

PEAK VOLUMES =	79	87	91	15	90	57	38	492	97	80	592	12	1730
PEAK HR. FACTOR:		0.774			0.942			0.866			0.929		0.881

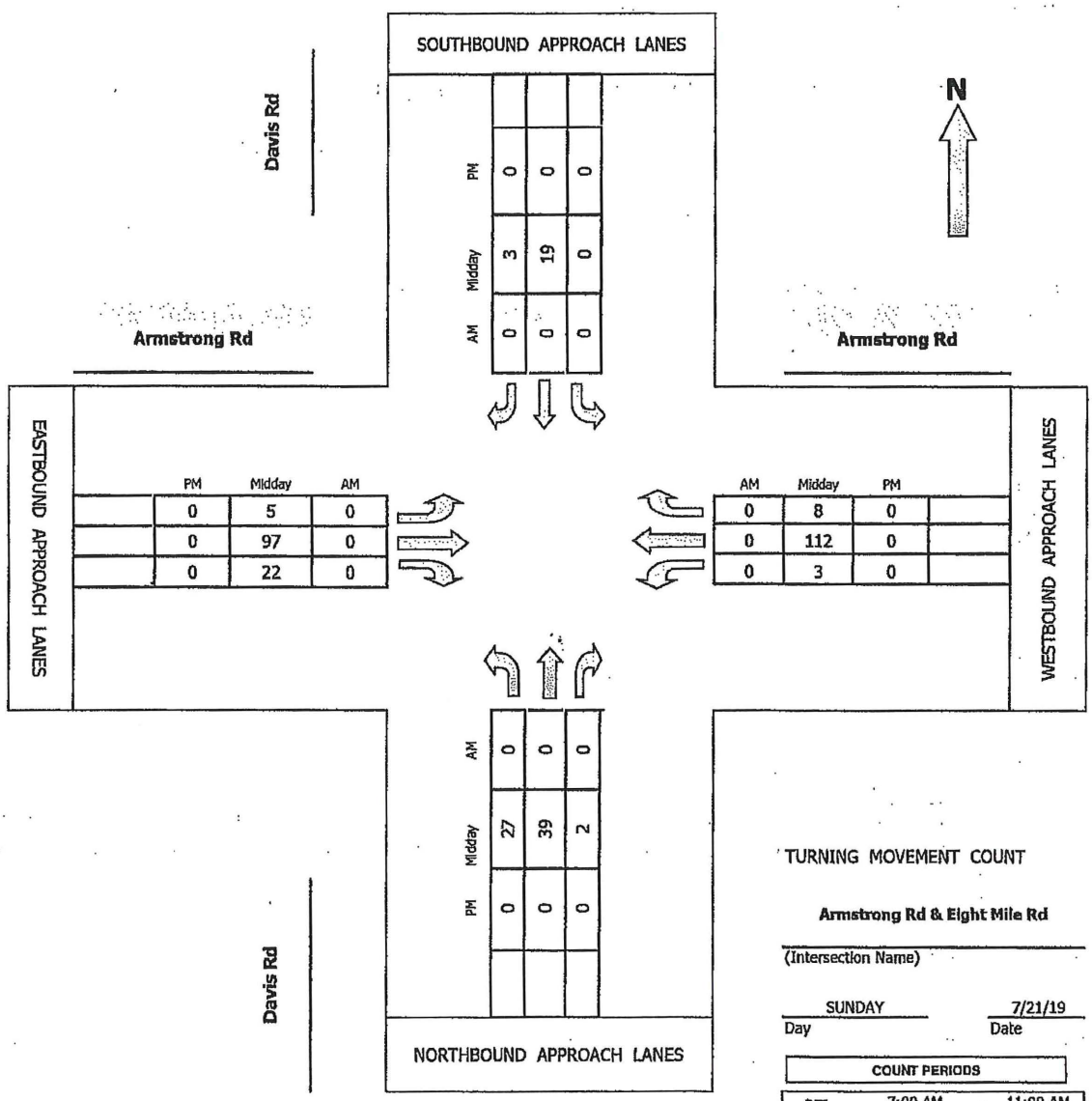
CONTROL:

Intersection Turning Movement

Prepared by:
KD Anderson Associates, Inc.

TMC Summary of Davis Rd/Armstrong Rd

Project #: 7372-01



TURNING MOVEMENT COUNT

Armstrong Rd & Eight Mile Rd

(Intersection Name)

SUNDAY (Day) — 7/21/19 (Date)

COUNT PERIODS			
am	7:00 AM	-	11:00 AM
noon	12:00 AM	-	2:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	0 AM
NOON PEAK HOUR	1245 PM
PM PEAK HOUR	0 AM

Intersection Turning Movement

Prepared by:

N-S STREET: Davis Rd DATE: 7/21/19 LOCATION: Lodi

E-W STREET: Armstrong Rd DAY: SUNDAY PROJECT# 7372-01

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
12:00 PM	6	11	0	0	5	1	1	22	11	0	20	3	80
12:15 PM	7	9	0	0	3	1	0	28	5	0	21	0	74
12:30 PM	5	9	5	1	3	0	0	24	5	0	25	2	79
12:45 PM	7	9	0	0	3	0	2	26	0	0	34	2	91
1:00 PM	6	14	2	0	8	1	3	21	1	1	32	3	92
1:15 PM	4	9	0	0	5	2	0	14	6	0	24	3	67
1:30 PM	10	7	0	0	3	0	0	36	7	2	22	0	87
1:45 PM	4	12	1	2	5	0	0	22	5	1	16	0	68
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
TOTAL VOLUMES =	49	80	8	3	35	5	6	193	48	4	194	13	638

NOON Peak Hr Begins at: 1245 PM

PEAK VOLUMES =	27	39	2	0	19	3	5	97	22	3	112	8	337
PEAK HR. FACTOR:		0.773			0.611			0.721			0.854		0.916

CONTROL:

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	97	22	3	211	8	27	39	2	0	19	3
Future Vol, veh/h	5	97	22	3	211	8	27	39	2	0	19	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	105	24	3	229	9	29	42	2	0	21	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	9.1	8.4	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	40%	4%	1%	0%
Vol Thru, %	57%	78%	95%	86%
Vol Right, %	3%	18%	4%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	124	222	22
LT Vol	27	5	3	0
Through Vol	39	97	211	19
RT Vol	2	22	8	3
Lane Flow Rate	74	135	241	24
Geometry Grp	1	1	1	1
Degree of Util (X)	0.1	0.162	0.288	0.032
Departure Headway (Hd)	4.856	4.33	4.3	4.782
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	738	830	837	749
Service Time	2.881	2.349	2.316	2.809
HCM Lane V/C Ratio	0.1	0.163	0.288	0.032
HCM Control Delay	8.4	8.2	9.1	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.6	1.2	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	43	559	110	91	673	14	90	99	103	17	167
v/c Ratio	0.24	0.60	0.12	0.41	0.66	0.01	0.45	0.21	0.19	0.10	0.49
Control Delay	37.0	22.8	0.3	39.9	22.7	0.0	43.6	25.1	0.7	34.5	30.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	22.8	0.3	39.9	22.7	0.0	43.6	25.1	0.7	34.5	30.5
Queue Length 50th (ft)	20	223	0	42	282	0	42	35	0	8	58
Queue Length 95th (ft)	49	#343	0	#97	#468	0	#107	84	0	26	#125
Internal Link Dist (ft)		9058			10575			4562			10512
Turn Bay Length (ft)	170		325	575			200			100	
Base Capacity (vph)	177	961	915	233	1020	958	198	559	617	177	382
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.58	0.12	0.39	0.66	0.01	0.45	0.18	0.17	0.10	0.44

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	492	97	80	592	12	79	87	91	15	90	57
Future Volume (veh/h)	38	492	97	80	592	12	79	87	91	15	90	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	559	110	91	673	14	90	99	103	17	102	65
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	710	602	117	756	640	115	326	276	36	134	85
Arrive On Green	0.04	0.38	0.38	0.07	0.40	0.40	0.06	0.17	0.17	0.02	0.13	0.13
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1068	680
Grp Volume(v), veh/h	43	559	110	91	673	14	90	99	103	17	0	167
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	0	1748
Q Serve(g_s), s	1.5	17.3	3.0	3.3	21.9	0.3	3.3	3.0	3.7	0.6	0.0	6.0
Cycle Q Clear(g_c), s	1.5	17.3	3.0	3.3	21.9	0.3	3.3	3.0	3.7	0.6	0.0	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	74	710	602	117	756	640	115	326	276	36	0	219
V/C Ratio(X)	0.58	0.79	0.18	0.78	0.89	0.02	0.78	0.30	0.37	0.47	0.00	0.76
Avail Cap(c_a), veh/h	136	828	701	180	873	740	153	326	276	136	0	270
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.7	17.9	13.5	30.0	18.1	11.7	30.1	23.5	23.8	31.6	0.0	27.6
Incr Delay (d2), s/veh	7.1	4.4	0.1	10.9	10.3	0.0	16.9	0.5	0.8	9.2	0.0	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.5	1.0	1.7	10.5	0.1	1.9	1.3	1.4	0.3	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	22.3	13.6	41.0	28.4	11.7	46.9	24.0	24.6	40.8	0.0	37.3
LnGrp LOS	D	C	B	D	C	B	D	C	C	D	A	D
Approach Vol, veh/h		712			778			292			184	
Approach Delay, s/veh		21.9			29.6			31.3			37.6	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	17.9	9.7	31.3	9.6	14.7	8.1	32.9
Change Period (Y+Rc), s	5.1	6.5	5.4	6.5	5.4	6.5	5.4	6.5
Max Green Setting (Gmax), s	5.0	11.0	6.6	28.9	5.6	10.1	5.0	30.5
Max Q Clear Time (g_c+I1), s	2.6	5.7	5.3	19.3	5.3	8.0	3.5	23.9
Green Ext Time (p_c), s	0.0	0.4	0.0	2.9	0.0	0.2	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C