COUNTY OF TULARE RESOURCE MANAGEMENT AGENCY



5961 South Mooney Boulevard Visalia, CA 93277

Initial Study and Mitigated Negative Declaration

Poplar-Cotton Center Community Plan 2018 Update GPA 17–010 (Community Plan) PZC 18–014 (Zoning District Map) PZC 18–012 (Section 18.9 Zoning Ordinance - Mixed Use) PZC 18–013 (Section 16 Zoning Ordinance - By Right)

October 2018

Prepared by
County of Tulare Resource Management Agency
Economic Development and Planning Branch
Environmental Planning Division

INITIAL STUDY CHECKLIST

1. **Project Title:** Popular-Cotton Center Community Plan 2018 Update

2. Lead Agency: County of Tulare

Resource Management Agency

5961 S. Mooney Blvd. Visalia, CA 93277

3. Contact Persons: Jessica Willis, Planner IV (Project Planner) – 559-624-7122

Hector Guerra, Chief, Environmental Planning Division – 559-624-7121

4. Project Location: The Project site is located approximately eight (8) miles west of Porterville and eleven

(11) miles southwest of Lindsay. It is generally bounded by Avenue 136 in the south, Avenue 152 in the north, Road 184 in the west, and Road 193 in the east; and encompasses approximately 1.3 square miles of land. Poplar-Cotton Center is located within Sections 26, 27, 34, & 35, Township 21 South, Range 26 East; Sections 02 & 03, Township 22 South, Range 26 East; and can be found within the Woodville Quad, United States Geological Survey 7.5 minute topographic quadrangle. Poplar-Cotton Center is located

at an elevation of 327 feet above sea level.

5. Latitude, Longitude: Latitude: 36° 3' 14" N and Longitude: 119° 8' 41" W.

6. Applicant: County of Tulare

Resource Management Agency

5961 S. Mooney Blvd. Visalia, CA 93277

7. General Plan Designation: General Plan Amendment

8. Zoning: AE-40; C-1; C-1-SR; C-2; C-3; C-3-SR; M-1; PD-C-2; P-0; R-1; R-1-SR; R-2; R-3; Rights-of-Way

- 9. Description of Project (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary. The objective of the Poplar-Cotton Center Community Plan is to develop a community plan which can accurately reflect the needs and priorities of the unincorporated communities of the Poplar-Cotton Center. The Land Use and Circulation portions of this Plan provide the mechanism to minimize or avoid the potential adverse impacts of urban growth. The development of an orderly, harmonious land use pattern and appropriate implementation measures are designed to reduce potential conflict between neighboring uses across Tulare County's 2030 planning horizon, consistent with the Tulare County 2030 General Plan Update.
- **10. Surrounding land uses and setting (Brief description):** Poplar-Cotton Center is an agriculturally oriented service community surrounded on all sides by lands in agricultural production, vacant lands, and scattered rural residential homes. Cities and communities surrounding Poplar-Cotton Center include Porterville to the east, Lindsay to the northeast, Tulare to the northwest, Woodville to the northwest, and Tipton to the east. The Tulare County/Kern County Line is located approximately 18 miles south of Poplar-Cotton Center.¹
 - 11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement): None.

Tulare County General Plan 2030 Update. August 2012. Page 12-112. Community of Poplar-Cotton Center. 12.1 General Information. http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20II/GENERAL%20PLAN%202012.pdf

12. 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, has consultation begun? Pursuant to AB 52 and SB 18, a Sacred Land File request was submitted to the Native American Heritage Commission on September 17, 2017 and was returned with negative results. On September 11, 2018, tribal consultation notices were sent to tribal contacts representing six (6) Native American tribes. The County received no responses from the tribes within the 30-day response time. Mitigation measures have been included in the project to reduce potential impacts on tribal cultural resources in the event that any are unearthed during construction-related activities.

Figure 1
Poplar-Cotton Center Existing Land Use Designation Map

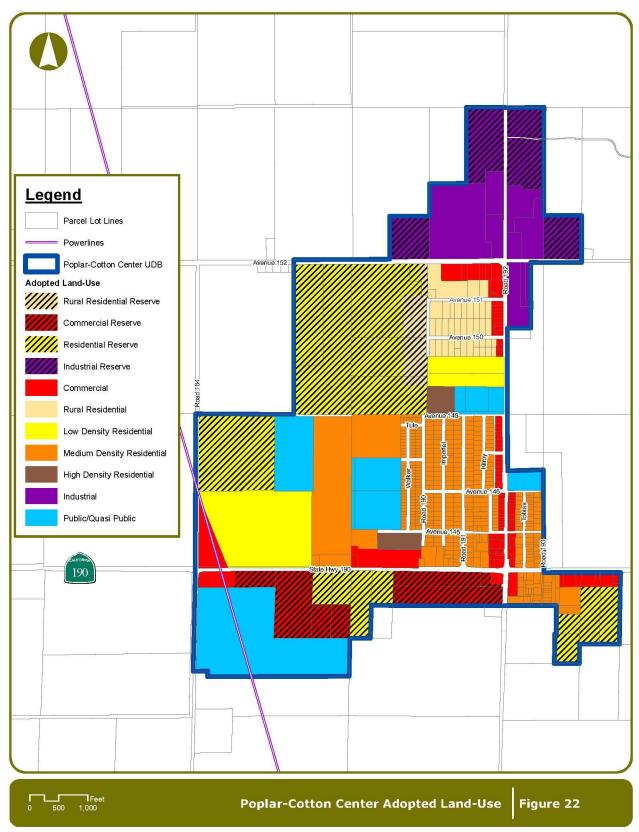
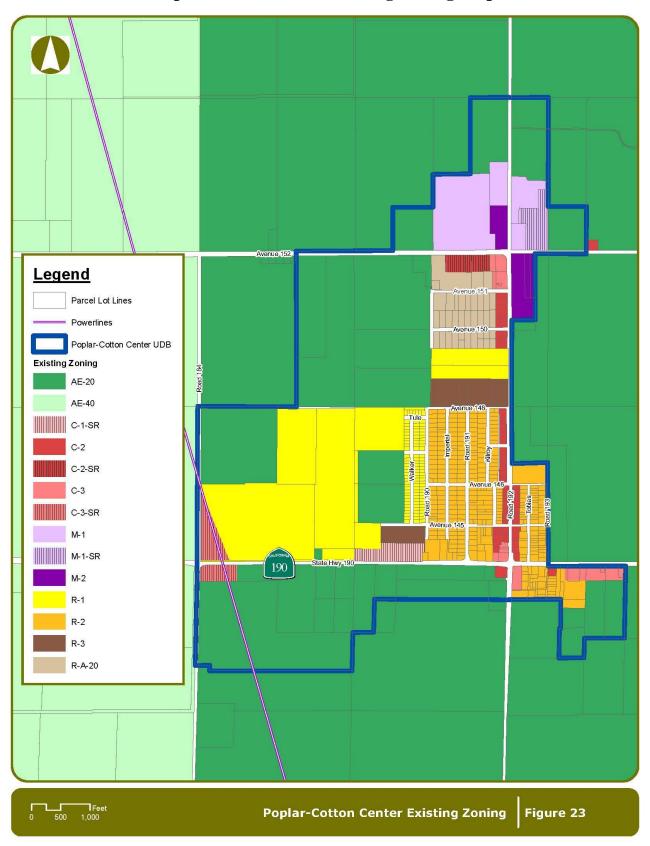


Figure 2
Poplar-Cotton Center Existing Zoning Map



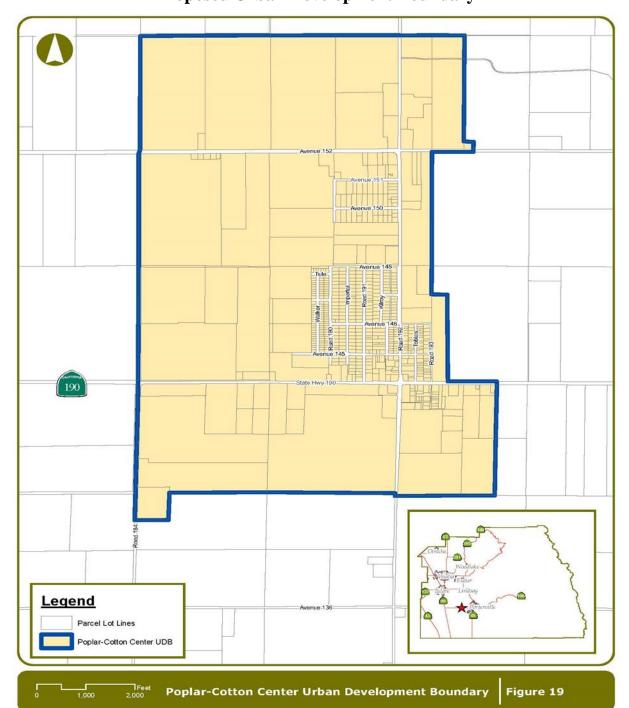


Figure 3
Proposed Urban Development Boundary

Figure 4
Poplar-Cotton Center Proposed Land Use Designation Map

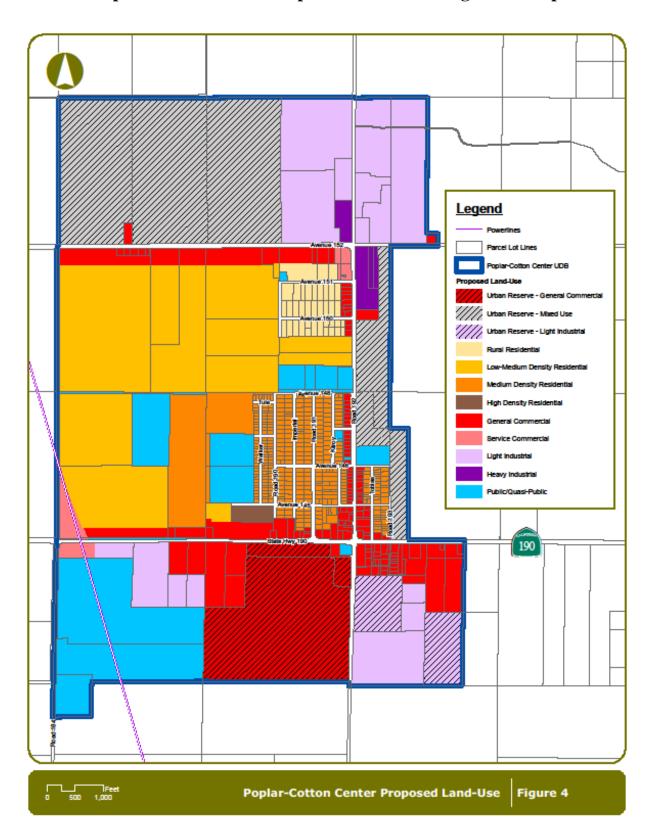
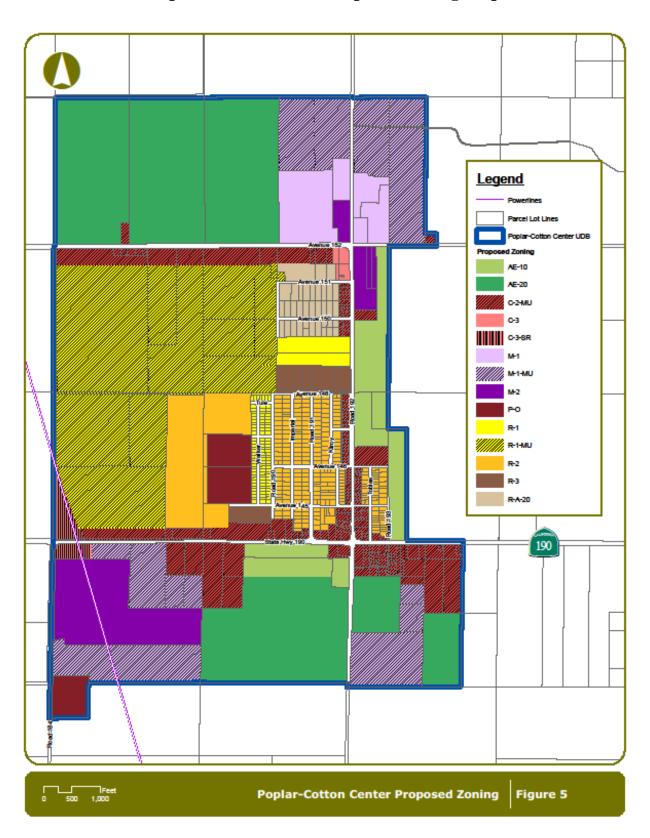


Figure 5
Poplar-Cotton Center Proposed Zoning Map



ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

A.	impa			pelow would be potentially affection in the control of the control					
		Aesthetics Biological Resources Greenhouse Gases Land Use / Planning Population / Housing Transportation / Traffic Mandatory Findings of Sig	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Agriculture and Forestry Resource Cultural Resources Hazards and Hazardous Materials Mineral Resources Public Services Tribal Cultural Resources ace		Air Quality Geology / Soils Hydrology / Water Quality Noise Recreation Utilities / Service Systems			
В.		TERMINATION: The basis of this initial evaluation	luatio	n·					
		I find that the propose	ed pro	iect COULD NOT have a sign TON will be prepared.	ificant eff	ect on the environment, and a			
	I find that although the proposed project could have a significant effect on the environment. NOT be a significant effect in this case because revisions in the project have agreed to by the project proponent. A MITIGATED NEGATIVE DECLARA 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 "potent significant unless mitigated" impact on the environment, but at least one effect 1) has adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has addressed by mitigation measures based on the earlier analysis as described on attached sheet ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects remain to be addressed.								
		all potentially signific DECLARATION pu to that earlier EIR or	ant eff rsuant NEG	cosed project could have a significate (a) have been analyzed adect to applicable standards, and (b) ATIVE DECLARATION , incroposed project, nothing further	quately in a have been luding rev	an earlier EIR or NEGATIVE avoided or mitigated pursuant visions or mitigation measures			
<u>Signa</u>	ture:			Da	ate:				
	<u>r Guerr</u> d Name				<u>nief Enviro</u> tle	onmental Planner			
<u>Signa</u>	ture:			Da	ate:				
	Schenk d Name	e, P.E.			nvironmen tle	tal Assessment Officer			
TIHL	uranic	<i>j</i>		11	uc				

C. 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 crossreferenced).
- 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.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
1.	AE	STHETICS				
	Wo	uld the project:				
	a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
	b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes
	c)	Substantially degrade the existing visual character or quality of the site and its surroundings?				
	d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				\boxtimes

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project:

The Poplar–Cotton Center Urban Development Boundary (UDB) contains approximately 915 acres, and is proposed to increase by 670 acres, for a total of 1,585 acres.² No proposed development projects are part of this proposed amendment. However, over time, the proposed 670-acre expansion and ultimate planned development within the Planning Area could impact the area's aesthetic character as future development replaces existing agricultural lands and rural open spaces. At the time of development, existing General Plan policies and proposed Community Plan policies will be implemented to avoid and/or minimize any potentially adverse impacts to scenic views (for example, *ERM-1.15 Minimize Lighting Impacts* and *ERM-5.18 Night Sky Protection*.

The Project area is not adjacent to or within a scenic corridor or vista. As with much of Tulare County, the Sierra Nevada mountains are visible when conditions (such as haze, fog, or air quality) do not interfere with visibility. Implementation of General Plan policies (for example, *SL-1.1 Natural Landscapes*) is intended to minimize impacts to views of landscapes. Future development design will be required to consider potential visual impacts to the surrounding areas, and set-back requirements and building height limitations contained in the Tulare County Zone Ordinance will also prevent adverse impacts to a scenic vista.

- a) *No Impact* The proposed Project is a Community Plan Update and contains no plans for development or construction projects. The Project will not adversely affect any scenic vista; as such, it will not include any structures which may substantially impact a scenic vista. As such, there will be no impact to this resource.
- b) *No Impact* The proposed Project area includes a mix of uses such as single-family residential, commercial, light industrial, and public use (elementary and middle schools). The community is completely surrounded by agriculturally productive lands (such as orchards and row crops). As such, the proposed Community Plan Update will not impact scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state or county designated scenic highway or county designated scenic road. Therefore, there will be no impact to this resource.

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² Draft Poplar-Cotton Center Community Plan 2018 Update. Pages 25, 27, 90, 96, 165, 166.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT		
T w ir a;	No Impact - The Community Plan Update will ultimately expand the existing UDB from 915 acres to 1,585 acres. The Update does not include any plans for construction or development. As noted earlier, future development design will consider potential visual impacts to the surrounding areas, and set-back and building height limitations contained in the Tulare County Zone Ordinance will also prevent any adverse impacts to a scenic vista. The predominantly agricultural scenery surrounding the Community will remain unchanged as a result of the proposed update. As such, there will be no impact to this resource.							
o P fi so d L L	No <i>Impact</i> - The proposed Community Plan Update will not result in the creation of a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Over the course to the planning horizon, the Plan acknowledges that additional development and growth will likely occur in the planning area that could lead to future impacts from light or glare. Various General Plan Policies are anticipated to minimize impacts from light or glare sources. Evening hour lighting for safety and security purposes cannot be determined until specific locations and development proposals are received. However, there are several General Plan Policies (such as <i>ERM-1.15</i> Minimize Lighting Impacts, <i>LU-4.5</i> Commercial Building Design, <i>LU-7.19</i> Minimize Lighting Impacts, and <i>SL-1.2</i> Working Landscapes) that require new development to minimize lighting impacts. Therefore, there update Project will result in no impact to this resource.							
2.	AG	RICUL TURAL AND FOREST F	RESOURCES					
	In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the Rural Valley Lands Plan point evaluation system prepared by the County of Tulare 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:							
	a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?						
	b)	Conflict with existing zoning for agriculture use, or a Williamson Act contract?						
	c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined				\boxtimes		

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to nonforest use?				\boxtimes
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?				\boxtimes

a) - e) *No Impact* - Existing uses include a mix of single-family residences, highway and general commercial, public (school), and agricultural uses. As noted earlier, the Project does not include any development projects/proposals; however, future development is anticipated to occur within the proposed UDB area over time. Development within the Planning Area would, over time, affect the area's agricultural lands and rural open spaces as future urban development occurs. The Popular-Cotton Center UDB expansion would result in the addition of 670 acres to the existing UDB area. The overall land use pattern will remain as currently defined; however, those areas within the proposed UDB expansion area could ultimately result in new residential, institutional, commercial, and light industrial uses as depicted in Figure 20 (Proposed Land Use Plan Map) of the Community Plan³.

The Project will likely result in the ultimate conversion (i.e., cancellation or non-renewal) of parcels containing Williamson Act (WA) Preserves. Over time, parcels classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) are planned for development to non-agricultural uses. The area within the existing 915 acre UDB is designated in the 2018 FMMP map (see Figure 6 of the Community Plan). Of these, approximately 288 acres are designated Urban and Built-up Land, approximately 973 acres are designated Prime Farmland, approximately 8 acres are designated vacant or disturbed land, with approximately 59 designated Farmland of Statewide Importance, approximately 200 acres are designated as Farmland of Local Importance. As specific development proposals come forward, each will be evaluated on its own merits and the appropriate environmental evaluation will determine the level of mitigation measures, if necessary/applicable.

As the Project does not include any development proposals, updating the Community Plan will not result in the conversion of any prime agricultural land as defined in Section 51201(C) of the Govt. Code to non-agricultural use. It will not conflict with existing zoning for agriculture use, or a Williamson Act contract; it will not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g) or timberland (as defined in Public Resource Code section 4526); it will not result in the loss of forest land or conversion of forest land to non-forest use, nor will it involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use. The Project could result in conversion of farmland to future non-agricultural use (residential, commercial, or industrial); however, no development proposals are part of this Community Plan Update. There will be no impact to these resources a) - e).

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³ Ibid. Figure 20, Page 100.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
3.	AIF	R QUALITY				
		ere available, the significance criteria estrol district may be relied upon to make				pollution
	a)	Conflict with or obstruct implementation of the applicable air quality plan?				
	b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			\boxtimes	
	c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			\boxtimes	
	d)	Expose sensitive receptors to substantial pollutant concentrations?				
	e)	Create objectionable odors affecting a substantial number of people?				

As noted previously, the Project is an update to the Poplar-Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). Also, the Project includes proposed expansion of the Urban Development Boundary (UDB) from its existing 915 acres to approximately 1,585 acres (and increase of 970 acres).

The proposed Project is located in the San Joaquin Valley Air Basin (SJVAB), a continuous inter-mountain air basin. The Sierra Nevada Range forms the eastern boundary; the Coast Range forms the western boundary; and the Tehachapi Mountains form the southern boundary. These topographic features restrict air movement through and beyond the SJVAB. The SJVAB is comprised of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare Counties and the valley portion of Kern County; it is approximately 25,000 square miles in area. Tulare County lies within the southern portion of the SJVAB. The SJVAB is managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD or Air District).

Both the federal government (through the United State Environmental Protection Agency (EPA)) and the State of California (through the California Air Resources Board (CARB)) have established health-based ambient air quality standards (AAQS) for six air pollutants, commonly referred to as "criteria pollutants." The six criteria pollutants are: carbon monoxide (CO), ozone (O_3) , sulfur dioxide (SO_2) , nitrogen dioxide (NO_2) , particulate matter (PM_{10}) and $PM_{2.5}$, and lead (Pb).

National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for each criteria pollutant to protect the public health and welfare. The federal and state standards were developed independently with differing purposes and methods, although both processes are intended to avoid health-related

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent.

The Federal Clean Air Act requires EPA to set NAAQS for the six criteria pollutants, noted above, that occur throughout the United States. Of the six pollutants, particle pollution and ground-level ozone are the most widespread health threats. EPA regulates the criteria pollutants by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health is called primary standards. Another set of limits intended to prevent environmental and property damage is called secondary standards.

EPA is required to designate areas as meeting (attainment) or not meeting (nonattainment) the air pollutant standards. The Federal Clean Air Act (CAA) further classifies nonattainment areas based on the severity of the nonattainment problem, with marginal, moderate, serious, severe, and extreme nonattainment classifications for ozone. Nonattainment classifications for PM range from marginal to serious. The Federal CAA requires areas with air quality violating the NAAQS to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures that states will use to attain the NAAQS. The Federal CAA amendments of 1990 require states containing areas that violate the NAAQS to revise their SIP to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of Air Basins as reported by the agencies with jurisdiction over them. The EPA reviews SIPs to determine if they conform to the mandates of the Federal CAA amendments and will achieve air quality goals when implemented. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and impose additional control measures.

The SJVAB is designated non-attainment of state and federal health based air quality standards for ozone and respirable particulate matter (PM). The federal classification for the SJVAB is extreme non-attainment for the 8-hour ozone standard. To meet Federal Clean Air Act requirements, the District adopted the 2007 Ozone Plan on April 30, 2007. The ARB approved the Plan on June 14, 2007, while the EPA approved the Plan effective April 30, 2012. The Plan projects that the Valley will achieve the 8-hour ozone standard for all areas of the SJVAB no later than 2023. The federal PM₁₀ standard has been achieved and the US EPA re-classified the SJVAB as in attainment on September 25, 2008. Even after achieving the PM₁₀ standard, the SJVAB is currently a PM₁₀ Maintenance Area and all rules and regulations are still in effect. The SJVAB is designated non-attainment for state and federal PM_{2.5} (particulate matter less than 2.5 micrometers in diameter) annual standards. The Air District adopted the 2012 PM2.5 Plan to address EPA's 2006 revised 24-hour standard (35 µg/m³) in December 2012. On April 15, 2015, the Air District adopted the 2015 Plan for the 1997 PM2.5 Standard which addresses both the annual (35 µg/m³) and 24-hour (35 µg/m³) standards established by EPA in 1997. Measures contained in the 2007 PM10 Maintenance Plan will also help reduce PM2.5 levels and will provide progress toward attainment until new measures are implemented for the PM2.5 Plan, if needed. The State does not have an attainment deadline for the ozone standards; however, it does require implementation of all feasible measures to achieve attainment at the earliest date possible. State PM10 and PM2.5 standards have no attainment planning requirements, but must demonstrate that all measures feasible for the area have been adopted.

In addition to consistency with Air District attainment plans, the Tulare County General Plan has a number of policies that apply to projects within County of Tulare. For example, General Plan policies that would apply to future development in the Project area include AQ-1.1 Cooperation with Other Agencies; AQ-1.2 Cooperation with Local Jurisdictions; AQ-1.3 Cumulative Air Quality Impacts; AQ-1.4 Air Quality Land Use Compatibility; AQ-1.5 California Environmental Quality Act (CEQA) Compliance; AQ-3.6 Mixed Land Uses; and AQ-4.2 Dust Suppression Measures. Among General Plan policies regarding land uses which benefit air quality are LU-1.1: Smart Growth and Healthy Communities; LU-1.4: Compact Development; LU-1.8: Encourage Infill Development; LU-3.2: Cluster Development; LU-3.3; and High-Density Residential Locations.

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The Technical Memorandum "Air Quality Emissions Analysis for the Poplar-Cotton Center Community Plan Update" (AQ Memo) was completed by RMA Staff (Jessica Willis, Planner IV) in October 2018 to analyze potential air quality emissions (See Attachment "A"). As indicated in the AQ Memo, the following air quality analysis was "...prepared to evaluate whether the estimated air pollutant emissions generated from implementation of the Project (i.e., future development projects) would cause significant impacts to air quality and health risks to nearby receptors. The air quality assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The assessment is intended to provide the County of Tulare (County) with sufficient detail regarding potential impacts of Project implementation and to identify mitigation measures, if necessary, to reduce potentially significant impacts. The estimated emissions are compared to federal and state ambient air quality standards (AAQS) and the thresholds of significance established by the San Joaquin Valley Unified Air Pollution Control District (Air District). The methodology for the air quality assessment follows the Air District recommendation for quantification of emissions and evaluations of potential impacts on air resources as provided in the *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) adopted by the Air District Governing Board on March 19, 2015."

There are no specific development projects proposed with the Poplar-Cotton Center Community Plan Update; however, the Plan does include updates to land use designations that could increase the buildout potential of the planning area. As such, the analysis estimates the increase in emissions based on the 1.3% annual growth rate projected for the County in the Tulare County 2030 General Plan. The growth rate was applied to the existing development in the 2016 base year to determine the amount of development that would occur by 2030. Although other types of development may be constructed consistent with the existing General Plan and Zoning designations, the land uses selected for evaluation are representative of common development types found in rural communities and provide a reasonable estimate for determining potential impacts.

In addition to criteria pollutants, the AQ Memo also assessed potential health impacts (particularly the potential exposure to toxic air contaminant (TAC) emissions) and nuisance odor impacts on nearby receptors as compared to health risk assessment and odor screening thresholds. As noted in the AQA Report, "There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update that would be a source of TAC or HAP emissions, and the location of future development projects in close proximity to sensitive receptors cannot be determined until future projects are identified. To ensure that development within the Project planning area does not expose sensitive receptors to significant impacts from TAC emissions, the County will review individual projects on a project-by-project basis to determine if ARB's Air Quality Land Use Handbook screening criteria presented in Table 7 [of the AQ Memo] are exceeded. Projects that exceed the screening criteria will be subject to analysis using screening models or may require dispersion modeling and a health risk assessment. Tulare County will also consult with the Air District during the CEQA process for guidance on the appropriate screening tools and modeling protocols for future development projects within the Plan Update area." The primary existing sources of concern in Terra Bella are State Route 190 due to its traffic volume and large percentage of diesel trucks. However, these truck trips already exist and would impact the Community even without the Community Plan update.

In regards to odor, the AQ Memo notes that as the Community Plan is built out, potential exists for odor impacts to occur resulting from existing and/or new agricultural, commercial and industrial land uses. "To ensure potential impacts are addressed, if proposed developments were to result in sensitive receptors being located closer than the recommended distances to any odor generator identified in Table 8 [of the AQ Memo], a more detailed analysis, is recommended. The

⁴ County of Tulare. 2018. Technical Memorandum: Air Quality Emissions Analysis for the Poplar-Cotton Center Community Plan Update. Page 1.

⁵ Ibid, 18-19.

⁶ Op. Cit., 20.

SIGNIFIC. IMPAC	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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detailed analysis would involve contacting the Air District's Compliance Division for information regarding odor complaints"

- a) Less Than Significant Impact Air quality plans (also known as attainment plans) and subsequent rules are used to bring the applicable air basin into attainment with federal ambient air quality standards designed to protect the health and safety of residents within that air basin. As indicated in the AQ Memo, criteria pollutant emissions associated with the construction and operation of the Project would not exceed any of the Air District's thresholds of significance. Furthermore, "The County will consult with the Air District on a project-by-project basis as new developments are proposed to evaluate project-specific impacts based on project-specific details and to determine whether a localized pollutant analysis (such as an Ambient Air Quality Analysis or Health Risk Assessment) would be required." The Air District's AQPs contains a number of control measures, which are enforceable requirements through the adoption of rules and regulations. "Future developments will comply with all applicable Air District rules and regulations. As such, the Project would not conflict with or obstruct implementation of the applicable Air Quality Plans." Therefore, there will be a less than significant Impact as a result of the Project.
- **b)** *Less Than Significant Impact* As noted in item a), above, the proposed Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The AQ Memo includes a projection of construction-related and operations-related emissions during the planning timeframe (that is, 2030) and concludes that emissions are below significance thresholds (see Table 9 of the AQ Memo). Therefore, the Project would result in a less than significant impact. Therefore, the Project would not result in a significant contribution to air quality violations.
- c) Less Than Significant Impact As development occurs within the Project planning area each project will be evaluated to ensure that emission control techniques are implemented consistent with Air District rules and regulations. For example, compliance with Air District Rule 9510 (Indirect Source Review) will ensure that cumulative growth does not result in an overall increase in emissions in the air basin and would not jeopardize attainment plan deadlines. As indicated in the AQ Memo, "The Project would be considered to have a significant cumulative impact on air quality if project-specific impacts are determined to be significant. As previously noted, the emissions analysis confirms that Project-specific emissions are below the Air District's thresholds of significance at a project-specific level, and that the Project will not cause or contribute to an existing air quality violation. Furthermore, the County will consult with the Air District on a project-by-project basis to ensure that future developments are implemented consistent with Air District rules and regulations, including Regulation VIII and Rule 9510 (Indirect Source Review). The Project will be required to implement all applicable General Plan policies and to comply with all applicable Air District rules and regulations. Therefore, because the Project would have Less Than Significant Project-specific Impacts, the Project will have a Less Than Significant Cumulative Impact on air quality." 12
- d) Less Than Significant Impact The Project would not expose sensitive receptors to substantial pollutant concentrations. Consistent with the Valley Air District's definition of "sensitive receptors", the AQ Memo contains analyses of criteria pollutants and projected potential impacts on sensitive receptors. "Sensitive receptors are those individuals who are sensitive to air pollution and include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. The Air District considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units." 13

⁷ Op. Cit., 20

⁸ Op. Cit. 13-14.

⁹ Op. Cit. 14

¹⁰ Op. Cit.

¹¹ Op. Cit. 13-14

¹² Op. Cit.16

¹³ Op. Cit.

	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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The AQ Memo analyzed and concluded the following:

"Construction Equipment TACs/HAPs: Particulate emissions from diesel powered construction equipment are considered a TAC by the California Air Resources Board. There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. However, future development projects have the potential to temporarily expose receptors to increased pollutant emission concentrations from diesel powered construction equipment during the short-term construction phase. However, construction emissions are temporary and would cease upon completion of construction activities. The short-term nature of construction-related emissions would not expose nearby receptors to substantial TAC concentrations. Less Than Significant Project-specific Impacts related to this Checklist Item will occur."¹⁴

"Dust-borne TACs/HAPs: There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. However, future development projects have the potential to temporarily expose nearby receptors to fugitive particulate (dust) emissions during the short-term construction phase or from landscaping activities once the development project is operational. As of August 17, 2018, there were no listings within the Project planning area in the California Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List. A query performed on the DTSC Envirostor indicated that there are no superfund, state response, voluntary cleanup, school cleanup or corrective actions within three (3) miles of the Project planning area. A query of the State Water Resources Control Board (WRCB) GeoTracker Site and Facilities mapping programs revealed three (3) leaking underground storage tank (LUST) sites within the Project planning area; however, cleanup of each of these sites has been completed and the cases closed. A query performed on the U.S. Environmental Protection Agency (EPA) Superfund Enterprise Management System (SEMS) website found that there are no listed polluted sites within the Project planning area. Therefore, fugitive dust emissions resulting from earthmoving activities during construction or landscaping activities during operations, would not expose future residents or nearby receptors to substantial pollutant concentrations. Less Than Significant Project-specific Impacts related to this Checklist Item will occur." ¹⁵

"Valley Fever: Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, Coccidioides immitis (C. immitis). According to the Centers for Disease Control (CDC), the San Joaquin Valley is considered an endemic area for valley fever. "People can get Valley fever by breathing in the microscopic fungal spores from the air, although most people who breathe in the spores don't get sick. Usually, people who get sick with Valley fever will get better on their own within weeks to months, but some people will need antifungal medication." Construction-related activities generate fugitive dust that could potentially contain C. immitis spores. The Project will be required to implement General Plan Policy AQ-4.2 (Dust Suppression Measures), which was specifically designed to address impacts from the generation of dust emitted into the air. The Project will be required to comply with Air District Regulation VIII (Fugitive PM10 Prohibitions) requirements, including submittal of construction notification and/or dust control plan(s), which minimize the generation of fugitive dust during construction-related activities. Therefore, implementation of General Plan policies and compliance with Air District rules and regulations would reduce the chance of exposure to valley fever during construction-related activities. Less Than Significant Project-specific Impacts related to this Checklist Item will occur." 16

"Naturally Occurring Asbestos: In areas containing naturally occurring asbestos, earthmoving construction-related activities, such as grading and trenching, could expose receptors to windblown asbestos. According to a United States Geological Soil Survey map of areas where naturally occurring asbestos in California are likely to occur, the Project is not located in an area known to contain naturally occurring asbestos. The Project planning area and the immediate vicinity has been previously disturbed by agricultural operations and by residential development. Future development projects will be

¹⁴ Op. Cit. 16-17.

¹⁵ Op. Cit. 17.

¹⁶ Op. Cit. 17-18.

SIGNIFIC. IMPAC	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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required to implement General Plan Policy AQ-4.2 (Dust Suppression Measures) to comply with Air District Regulation VIII (Fugitive PM10 Prohibitions) requirements, thereby reducing the chance of exposure to valley fever during construction-related activities. Therefore, Less Than Significant Project-specific Impacts related to this Checklist Item will occur." ¹⁷

"Operations from Future Development: There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update that would be a source of TAC or HAP emissions. However, construction- and operation-related activities associated with future development projects may require the transport and use of hazardous materials Consumer products and gasoline are regulated by the State and use of these products would not pose a significant risk to residents or nearby receptors. Medium- and Heavy-duty diesel trucks would be a source of diesel particulate matter, which is considered to be a TAC. The County will work with the Air District on a project-by-project basis to determine whether health risk assessments would be required for projects generating diesel truck trips travelling through the Project planning area, and for other equipment that may require Air District permits. Furthermore, future applicants will be required to comply with all local, state, and federal policies related to emission of TACs/HAPs in the event such pollutants require control efforts to minimize their impacts. Tulare County Environmental Health Division will require a Hazardous Waste Business Plan if materials exceed 55 gallons (liquids), 500 pounds (solids), or 200 cubic feet (compressed gas) handled or stored on site. As such, the Project will not expose sensitive receptors to substantial pollutant concentrations. Less Than Significant Project-specific Impacts related to this Checklist Item will occur." 18

"Existing Sources: There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update that would be a source of TAC or HAP emissions, and the location of future development projects in close proximity to sensitive receptors cannot be determined until future projects are identified. To ensure that development within the Project planning area does not expose sensitive receptors to significant impacts from TAC emissions, the County will review individual projects on a project-by-project basis to determine if ARB's Air Quality Land Use Handbook screening criteria presented in Table 7 are exceeded. Projects that exceed the screening criteria will be subject to analysis using screening models or may require dispersion modeling and a health risk assessment. Tulare County will also consult with the Air District during the CEQA process for guidance on the appropriate screening tools and modeling protocols for future development projects within the Plan Update area. Therefore, existing sources of TAC/HAP emissions would not expose receptors to substantial pollutant concentrations. Less Than Significant Project-specific Impacts related to this Checklist Item will occur." ¹⁹

"Existing Agricultural Operations: The Project planning area is located in a rural area with urban built up land as well as active agricultural operations. Agricultural operations typically include the use of chemicals on crops for activities such as pest control, damage control, weed abatement, etc. However, these chemicals are regulated by the State and would not pose a significant risk to the existing and future residents within the Project planning area. Furthermore, the Tulare County General Plan includes Policy AG-1.14 Right-to-Farm Noticing which requires new property owners to acknowledge and accept the inconveniences associated with normal farming activities. Future development projects adjacent to agricultural lands will be required to sign a "Right to Farm" notice. Less Than Significant Project-specific Impacts related to this Checklist Item will occur."²⁰

e) Less Than Significant Impact - The Project would not create objectionable odors affecting a substantial number of people. Consistent with the Air District's definition of "sensitive receptors" the AQ Memo contains analyses of odor sources and projected potential impacts on sensitive receptors. "Two situations create a potential for odor impact. The first occurs

¹⁸ Op. Cit. 1

¹⁷ Op. Cit. 18.

¹⁹ Op. Cit. 18-19.

²⁰ Op. Cit. 19.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update that would be a source of nuisance odors. However, as the Community Plan is built out, dependent upon the location and nature of operations, potential exists for odor impacts to occur resulting from existing and/or new agricultural, commercial, and industrial land uses."²¹

"As presented in Table 8[of the AQ Memo], the Air District has determined the common land use types that are known to produce odors in the San Joaquin Valley Air Basin. As previously noted, there are no specific development projects associated with the Community Plan Update. However, the existing wastewater treatment facility located southwest of the community and the animal confinement facilities located to the northwest and northeast of the community could be a source of nuisance odors. All projects, with the exception of agricultural operations, are subject to Air District Rule 4102 (Nuisance). Therefore, odors from agriculture-related operations would not be subject to complaint reporting. There is potential for these agricultural operations to generate objectionable odors; however, these odors would be temporary or seasonal. Furthermore, the Tulare County General Plan includes Policy AG-1.14 Right-to-Farm Noticing which requires new property owners to acknowledge and accept the inconveniences associated with normal farming activities. If future developments are proposed adjacent to active agricultural uses, future residents will be required to sign a "Right to Farm" notice. To ensure potential impacts are addressed, if proposed developments were to result in sensitive receptors being located closer than the recommended distances to any odor generator identified in Table 8, a more detailed analysis, is recommended. The detailed analysis would involve contacting the Air District's Compliance Division for information regarding odor complaints Implementation of the applicable General Plan policies and compliance with applicable Air District rules and regulations specifically designed to address air quality and odor impacts, would reduce potential odor impacts. Therefore, the Project would not create or expose existing residents to objectionable odors. Less Than Significant Project-specific Impacts related to this Checklist Item will occur."22

It should be noted that agricultural operations are exempt from the Air District's nuisance rule. Therefore, odors from animal operations, such as dairies, feedlots, and poultry farms, and in field composting operations would not be subject to complaint reporting. However, the Tulare County General Plan Recirculated Environmental Impact Report (REIR) indicated that General Plan Policies AQ-3.1 through AQ-3.6, LU-1.1 through LU-1.4, and LU-1.8 would help to minimize this impact by avoiding inappropriate siting of sensitive land uses near other incompatible uses. Air District regulations on dairy and feedlot operations would also help to reduce this potential impact. Therefore, there would be a less than significant impact as a result of the Project.

4.	BIC	DLOGICAL RESOURCES		
	Wor	uld the project:		
	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?		

²¹ Op. Cit. 20.

²² Op. Cit. 20.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
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?				

As noted previously, the Project is an update to the Poplar-Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). The Project includes expansion of the Urban Development Boundary (UDB); as such, a case-by-case evaluation will be conducted when development proposals are received for both the existing UDB and future UDB area. However, as this Project is merely and update to the Community Plan, there is no possibility of changes to biological resources within the already established UDB area.

A search of the CNDDB RareFind 5 and BIOS indicated that 16 special status plant species and 24 special status animal species are within the Woodville Quadrangle (see Attachment "B" for CNDDB results, attachment ElmList). However, only two special status animal species have been recorded within 5 miles of the UDB (see Figures 1-4): *Vulpes macrotis mutica* (San Joaquin Kit Fox); *Taxidea taxus* (American Badger). No special status plant or animal species have been recorded within the Project site (i.e., the Poplar-Cotton Center Urban Development Boundary (UDB)). There is a possibility

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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that migratory birds and raptors may be present within the UDB. Therefore, future development projects within the UDB subject to subsequent CEQA analysis may be required to implement mitigation measure(s) to reduce potential impacts on special status species to less than significant.

Also, the Tulare County General Plan has a number of policies that apply to projects within County of Tulare. For example, General Plan policies that would apply to future development in the Project area include *ERM-1.1 Protection of Rare and Endangered Species*; *ERM-1.17 Conservation Plan Coordination*; and *ERM-2.7 Minimize Adverse Impacts*. And, as indicated earlier, proposed development(s) will be evaluated on a case-by-case basis regarding impacts to the biological resource.

a) Less Than Significant Impact With Mitigation - The updated Poplar-Cotton Center Community Plan Urban Development Boundary (UDB) is proposed to be increased by 670 acres to an area of approximately 1,585 acres. The following section assumes that special status species within the UDB may be impacted by future development, which will be evaluated on a case-by-case basis, as development occurs. There are two species (San Joaquin kit fox and American Badger) documented in the CNDDB Occurrence List within the Poplar-Cotton Center Project area that could potentially be impacted, as such, mitigation measures are limited to this species as discussed below

The last known sighting of San Joaquin kit fox (SJKF) was reported near the proposed, expanded UDB in 1973 (45 years ago, ±6.25 miles northwest), in 1972 (46 years ago, ±2.25 miles northwest), and in 1971 (47 years ago, ±4.0 miles east), and However, based on past occurrences of kit fox in the 10-mile vicinity of the UDB, it is possible that an individual fox may pass through and possibly forage within the UDB from time to time during dispersal movements. If an SJKF were present at the time of future construction activities in the UDB, then it would be at risk of project-related injury or mortality. Kit fox mortality as a result of future development of the UDB would violate the state and federal Endangered Species Acts, and is considered a potentially significant impact under CEQA.

Mitigation: Prior to the construction of any projects within the UDB, the following Mitigation Measures adapted from the U.S. Fish and Wildlife Service 2011 *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* will be implemented.

Mitigation Measure 4-1 (Pre-construction Surveys). Pre-construction surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance, construction activities, and/or any project activity likely to impact the San Joaquin kit fox. These surveys will be conducted in accordance with the USFWS Standard Recommendations. The primary objective is to identify kit fox habitat features (e.g. potential dens and refugia) on the project site and evaluate their use by kit foxes through use of remote monitoring techniques such as motion-triggered cameras and tracking medium. If an active kit fox den is detected within or immediately adjacent to the area of work, the USFWS and CDFW shall be contacted immediately to determine the best course of action.

Mitigation Measure 4-2 (Avoidance). Should a kit fox be found using any of the sites during preconstruction surveys, the project will avoid the habitat occupied by the kit fox and the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified.

Mitigation Measure 4-3 (Minimization). Construction activities shall be carried out in a manner that minimizes disturbance to kit foxes. Minimization measures include, but are not limited to: restriction of project-related vehicle traffic to established roads, construction areas, and other designated areas; inspection and covering of structures (e.g., pipes), as well as installation of escape structures, to prevent the inadvertent entrapment of kit foxes; restriction of rodenticide and herbicide use; and proper disposal of food items and trash.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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Mitigation Measure 4-4 (Employee Education Program). Prior to the start of construction the applicant will retain a qualified biologist to conduct a tailgate meeting to train all construction staff that will be involved with the project on the San Joaquin kit fox. This training will include a description of the kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of the measures being taken to reduce impacts to the species during project construction and implementation.

Mitigation Measure 4-5 (Mortality Reporting). The Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified in writing within three working days in case of the accidental death or injury of a San Joaquin kit fox during project-related activities. Notification must include the date, time, location of the incident or of the finding of a dead or injured animal, and any other pertinent information.

Implementation of the **Mitigation Measures 4-1 through 4-5** will reduce potential Project impacts with construction mortality of San Joaquin kit fox to a less than significant level.

As indicated in the CNDDB search, American Badger (*Taxidea taxus*) has also been recorded approximately five miles southeast of the Project Area. The following mitigation measure(s) will be implemented in the event of American Badger presence. The following mitigation measures will reduce potential project impacts associated with construction mortality of the American badger to a less than significant level.

Mitigation Measure 4-6 (Pre-construction Surveys). A pre-construction survey for American badgers will be conducted by a qualified biologist within 30 days of the onset of construction. The survey area will encompass all suitable habitats within and immediately adjacent to the Cottonwood Creek (both options), sand pit expansion, and retired sand pit reclamation sites.

Mitigation Measure 4-7 (Avoidance). Should an active den be identified during the preconstruction surveys, a disturbance-free buffer will be established around the den and maintained until a qualified biologist has determined that the cubs have dispersed, if it is a natal den, or the den has been abandoned. If it is not a natal den, and the badger does not leave of its own accord, then the badger can be passively relocated with methods developed by a qualified biologist.

Implementation of the **Mitigation Measures 4-6 and 4-7** will reduce potential Project impacts with construction mortality of American badger to a less than significant level.

Implementation of these **Mitigation Measures 4-1 through 4-7** will reduce potential impacts to the San Joaquin kit fox and American badger to less than significant with mitigation and ensure that future development activities within the UDB remain compliant with state and federal laws protecting these species.

- b) *No Impact* As noted in Item a., above, the proposed Project area is within the historic sites of various species of concern. However, the San Joaquin kit fox and American Badger are the only species documented as occurring in the CNDDB Occurrence List within the existing and proposed Poplar-Cotton Center UDB. Riparian habitat is absent from the impact areas of the proposed Project. Existing urban uses and agriculturally productive lands constitute the majority of the types of habitat within the existing and proposed UDB and, as such, are not considered habitats of special concern. Because riparian and other habitats of special concern are absent, the Project and future development proposals will have no impact on these habitats.
- c) Less Than Significant Impact With Mitigation Waters of the United States, specifically the Wood Central Ditch and Poplar Ditch, are located within the Project site. These man-made, seasonal, irrigation ditches are functionally used

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT		
Late locate	to irrigate adjacent agricultural uses, receive their waters from the Friant-Kern Canal (which originates from Millerton Late at Friant Dam in Fresno County). Therefore, as future development proposal occur where one of these ditches is located within or adjacent to the project site, the following mitigation measure(s) will be implemented to reduce potential impacts on biological species, riparian habitats, and other protected wetlands to less than significant.							
	cor Wi	tigation Measure 4-8 (Consultation). It is useful to the California Department of Idlife Service (USFWS) to determine if I be required.	f Fish and Wildlife	e (CDFW) and/or the	e U.S. Department	of Fish and		
		ation of the Mitigation Measures 4-8 when Eu.S. to a less than significant level.	vill reduce potentia	al Project impacts on	wetland, waters of	the State, and		
of op devel within attract UDB made has no neither as be occur e) No resour f) No Conse	d) Less Than Significant Impact - Wildlife movement corridors usually occur where there are relatively large areas of open space composed of undeveloped habitat, ideally native habitat. The majority of the existing UDB is already developed to urban type uses and agriculturally productive land, and it is surrounded by more agricultural land. The areas within the proposed UDB expansion are predominantly agriculturally productive lands. While agricultural land may be attractive to wildlife as movement corridor in otherwise urban, developed landscapes, there is nothing within the existing UDB that would make it more attractive as a wildlife movement corridor than adjacent parcels. However, three manmade irrigation ditches traverse the proposed UDB that could be used as a movement corridor for SJKF (even though one has not been sighted in the vicinity for more than forty years, the Project is within its historical range). It is noted, however, neither the existing or proposed UDB of the Project were identified in the Environmental Resources Management Element as being a migration corridor or wildlife nursery for any wildlife species. Therefore, a less than significant impact would occur as a result of the Project. e) No Impact - The proposed Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances. Therefore, the Project will result in no impact to this resource. f) No Impact - There are two habitat conservation plans that could apply in Tulare County. The Kern Water Habitat Conservation Plan only applies to an area in Allensworth (located approximately 19 miles southwest of the Project area)					DB is already nd. The areas land may be the existing er, three manning through one ted, however, ment Element impact would and biological this resource. Water Habitat Project area)		
speci	es tha ct. Th	ot apply this Project. The Recovery Pl t are important to the San Joaquin Valle derefore, the Project would not conflict v	ey. None of these s	species were identifie	ed within the impac	et areas of the		
5.								
	a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		\boxtimes				
	b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		\boxtimes				

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d)	Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes		
e)	Disturb unique architectural features or the character of surrounding buildings?				

As noted previously, the Project is an update to the Popular-Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). Limited changes to the Urban Development Boundary (UDB) will occur and such changes would incorporate areas that have historically been under heavy agricultural production; as such, there is no possibility of changes to cultural resources outside of the already established UDB area.

The Southern San Joaquin Valley Information Center, Bakersfield (SSJVIC or Center) conducted a cultural resources records search at the request of RMA Planning Branch staff. The Center records search (dated October 5, 2018 is included in see Attachment "C" of this document) included historic sites listed on the National Register of Historic Places, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. According to the California Historical Resources Information System, there are four (4) recorded cultural resources within the planning area and one within a one-half mile radius of the planning area. There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks in or near Poplar-Cotton Center.

According to the information provided by the SSJVIC, there have been 15 previous cultural resource studies conducted within the project area, TU-00269, 00413, 00751, 00952, 00953, 01135, 01136, 01169, 01170, 01225, 01498, 01572, 01757, 01763, and 01764. There have been two additional studies conducted within the one-half mile radius, TU-00340 and TU-01674. However, until; the specific location of a development proposal occurs, the locations and nature of the resources will remain confidential and will only be shared with an applicant and remain confidential until otherwise determined by the courts.

The following Native American tribes were contacted on September 11, 2018, in order to solicit their interest regarding tribal consultation: Kern Valley Indian Council; Santa Rosa Racheria Tachi Yokut Tribe, Torres-Martinez Desert Cahuilla Indians; Tubatulabals of Kern County; Tule River Indian Tribe; and Wuksache Indian Tribe. No responses have been received to date. The Native American Heritage Commission (NAHC) was also contacted on September 17, 2018, with a request that they conduct a sacred lands files (SLF) search. The SLF records search was completed with negative results.

The SSJVIC acknowledges that the Project essentially consists of a General Plan Update for the Poplar-Cotton Center Community. They further acknowledge that no immediate ground disturbance will take place as a result of this update and conclude that no further cultural resource investigation is recommended at this time. However, prior to any future ground disturbance project activities, the SSJVIC recommends that a new record search be conducted so their office can then make project specific recommendations for further cultural resources study, if needed. Once specific projects are proposed, location specific studies can be conducted to determine the appropriateness of avoiding or minimizing impacts to cultural resources as applicable.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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The Tulare County General Plan has a number of policies that relate to the proposed Project area including *ERM-6.1* Evaluation of Cultural and Archaeological Resources; *ERM-6.2* Protection of Resources with Potential State or Federal; *ERM-6.4* Mitigation; *ERM-6.10* Grading Cultural Resources Sites; and *ERM-6.9* Confidentiality of Archaeological Sites which allows the County to (within its authority) maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

a), b) and d) *Less Than Significant Impact With Mitigation* - As noted above, a CHRIS records search was conducted by the SSJVIC. Four previously recorded historic-period sites have been recorded within the study area and one historic-period site identified within one-half mile of the study area. These resources consist of two historic era ditches, an historic era transmission line, an historic era commercial building, and a prehistoric era lithic and bead scatter. The records search included an examination of the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historic Interest, the California Inventory of Historic Resources, or the California State Historic Landmarks (see Attachment "C"). Also, as noted earlier, 15 previous cultural resources studies have been completed within the project area and two additional studies have been conducted within the one-half mile radius. The planning area consists of existing residential, commercial and light commercial uses. Future UDB expansion will encompass areas to the west and southwest of the existing UDB. These areas are currently under agricultural cultivation and as such, unlikely to contain surface. Until an actual development project is initiated, it remains unknown if subsurface historic resources would be encountered.

While the proposed Community Plan Update contains no plans for development or construction, over the planning horizon, future development within the UDB may result in the eventual construction of residences, and establishment of commercial and industrial use, and streets (and other infrastructure such as curbs, gutters, sidewalks, sewer and water collection/distribution systems, etc.). Such future activity could cause a substantial adverse change in the significance of a historical resource were any such resources to be located within the planning area. The proposed Project would not result in a substantial adverse change in the significance of an historical or archaeological resource as defined in Section 15064.5 of the CEQA Guidelines. Although no cultural resources were identified in the records search, there will, nonetheless, be a potentially significant impact if historical resources were uncovered during proposed specific development project construction; however, implementation of the **Mitigation Measures 5-1 and 5-2** (and also contained in the Mitigation Monitoring and Reporting Program) are included as part of this Mitigated Negative Declaration to reduce potential impacts to historical or archaeological resources to less than significant with mitigation.

Mitigation Measure 5-1. If, in the course of construction or operation within the Project area, any archaeological, historical, or paleontological resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall be ceased. A qualified archaeologist/paleontologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Tulare County Resources Management Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the proposed Project. Where feasible, mitigation achieving preservation in place will be implemented. Preservation in place may be accomplished by, but is not limited to: planning construction to avoid archaeological/paleontological sites or covering archaeological/paleontological sites with a layer of chemically stable soil prior to building on the site. If significant resources are encountered, the feasibility of various methods of achieving preservation in place shall be considered, and an appropriate method of achieving preservation in place shall be selected and implemented, if feasible. If preservation in place is not feasible, other mitigation shall be implemented to minimize impacts to the site, such as data recovery efforts that will adequately recover scientifically consequential information from and about the site. Mitigation shall be consistent with CEQA Guidelines section 15126.4(b)(3).

	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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Mitigation Measure 5-2. If cultural/archeological/paleontological resources are encountered during project-specific construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural resources. If such resources are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.

No formal cemeteries or other places of human internment are known to exist within the Project site; however, in accordance with State Health and Safety Code Section 7050.5 and Public Resource Code Section 5097.98, if human remains are unearthed during project-specific construction as development occurs, no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition of such remains. If the remains are determined to be Native American, the Coroner must notify the Native American Heritage Commission (NAHC) within 48 hours of the Coroner's determination. The NAHC will then identify the person(s) thought to be the most likely descendent of the deceased Native American, who will then assist in determining what course of action shall be taken in handling the remains. Impacts to this checklist item will be less than significant with mitigation.

- c) Less Than Significant No paleontological resources are known to exist within the proposed Project area, nor are there any known geologic features in the proposed Project area. As there is no project-specific construction anticipated or contemplated, the Project will not disturb any paleontological resources not previously disturbed; however, the measures discussed in item a., will ensure proper investigation and handling of any discovery were to occur in future projects. If, in the course of specific-project construction or operation, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall immediately cease. A qualified archaeologist shall be contacted and advise the County of Tulare of the site's significance. If the findings are deemed significant by the Tulare County Resources Management Agency, appropriate measures shall be required prior to any resumption of work in the affected area of the proposed Project area. As such, the Project would result in a less than significant impact to this resource.
- e) *Less Than Significant Impact* The proposed Project will not disturb unique architectural features or the character of surrounding buildings. Individual site-specific development proposals will be required to undergo individual assessments on a case-by-case basis. As indicated in the CHRIS results (see Attachment "C"), no resources were identified within the Poplar-Cotton Center planning area. Implementing the General Plan policies will result in a less than significant to this resource.

6.	GEOLOGY/SOILS					
	Wo	uld the project:				
	a)	Expose people or structures to 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				

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	known fault? Refer to Division of Mines and Geology Special Publication No. 42.				
ii)	Strong seismic ground shaking?				\boxtimes
iii)	Seismic-related ground failure, including liquefaction?				\boxtimes
iv)	Landslides?				\boxtimes
b)	Result in substantial soil erosion or the loss of topsoil?				\boxtimes
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 onor off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				\boxtimes
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				\boxtimes
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?				\boxtimes

Seismicity:

As noted previously, the Project is an update to the Poplar-Cotton Center Community Plan and no development proposals are being considered at this time. The Update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). As changes to the Urban Development Boundary (UDB) are proposed, there is a possibility of changes to geology or soil analysis as areas outside of the already established UDB area may become incorporated into the planning area.

The official maps of earthquake fault zones delineated by the California Geological Survey (CGS), State of California Department of Conservation (2010), in accordance with the Alquist-Priolo Earthquake Fault Zoning Act, indicate that several faults are known to occur in Tulare County. According to the CGS Fault Activity Maps, a pre-quaternary fault runs parallel to, and approximately 7 miles east, of the planning area while a quaternary fault lies approximately 7 miles to the southeast of the planning area.²³ An additional cluster of potentially active faults lies north of Bakersfield, approximately 22 miles from the planning area and include the Pond—Poso Creek Fault, quaternary fault.²⁴ The quaternary

²⁴ Ibid.

²³ California Department of Conservation, 2018. Fault Activity Map of California (2010). http://maps.conservation.ca.gov/cgs/fam/

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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period began approximately 1.8 million years ago.²⁵ "Geologists focus their studies on Quaternary-active faults, faults that have ruptured in Quaternary time. Faults that have not broken in the last 1.8 million years are probably abandoned, or at least they cause an earthquake so infrequently as to be less important."²⁶

Additional faults with the potential to affect the proposed Project area are the San Andreas Fault approximately 40 miles west of the Tulare County boundary, the Owens Valley Fault (approximately 65 miles to the northeast), and the Clovis Fault, approximately six miles south of the Madera County boundary in Fresno County (or approximately 65 miles northeast of Poplar-Cotton Center).²⁷

"In 1973, five counties within the Southern San Joaquin Valley undertook the preparation of the Five County Seismic Safety Element to assess seismic hazards. The Element identifies areas of potential seismic activity, including Doyle Springs and most of the Moorehouse subareas, as being in the Sierra 1 (S1) Zone (eastern Sierra Nevada). All of the subareas east of and including Sequoia Crest, Pierpoint, and Roger's Camp lie within the Sierra 2 (S2) Zone (eastern Sierra Nevada, south of Owens Valley fault). In general, zones C1, S1, and V1 (V-1) are safer than zones C2, S2, and V2."²⁸

According to the Tulare County General Plan, the planning area lies in the V-1 seismic study area.²⁹

"Seismic Zone "V-I" includes the most of the eastern San Joaquin Valley, and is characterized by a relatively thin section of sedimentary rock overlying a granitic basement. Amplification of shaking that would affect low to medium-rise structure is relatively high, but the distance to either the San Andreas or Owens Valley faults (the expected sources of shaking) is sufficiently great that the effects should be minimal. Adherence to the requirements of the Uniform Building Code applicable to the Planning Area should be adequate to protect new structures from earthquake damage."³⁰

Soils:

According to the Poplar-Cotton Center CPU, the soils that characterize the Poplar-Cotton Center area originated from granitic rocks of the Sierra Nevada and contain quantities of mica, quartz, feldspars and granitic sand. ³¹ The predominant soil types in the Poplar-Cotton Center area are described as follows:

Exeter loam, 0 to 2 percent slopes, is a moderately deep, moderately well drained alluvium soil derived mainly from granitic rock sources. The soil is not considered to be prime farmland. This soil has a moderate shrink-swell potential and is found primarily along stream terraces. Exeter loam carriers a Class III agricultural rating.

Flamen loam, 0 to 2 percent slopes, is an alluvium derived mainly from granitic rock sources and is found on stream terraces. The soil has moderate shrink-swell capacity, is deep to duripan and is moderately well drained. Flamen loam is classified as prime farmland when it is irrigated and carries a Class II agricultural rating.

Hanford sandy loam 0 to 2 percent slopes, is a very deep, well drained alluvium soil derived mainly from granitic rock

²⁵ US Geological Survey, 2018. What is Quaternary? https://geomaps.wr.usgs.gov/sfgeo/quaternary/stories/what_is.html

²⁶ US Geological Survey, 2018. Do All Faults Cause Earthquakes? https://geomaps.wr.usgs.gov/sfgeo/quaternary/stories/all_faults.html

²⁷ Tulare County, 2010, page 8-6. Background Report Tulare County General Plan. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf

²⁸ Ibid.

Tulare County General Plan 2030 Update. August 2012. Seismic/Geologic Hazards and Microzone. Figure 10-5. Page 10-31. http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20II%20and%20Part%20II/GENERAL%20PLAN%202012.pdf

Tulare County, 2018, page 53. Draft Poplar-Cotton Center Community Plan Update.

³¹ Ibid.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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sources, and is typically found along floodplains and alluvial fans. The soil has a low shrink-swell potential. The soil is considered prime farmland when irrigated and carries a Class I agricultural rating.

Nord fine sandy loam, 0 to 2 percent slopes, is a very deep, well drained mixed alluvium derived mainly from granitic rocks. The soil has a low shrink-swell potential and is found on alluvial fans and floodplains. Nord fine sandy loam is considered to be prime farmland when it is irrigated and carries a Class I agricultural rating.

Tagus loam, 0 to 2 percent slopes, are very deep, well drained alluvium soils derived from granitic rocks. The soils have low shrink-swell potential and are found on fan terraces. Tagus loam, is classified as prime farmland when irrigated and carries a Class I agricultural rating.

Tujunga loamy sand, 0 to 2 percent slopes, are very deep, somewhat excessively drained alluvium soils derived from granitic rock. This soil has a low shrink-swell potential and is located primarily in floodplains. Tujunga loamy sand is not classified as prime farmland. This soil carries a Class III agricultural rating.

Yettem sandy loam, 0 to 2 percent slopes, are very deep, well drained alluvium soils derived from granitic rock sources. The soils has a low shrink-swell potential and is located mainly on floodplains and alluvial fans. Yettem sandy loam is considered prime farmland when it is irrigated and carries a Class I agricultural rating.

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project:

a) *No Impact* - According to the Tulare County General Plan, the planning area lies in the V1 seismic study area, characterized by a relatively thin section of sedimentary rock overlying a granitic basement (see precious text).

The V-1 seismic zone, which is characterized by a relatively thick section of sedimentary rock overlying a granitic basement, has "low" risks for shaking hazards, "minimal" risk for landslides, "low to moderate" risk for subsidence, "low" risks for liquefaction and "minimal" risk for seiching.³²

The distance to area faults i.e. the Clovis Group, Pond - Poso, and San Andreas, expected sources of significant shaking, is sufficiently great that shaking effects should be minimal.

i) Fault Rupture: An analysis prepared by the Tulare County Environmental Planning Department based on information provided by the State of California and the Five County Seismic Safety Element indicates that the Project site is not located within the Alquist-Priolo Earthquake Fault Zone. No active or potentially active fault traces are known to traverse the site.³³ In addition, the California Department of Conservation's CGS Information Warehouse indicates that the planning area is not located in a "fault zone," i.e. in an area where hazards exist that are associated with surface fault rupture.³⁴³⁵ The Project does not include specific development projects (such as residential, commercial, or industrial uses). Any future developments would be evaluated on a project-by-project basis and will be constructed in accordance with all applicable building codes. As such, risk to persons or structures caused by rupture of known earthquake faults are minimal. As such, there will be no impact as a result of the Project.

http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

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³² Envicom Corporation, 1974. Summary of Seismic Hazards & Safety Recommendations. Five County Seismic Safety Element Fresno, Kings, Madera, Mariposa & Tulare Counties.

³³ California Department of Conservation, 2018. Fault Activity Map of California (2010). http://maps.conservation.ca.gov/cgs/fam/.

⁴ California Department of Conservation, 2019. CGS Warehouse: Regulatory Maps.

³⁵ California Department of Conservation, 2018. Special Publication 42 Revised 2018 Earthquake Fault Zones. A Guide for Government Agencies, Property Owners / Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California. Page 1. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sp/Sp42.pdf.

	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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- ii) *Ground Shaking:* As previously discussed, the Project is located in the V-1 seismic zone and located above a geological formation that is not conducive to ground shaking events. The release of energy caused by an earthquake is a direct result of fault rupture at depth, and when that rupture extends to the ground surface it manifests as displacements expressed as fractures, fissures, tectonic deformation and ground shaking.³⁶ Based on the information discussed in checklist sub-item i), it is unlikely that ground shaking will affect the planning area. As such, there will be no impact as a result of the Project.
- iii) *Ground Failure and Liquefaction:* As previously discussed, the Project is located in the V-1 zone. According to the Five County Seismic Safety Element, the V-1 zone has a low risk of liquefaction.³⁷ The California Department of Conservation's CGS Information Warehouse indicates that the planning area is not located in a "liquefaction zone."³⁸ The Project does not include specific development projects (such as residential, commercial, or industrial uses). Any future developments would be evaluated on a project-by-project basis and will be constructed in accordance with all applicable building codes. As such, risk to persons or structures due to liquefaction is minimal. There will be no impact as a result of the Project.
- iv) Landslides: As previously discussed, the Project is located in the V-1 zone. According to the Five County Seismic Safety Element the V-1 zone has "minimal" risk of landslide activity. The Project does not include specific development projects (such as residential, commercial, or industrial uses). The California Department of Conservation's CGS Information Warehouse indicates that the planning area is not located in an area prone to landslides.³⁹ The Project does not include specific development projects (such as residential, commercial, or industrial uses). Any future developments would be evaluated on a project-by-project basis and will be constructed in accordance with all applicable building codes. As such, risk to persons or structures due to subsidence is minimal. There will be a no impact as a result of the Project.
- b) *No Impact* The proposed Project is a Community Plan Update and contains no plans for development or construction. As future development occurs, site construction activities would involve earthmoving activities to shape land, trenching for sewer and potable water distribution systems, pouring concrete for sidewalks, curbs, and gutters, and other typical construction-related activities. These activities could expose soils to erosion processes. The extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions.

To prevent water and wind erosion during the construction-related activities, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for projects within the planning area which disturb more than one acre in size. As part of the SWPPP, applicants would be required to provide erosion control measures to protect the topsoil. Any stockpiled soils would be watered and/or covered to prevent loss due to wind erosion as part of the SWPPP during construction. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated. Therefore, the Project would result in no impact.

c) No Impact - As discussed in subsections a) i - v, the Project site is located in a V-1 seismic zone with minimal and low-to-moderate risks for landslide, lateral spreading, subsidence, liquefaction or collapse. The Project does not include specific development projects (such as residential, commercial, or industrial uses). Any future developments would be evaluated on a project-by-project basis and will be constructed in accordance with all applicable building codes. A

³⁶ Ibid. 6.

³⁷ Envicom Corporation, 1974. Summary of Seismic Hazards & Safety Recommendations. Five County Seismic Safety Element Fresno, Kings, Madera, Mariposa & Tulare Counties.

¹⁸ California Department of Conservation, 2019. CGS Warehouse: Regulatory Maps. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

³⁹ Ibid.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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substantial grade change would not occur in the area topography to the point where the developments within the proposed Project area would expose people or structures to potential substantial adverse effects from on or off-site landslides. Furthermore, as previously discussed in this chapter, lateral spreading, liquefaction or collapse are unlikely to occur as area soils, substrate and seismology are not conducive to such phenomena. Therefore, the Project will result in no impact.

d) *No Impact* - As identified in the analysis section of this chapter, the planning area contains at least seven soil types, all of which exhibit "low" or "moderate" shrink-swell potential as identified by the USDA's Soil Survey Map.⁴⁰ The California Department of Parks and Recreation has defined expansive soils as clay-based soils that tend to expand (increase in volume) as they absorb water and shrink (lessen in volume) as water is drawn away, resulting in damage to structures, slabs, pavements, and retaining walls if wetting and drying of the soil does not occur uniformly across the entire area.⁴¹ The 1994 Uniform Building Code requires that when expansive soils are present, the building official may require that special provisions be made in the foundation design and construction to safeguard against damage due to this expansiveness, requiring a special investigation and report to provide design and construction criteria.⁴² The proposed Project is a Community Plan Update contains no plans for development or construction; however, it does anticipate that across the planning horizon that the Popular-Cotton Center communities will continue to grow at a 1.3% rate, consistent with the Tulare County General Plan.

As future development occurs, construction of residential or commercial structures would be evaluated on a case-by-case basis. Based on the analysis performed in this chapter, it is anticipated that the area's low frequency of seismological activity, combined with soil types of limited shrink-swell potential, the use of building and construction standards would result in a low risk thresholds with regard to life or property. Because no development or any project is planned as part of this Update, the Project will result in no impact.

e) *No Impact* - The Poplar-Cotton Center Community Plan Update serves to outline community goals regarding the physical development of these respective communities in addition to the promotion of the general welfare of each community. As the proposed Project is a Community Plan Update and contains no plans for development or construction, the Plan in and of itself will not require or lead to the introduction or installation of septic tanks or alternative waste water disposal systems into area soils.

The Poplar Community Services District (CSD) is responsible for providing sanitary sewer service to residents within its the CSD's boundary.⁴³ According to the Poplar CSD, there are approximately 658 connections to the District's sewer system.⁴⁴ Raw sewage is collected and transported to a wastewater treatment and disposal facility (WWTF) located southwest of the community.⁴⁵ This facility is located southwest of the urbanized portion of Poplar and provides primary sewage treatment with a treatment capacity of 0.31 million gallons per day (mgd) i.e. 310,000 gallons of effluent per day.⁴⁶

According to the Draft Community Plan Update, Poplar-Cotton Center does have a storm drainage system, but system information and mapping is currently unavailable.⁴⁷

⁴⁵ Op. Cit. 65.

⁴⁰ Tulare County, 2018, pages 53-54. Draft Poplar-Cotton Center Community Plan Update.

⁴¹ California Department of Parks and Recreation, 2010, Page 3.5-3. Los Angeles State Historic Park Master Development Plan Final EIR. https://www.parks.ca.gov/pages/22272/files/r3_5_geology_soils.pdf

⁴² International Conference of Building Officials, 1994. Page 2-49. Uniform Building Code. Volume 2. Structural Engineering Design Provisions. 1804.4 Expansive Soils. http://digitalassets.lib.berkeley.edu/ubc/UBC 1994 v2.pdf.

⁴³ 2018 Draft Poplar-Cotton Center Community Plan Update. Page 63.

⁴⁴ Ibid.

⁴⁶ Op. Cit.

⁴⁷ Op. Cit. 67.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Future	e dev	elopment within the proposed UDB wo	uld be required to	connect to the existing	ng wastewater treat	tment system
provid	ded b	y the CSD.	•			•
As noted previously because no development or any project is planned as part of this Update; as such, the Project will result in no impact.						
7.	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 any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	
Analy	Analysis:					

As noted previously, the Project is an update to the Poplar-Cotton Center Community Plan and no development proposals are being considered at this time. The Community Plan Update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). The Project includes expansion of the Urban Development Boundary (UDB) by 670 acres resulting in a total UDB area of approximately 1,585 acres. There are no specific development projects included in the proposed update that would contribute to an increase of greenhouse gases; as such, there is no possibility of the Project resulting in changes of greenhouse gas emissions outside of the already established UDB. However, future developments within the proposed UDB would generate greenhouse gases and are evaluated in this analysis.

This Initial Study/Mitigated Negative Declaration is relying on the guidance and expertise of the San Joaquin Valley Air Pollution Control District (District, Air District, or SJVAPCD) in addressing greenhouse gas (GHG) emissions. The following is an excerpt contained in the Air District's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) adopted by the Air District Governing Board on March 19, 2015:

"On December 17, 2009, the District's Governing Board adopted the District Policy: Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The District's Governing Board also approved the guidance document: Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA. In support of the policy and guidance document, District staff prepared a staff report: Addressing Greenhouse Gas Emissions Under the California Environmental Quality Act. These documents adopted in December of 2009 continue to be the relevant policies to address GHG emissions under CEQA. As these documents may be modified under a separate process, the latest versions should be referenced to determine the District's current guidance at the time of analyzing a particular project. These documents and the supporting staff reports are available at the District's website: www.valleyair.org/Programs/CCAP/CCAP_idx.htm." 48

"By enacting SB 97 in 2007, California's lawmakers expressly recognized the need to analyze greenhouse gas emissions as a part of the CEQA process. SB 97 required OPR [Office of Planning and Research] to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of greenhouse gas emissions.

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⁴⁸ San Joaquin Valley Air Pollution Control District, Guidance for Assessing and Mitigating Air Quality Impacts. Page 110.

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...It is widely recognized that no single project could generate enough GHG emissions to noticeably change the global climate temperature. However, the combination of GHG emissions from past, present and future projects could contribute substantially to global climate change. Thus, project specific GHG emissions should be evaluated in terms of whether or not they would result in a cumulatively significant impact on global climate change."⁴⁹

"In summary, the staff report evaluates different approaches for assessing significance of GHG emission impacts. As presented in the report, District staff reviewed the relevant scientific information and concluded that the existing science is inadequate to support quantification of the extent to which project specific GHG emissions would impact global climate features such as average air temperature, average rainfall, or average annual snow pack. In other words, the District was not able to determine a specific quantitative level of GHG emissions increase, above which a project would have a significant impact on the environment, and below which would have an insignificant impact. This is readily understood, when one considers that global climate change is the result of the sum total of GHG emissions, both manmade and natural that occurred in the past; that is occurring now; and will occur in the future."

"In the absence of scientific evidence supporting establishment of a numerical threshold, the District policy applies performance based standards to assess project specific GHG emission impacts on global climate change. The determination is founded on the principal that projects whose emissions have been reduced or mitigated consistent with the California Global Warming Solutions Act of 2006, commonly referred to as "AB 32", should be considered to have a less than significant impact on global climate change. For a detailed discussion of the District's establishment of thresholds of significance for GHG emissions, and the District's application of said thresholds, the reader is referred to the above referenced staff report, District Policy, and District Guidance documents." ⁵¹

"As presented in Figure 6 (Process of Determining Significance of Greenhouse Gas Emissions) [of the GAMAQI], the policy provides for a tiered approach in assessing significance of project specific GHG emission increases.

- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the Lead Agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the Lead Agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement Best Performance Standards (BPS).
- Projects implementing BPS would not require quantification of project specific GHG emissions. Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing BPS would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business as Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.)"52

In addition to consistency with Air District GHG Guidance, the Tulare County General Plan has a number of policies that apply to projects within County of Tulare regarding GHG emissions. For example, General Plan policies that would apply

⁵⁰ Op. Cit. 111.

⁴⁹ Ibid. 110-111.

⁵¹ Op. Cit. 111-112.

⁵² Op. Cit. 112

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to future development in the Project area include AQ-1.7 Support Statewide Climate Change Solutions; AQ-1.9 Support Off-Site Measures to Reduce Greenhouse Gas Emissions; AQ-3.5 Alternative Energy Design; and LU-1.1 Smart Growth and Healthy Communities wherein the County shall promote the principles of smart growth and healthy communities in UDBs and HDBs, including LU-1.1.-3. (creating a strong sense of place), LU-1.1.-4. (mixing land uses), and LU-1.1.-9. (preserving open space).

There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. As such, the proposed Project will not result in GHG emissions until specific development occurs. The Technical Memo "Greenhouse Gas Emissions Analysis for the Poplar-Cotton Center Community Plan Update" (GHG Memo) was completed by RMA Staff (Jessica Willis, Planner IV) in October 2018 to assess potential GHG impacts (See Attachment "D"). As indicated in the GHG Memo, the following GHG analysis was "…prepared to evaluate whether the estimated GHG emissions generated from the implementation of the Project (i.e., future development projects) would cause significant impacts on global climate change. The assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows Air District recommendations for quantification of GHG emissions and evaluation of potential impacts on global climate change as provided in their guidance documents…"⁵⁵³

a) and b) *Less Than Significant Impact* - The Air District has established a menu of performance standards, some of which depend on the existence of an adopted climate action plan or the establishment of Best Performance Standards. The County has an adopted Climate Action Plan (CAP), which is used in this analysis to determine significance for this impact. The CAP states, "Commercial and industrial development in Tulare County during the 2020 and 2030 planning timeframes will be subject to conditions of approval and mitigation measures that will reduce greenhouse gas emissions beyond State regulations in most projects. For industrial projects, where the SJVAPCD is a Responsible Agency, the project will be expected to implement Best Performance Standards included in the SJVAPCD Guidelines for Addressing Greenhouse Gas Emissions on the processes and stationary equipment that emit greenhouse gases to levels that meet or exceed State targets." The CAP further explains, "To demonstrate consistency with the ARB Scoping Plan 2020 target of 26.2 percent reduction in land use related sectors compared with business as usual, new development in the County subject to discretionary approval would need to provide an overall reduction of 6 percent beyond that provided by State and SJVAPCD regulation. Based on this analysis, implementation of the policies contained in the 2030 General Plan Update and available project specific measures can achieve an overall reduction of 6 percent of development-related greenhouse gas emissions under Tulare County jurisdiction. When reductions from regulations and programs are included, new development would produce approximately 31 percent fewer greenhouse gas emissions compared with the 2020 business as usual scenario." ⁵⁵⁵

The Project is consistent with the CAP adopted by Tulare County. As shown in Table 4 of the GHG Memo, compliance with existing regulations and implementation of the applicable General Plan and Poplar-Cotton Center Community Plan policies would reduce GHG emissions from future development by 7.63%, which exceeds the requirements set forth in the CAP. Therefore, the Project meets the County's CAP reductions and is consistent with the ARB Scoping Plan reductions. Therefore, consistent with Air District recommendations, the Project will have a less than significant individual and cumulative impact from greenhouse gas emissions.

As previously stated, there are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. As such, the proposed Project will not result in GHG emissions until specific development occurs. All future developments will be required to comply with the County's 2030 General Plan Update, the Poplar-Cotton Center Community Plan Update, and the Tulare County Climate Action Plan, which includes implementation

⁵³ Tulare County RMA. Technical Memorandum: Greenhouse Gas Emissions Analysis for the Poplar-Cotton Center Community Plan Update. October 2018. Page 1.

⁵⁴ County of Tulare. 2012. Tulare County Climate Action Plan. Page 55.

⁵⁵ Ibid. 56.

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requir Scopi	emen	rformance Standards and design feature its. Per the Air District recommendation an and the County's adopted CAP, the impact for GHG emissions. Therefore,	ns above, because t e Project is determ	he Project is consistential to have a less	ent with the reduction than significant in	ons in ARB's adividual and
8.	HAZARDS AND HAZARDOUS MATERIALS:					
		ald the project:				
	a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				\boxtimes
	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?				\boxtimes
	c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				\boxtimes
	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?				\boxtimes
	e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working the project area?				\boxtimes
	f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
	g)	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?				\boxtimes

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

Analysis:

As noted previously, the Project is an update to the Poplar-Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). Expansion of the Urban Development Boundary (UDB) may result in the discovery of, or over time, proposed businesses that handle hazards and hazardous materials.

The Community Plan Update does not include any specific development projects (such as residential, commercial, or industrial uses) and will not involve any hazards or hazardous materials. Future development projects will be evaluated on a case-by-case basis and, in the event a specific project may include the use of potential hazardous materials, said project will be required to comply with all rules/regulations of the Tulare County Environmental Health Department, California Department of Toxic Substances Control, San Joaquin Valley Air Pollution Control District, and any other regulatory agency's rules and regulations.

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project:

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project include: *HS-4.1 Hazardous Materials*; *HS-4.3 Incompatible Land Uses*; and *HS-4.4 Contamination Prevention*.

- a) No Impact The Community Plan Update does not include any specific development projects (such as residential, commercial, or industrial uses) and as such, will not, in and of itself, create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The proposed Project is a Community Plan Update and the update contains no plans for development or construction; however, it does anticipate that across the planning horizon, the Popular-Cotton Center communities will continue to grow at a 1.3% rate, consistent with the Tulare County General Plan's forecast growth rate for its unincorporated communities. Future development projects, anticipated to meet this 1.3% growth rate, will be evaluated on a case-by-case basis and construction-related activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction-related activities. Construction-related activities would also be required to comply with the California fire code to reduce the risk of potential fire hazards. The Tulare County Environmental Health Services Division (TCEHSD) requires submittal of a Hazardous Materials Business Plan, if the site ever handles or stores quantities of hazardous materials in excess of 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas or any amount of a hazardous waste. Compliance with local, state and federal regulations would be adequate such that any future projects would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, this Community Plan Update would result in no impact to this checklist item.
- b) *No Impact* As discussed in the previous checklist item, the Community Plan Update does not include any specific development projects (such as residential, commercial, or industrial uses) and as such, will not, in and of itself, create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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involving the release of hazardous materials into the environment. Over the planning horizon, it is anticipated that residential, commercial and/or municipal infrastructure projects may require and/or generate hazardous materials as part of the construction process. Furthermore, long-term storage of hazardous materials (i.e., agricultural compounds, building supplies, etc.,) may occur on residential premises or commercial supply yards upon buildout of the proposed UDB and will be evaluated on a case-by-case basis. Long-term construction, operational and storage-related activities involving hazardous materials would be required to comply with the California fire code to reduce the risk of potential fire hazards. The TCEHSD requires submittal of a Hazardous Materials Business Plan, if the site ever handles or stores quantities of hazardous materials in excess of 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas or any amount of a hazardous waste. Compliance with local, state and federal regulations would be adequate such that any future projects would not, upon buildout, 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. Therefore, the Project would result in a no impact to this Checklist item.

c) *No Impact* - "Currently Poplar/Cotton Center Community Plan Area is served by three K-8 school districts and Porterville Union High School District. One of the elementary school districts – Woodville Union, covers only a minor portion of the planning area north of Cotton Center. Pleasant View School District includes Pleasant View Elementary (located at 14004 Road 184, in Poplar) offers Kindergarten through fourth grade education; Pleasant View West (located at 14004 Road 184, in Poplar) offers fifth through eighth grade education and lies within a majority of the area. Rockford School District (located at 14983 Road 208, in Porterville) lies within the east half of Poplar." 56

The Community Plan Update does not include any specific development projects (such as residential, commercial, or industrial uses) and will not, in and of itself, involve any hazards or hazardous materials. Future development projects will be evaluated on a case-by-case basis and, in the event a specific future project, may include the use of potential hazardous materials, the project will be required to comply with all rules/regulations of the Tulare County Environmental Health Department, California Department of Toxic Substances Control, San Joaquin Valley Air Pollution Control District, the California Department of Education and all applicable local, state and federal regulations with regards to hazardous emissions, materials, substances, or waste within one-quarter mile of an existing or proposed school. Based on this analysis, there will no impact as a result of the Community Plan Update.

d) *No Impact* - According to the State of California Department of Toxic Substances Control *EnviroStor* database map and *Hazardous Waste and Substance Sites List*, the planning area does not contain and is not proximate to a listed hazardous site, pursuant to Government Code Section 65962.5.⁵⁷ A search of the United States Environmental Protection Agency's *Superfund* database indicates that the planning area does not contain and is not near a listed hazardous site, pursuant to 26 U.S. Code § 9507.⁵⁸ Based on this information, it is not anticipated that the planning area will be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The Community Plan Update will not create a significant hazard to the public or the environment and as such, no impact will result from this update.

⁵⁶ Tulare County, 2018, page 71. Draft Poplar-Cotton Center Community Plan Update.

California Department of Toxic Substances Control, 2018. Hazardous Waste and Substances Site List (Cortese).

https://www.envirostor.dtsc.ca.gov/public/search.asp?PAGE=8&CMD=search&ocieerp=&business_name=&main_street_number=&main_street_name=&city=&zip=&county=&branch=&status=ACT%2CBKLG%2CCOM%2CCOLUR&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&cleanup_type=&npl=&funding=&reporttype=CORTESE&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29&federal_superfund=&state_response=&voluntary_clean_up=&school_cleanup=&operating=&post_closure=&non_operating=&corrective_action=&tiered_permit=&evaluation=&spec_prog=&national_priority_list=&senate=&congress=&assembly=&critical_pol=&business_type=&case_type=&display_results=&school_district=&pub=&hwmp=False&permitted=&pc_permitted=&inspections=&complaints=&censustract=&cesdecile=&ORDERBY=county&next=Next+50_.

⁵⁸ United States Environmental Protection Agency, 2018. Superfund. https://www.epa.gov/superfund/search-superfund-sites-where-you-live.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Porte antici Cotto Porte such,	rville pated n Cei rville there	Municipal Airport (PTV) located app that across the planning horizon (inclu- nter will continue to lie outside of the airport. The CPU will not result in a s will be no impact related to this Check act - The nearest private airport to the p a. As such, the Community Plan Update	proximately five (anding the proposed Porterville airport safety hazard for pallist item.	5) miles east of Pop UDB expansion are land use plan and be eople residing or wo	plar-Cotton Center a), future growth we beyond a two-mile rking in the project proximately 9 mile	UDB. ⁵⁹ It is within Poplar-radius of the et area and as
g) No Upda Servi Juriso Coun repres comn Comr plan o h) No and e Cente Statio Upda	Importe succes Noticition ty control ty cont	a private airport; therefore, the Project act - The Community Plan Update will of as $HS - 1.1$ Maintaining Emergence ar Assisted Living Housing, in additional Local Hazard Mitigation Plan (MJI mmunities, to reduce the potential impact the County's commitment to create a sign resources to lessen the effects of has y Plan Update will not impair implement ergency evacuation plan. As such therefore the provided by Europe Branch and State of the Patrol 19, Engine 19, and Water 1 not result in any exposure to people of the will be no impact related to this Check.	comply with policity Services, HS - on to the Multi-Juri LHMP) to assess the control of the hazards beafer, more resilient azards on the peoperation of, or physical will be no impact the Tulare County on the Station # 19 local Tender 19 assigned or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures to a second to the Station # 19 local or structures	es contained in the Tal. 9 Emergency Acces dictional Local Hazane natural, technology creating mitigation to community by taking ple and property of ically interfere with, as a result of this property of ignated wildland fire a Fire Department. The tated at 22315 Avenued to this location."	ulare County Generous, and $HS - 1.10$ and Mitigation Plantical, and human-cate strategies. The 20 and actions to reduce the County." The an adopted emerge oject. The hazard zone. The community of Figure 152 in Portervill 2 As such, the Control of the County. The Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such, the Control of the 152 in Portervill 2 As such	D Emergency "The Multi- nused risks to 17 MJLHMP e risk and by therefore, the ency response ire protection coplar-Cotton e, California. munity Plan
9.	HY	DROLOGY AND WATER QUA	LITY			
	Wot	ıld the project:				
	a)	Violate any water quality standards or waste discharge requirements?				\boxtimes
	b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing				\boxtimes

nearby wells would drop to a level which would not support existing

 $^{^{59}\,}$ 2018 Draft Poplar-Cotton Center Community Plan Update. Page 191.

⁶⁰ Tulare County, 2018, page 83. Draft Poplar-Cotton Center Community Plan Update.

Calfire, 2018. FHSZ Viewer. http://egis.fire.ca.gov/FHSZ/.
 Tulare County, 2018, page 68. Draft Poplar-Cotton Center Community Plan Update.

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	land uses or planned uses for which permits have been granted)?				
	c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?				\boxtimes
	d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course or stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				\boxtimes
	e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
	f) Otherwise substantially degrade surface or groundwater quality?				\boxtimes
	g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
	h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				\boxtimes
	i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
	j) Inundation by seiche, tsunami or mudflow?				\boxtimes
Analys	sis:				

Water Quality/Quantity

As noted previously, the Poplar-Cotton Center Community Plan Update is an update to the existing community plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). As development occurs with the proposed Urban Development

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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Boundary (UDB), hydrology and water quality outside of the already established UDB area may, be impacted and will therefore be evaluated on a case-by-case basis.

"Domestic water and sewer service in Poplar-Cotton Center is provided by the Poplar Community Services District (CSD), which was formed in December 1959. Table 12-1 (of Action Program 9) shows the number of existing water and sewer connections, the capacity of each system, and the number of additional connections the systems can accommodate for new development (Housing Element, May 2012). Maps of the sewer and water systems are currently unavailable." 63

"The CSD's water system is in good operating condition, and has available capacity to connect additional users however additional capacity would likely be needed to accommodate build-out of the District's SOI. A complete assessment by the CSD Engineer should be completed prior to the approval of additional connections to ensure that adequate distribution system pressures can be achieved." 64

"The drinking water and wastewater services are provided by the Poplar Community Services District (CSD). Testing conducted between 2004 and 2009 and provided to the Environmental Working Group (EWG) by the California Department of Public Health did indicate nitrate levels over the legal and health limits, as well as alpha particle activity and radium 228 over the health limits. No Environmental Protection Agency (EPA) violations were reported since 2004. However, more recent data is not available, therefore potential deficiencies may exist." 65

"The Poplar CSD is also responsible for providing sanitary sewer service to residents within its Boundary. Poplar CSD staff has indicated that there are approximately 658 connections to their sewer system. The District owns and operates a Wastewater Treatment Facility (WWTF) southwest of the community, which is operated under the provisions of Waste Discharge Requirements Order No. 98-214, issued by the Regional Water Quality Control Board (RWQCB). The CSD's WWTF is currently operating in full compliance with the requirements of Order No. 98-214. Order No. 98-214 prescribes that the monthly average discharge flow shall not exceed 0.31 million gallons per day (MGD). Available data indicates that current average dry weather flow at the WWTF is 0.22 MGD, indicating that the WWTF is currently operating at about 71% of its capacity." 66

"Based upon information provided by the CSD's Engineer, developments which have recently been approved within the existing District Boundary will use the remaining capacity at the WWTF. Based upon this realization, the CSD would need to expand its WWTF to support any additional development projects proposed within its District Boundary and/or SOI."67

"The Poplar CSD recycles its wastewater by irrigating 41-acres of alfalfa owned by the District. The land used for wastewater reclamation will increase in the near future, as the District recently purchased additional acreage for this purpose. The District's wastewater reclamation activities promote water conservation, groundwater recharge, and demonstrate the District's desire to conserve its potable water sources."

Storm Drainage

⁶³ Tulare County Housing Element Action Program 9 Existing Infrastructure April 2014. Page 12-1.

http://tularecounty.ca.gov/rma/assets/File/Tulare%20County%20Action%20Program%209%20Existing%20Infrastructure%20041014.pdf.

⁶⁴ Ibid.

⁶⁵ Op. Cit. 35-18.

⁶⁶ Op. Cit. 12-2.

⁶⁷ Op. Cit.

⁶⁸ Op. Cit.

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Storm drainage systems should be designed so they have adequate capacity to accommodate runoff that enters the system for the design frequency and should also be designed considering future development. An inadequate roadway drainage system could result in the following:

- ✓ Water overflowing the curb and entering adjacent property leading to damage
- ✓ Accelerated roadway deterioration and public safety concerns may occur due to excessive water accumulation on roadways
- ✓ Over saturation of the roadway structural section due to immersion will lead to pavement deterioration"⁶⁹

Flooding

"Flooding is a natural occurrence in the Central Valley because it is a natural drainage basin for thousands of watershed acres of Sierra Nevada and Coast Range foothills and mountains. Two kinds of flooding can occur in the Central Valley: general rainfall floods occurring in the late fall and winter in the foothills and on the valley floor; and snowmelt floods occurring in the late spring and early summer. Most floods are produced by extended periods of precipitation during the winter months. Floods can also occur when large amounts of water (due to snowmelt) enter storage reservoirs, causing an increase in the amount of water that is released."

"Official floodplain maps are maintained by the Federal Emergency Management Agency (FEMA). FEMA determines areas subject to flood hazards and designates these areas by relative risk of flooding on a map for each community, known as the Flood Insurance Rate Map (FIRM). A 100-year flood is considered for purposes of land use planning and protection of property and human safety. The boundaries of the 100-year floodplain are delineated by FEMA on the basis of hydrology, topography, and modeling of flow during predicted rainstorms."

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: There are several General Plan policies which will be implemented to avoid and/or minimize any potentially adverse impacts to hydrology/water quality such as: HS-4.4 Contamination Prevention; WR-2.1 Protect Water Quality; WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement; WR-2.3 Best Management Practices (BMPs); WR-2.4 Construction Site Sediment Control; WR-3.3 Adequate Water Availability; WR-3.6 Water Use Efficiency; HS-5.1 Development Compliance with Federal, State, and Local Agencies; and HS-5.2 Development in Floodplain Zones.

a) *No Impact* - The proposed planning area contains a variety of uses such as residential, highway, commercial, public use (e.g., schools), and agricultural activity. The Poplar-Cotton Center community is completely surrounded by agriculturally productive lands (such as vineyards, orchards, and row crops). The Community Plan Update does not contain specific development projects, however, over time, the Community Plan Update would allow for the future development of non-urban lands to urban-type uses. The expansion of the existing UDB, as proposed in the Community Plan Update, would add approximately 670 acres to the southern portion of the existing UDB. The land uses proposed in the rezone planning area are compatible with the land uses within the existing community.

In addition to domestic water service, the Poplar CSD provides sanitary sewer collection and treatment services to residents within the District. Based on information provided by the CSD, there are currently 658 single family residential units equivalent (SFRUE) connections to the District's WWTF system⁷². The WWTF, located southwest of the

Background Report Tulare County General Plan 2030 Update. February 2010. Page 8-13.

⁶⁹ Op. Cit. 4-2 to 4-3

http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf

⁷¹ Ibid. 8-14

^{72 2018} Poplar Community Service District; information received via consulting engineers Keller/Wegley. October 2018. Page 3.

SIGNIFIC. IMPAC	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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community, is owned and operated by the Poplar CSD. The WWTF is operated under the provisions of Order No. 98-140 issued by the California Regional Water Quality Control Board. The District currently complies with the requirements specified in Regional Water Quality Control Board Order No. 98-214 and it operating at approximately 85% of its rated capacity. At 100% of permitted flow, is it estimated that the CSD could support a total of 774 SFRUE ⁷⁴; however, as development occurs over time it will likely result in the need to expand CSD's WWTF capabilities.

To reiterate, this project is limited to amending the Urban Development Boundary, amending General Plan Land Use designations, and re-zoning consistent with land use designations. As such, there are no specific developments proposed as part of this project; however, future developments within the UDB area will be evaluated on a case-by-case basis to ensure the CSD can accommodate proposed developments or if the developer must pay for future capacity improvements. Therefore, the action to amend the Urban Development Boundary, amend General Plan Land Use designations, and rezone would result in no impact to this resource.

- a) *No Impact* As indicated earlier, this project is limited to amending the Urban Development Boundary, amending General Plan Land Use designations, and re-zoning consistent with land use designations. As such, there are no specific developments proposed as part of this project; however, future developments within the UDB area will be evaluated on a case-by-case basis to ensure the CSD can accommodate proposed developments or if the developer must pay for future capacity improvements. Therefore, the Community Plan Update would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). As such, the Project would result in no impact to this resource.
- b) *No Impact* As noted earlier, this project is limited to amending the Urban Development Boundary, amending General Plan Land Use designations, and re-zoning consistent with land use designations. As such, there are no specific developments proposed as part of this project; therefore, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site? Therefore, the Project would result in no impact to this resource.
- c) *No Impact* This project is limited to amending the Urban Development Boundary, amending General Plan Land Use designations, and re-zoning consistent with land use designations. As such, there are no specific developments proposed as part of this project; therefore, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course or stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? Therefore, the Project would result in no impact to this resource.
- d) *No Impact* This project is limited to amending the Urban Development Boundary, amending General Plan Land Use designations, and re-zoning consistent with land use designations. As such, there are no specific developments proposed as part of this project; therefore, the Project would not 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. Therefore, the Project would result in no impact to this resource.
- e) *No Impact* As indicated earlier, this project is limited to amending the Urban Development Boundary, amending General Plan Land Use designations, and re-zoning consistent with land use designations. As such, there are no specific

⁷⁴ Op. Cit.

⁷³ Ibid.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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developments proposed as part of this Project; therefore, the Project would not otherwise substantially degrade surface or groundwater quality? Therefore, the Project would result in no impact to this resource.

f) *No Impact* - "Official floodplain maps are maintained by the Federal Emergency Management Agency (FEMA). FEMA determines areas subject to flood hazards and designates these areas by relative risk of flooding on a map for each community, known as the Flood Insurance Rate Map (FIRM). A 100-year flood is considered for purposes of land use planning and protection of property and human safety. The boundaries of the 100-year floodplain are delineated by FEMA on the basis of hydrology, topography, and modeling of flow during predicted rainstorms."⁷⁵

The planning area sits astride two separate FIRM rate panels; the northern area of the community lies in panel 06107C1610E and the southern section lies in panel 06107C1620E. The area is within "Zone X", an "Area of Minimal Hazard," and is outside of a 100-year flood hazard area as mapped on the FEMA FIRM. ⁷⁶ See Figure 10 in the Community Plan update (page 57).

The Project does not contain any specific housing proposals at this time. Future housing developments will be evaluated on a case-by-case basis. As development occurs, project design and standards will be implemented to ensure future housing or structures will not be impacted by flooding events. Therefore, the Project would result in no impact from this resource.

- g) *No Impact* As shown in Checklist item 9 g), the planning area is located outside of a FIRM 100-year flood zone. The Project does not contain any specific proposals for the establishment of structures at this time. Future structural developments will be evaluated on a case-by-case basis. As infill occurs, project design and standards will be implemented to ensure future structures will not be impacted by flooding events, nor impede or redirect flood flows. Therefore, the Project will result in no impact related to this checklist item.
- h) *No Impact* "Two major dams could cause substantial flooding in Tulare County in the event of a failure: Terminus Dam on Lake Kaweah and Success Dam on Lake Success." "Dam failure can result from numerous natural or human activities, such as earthquakes, erosion, improper siting, rapidly rising flood waters, and structural and design flaws. Flooding due to dam failure can cause loss of life, damage to property, and other ensuing hazards. Damage to electric-generating facilities and transmission lines associated with hydro-electric dams could also affect life support systems in communities outside the immediate hazard area." The planning area is approximately 12 miles west of the Success Dam. Due to the distance from Success Dam, the Project would result in no impact from this resource.
- i) *No Impact* The Tulare County 2030 General Plan has identified that the Poplar-Cotton Center planning area falls within Dam Failure Inundation Zone.⁸⁰ As such, consistent with the General Plan, "The County shall review projects for their exposure to inundation due to dam failure. If a project presents a direct threat to human life, appropriate mitigation measures shall be taken, including restriction of development in the subject area." As the Project does not involve any proposed development(s), the Community Plan Update would result in no impact.

⁷⁵ Tulare County General Plan 2030 Update Background Report. Page 8-14. February 2010. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf

Federal Emergency Management Agency, 2018. FEMA Flood Map Service Center: Search by Address. https://msc.fema.gov/portal/search.

⁷⁷ Tulare County General Plan 2030 Update Background Report. Page 8-17. February 2010

⁷⁸. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf

Google, 2018. Google Maps. https://www.google.com/maps/place/21063+Ave+128,+Porterville,+CA+93257/@36.0289082,-119.1260196,30411m/data=!3m1!1e3!4m5!3m4!1s0x80eac6faf2d19e7f:0xbd54c8426874d241!8m2!3d36.0221177!4d-119.1009714.

⁸⁰ Op. Cit. Figure 10-1 Flood Hazards and Faults.

⁸¹ Op. Cit. 10-53.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT	
i) No Impact - The Tulare County General Plan Background Report defines seiche as a standing wave produced in a body						

j) *No Impact* - The Tulare County General Plan Background Report defines seiche as a standing wave produced in a body of water such as a reservoir, lake, or harbor, by wind, atmospheric changes, or earthquakes.⁸² A tsunami is a series of waves caused by earthquakes or undersea volcanic eruptions.⁸³ FEMA describes mudflows as rocks, soil or debris moving down a slope.⁸⁴

As noted previously, the Poplar-Cotton Center Community Plan Update is an update to the existing community plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). The proposed expansion of the Urban Development Boundary (UDB) will not intrude into an area subject to seiche, tsunami or mudflow events. As such, the Project would result in no impact to or from this resource.

10.	LA	ND USE AND PLANNING		
	Wo	uld the project:		
	a)	Physically divide an established community?		\boxtimes
	b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?		
	c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?		\boxtimes

Analysis:

"Poplar/Cotton Center is a census-designated place located in the southern portion of Tulare County, approximately eight miles west of Porterville and eleven miles southwest of Lindsay. It is generally bounded by Avenue 136 in the south, Avenue 152 in the north, Road 184 in the west, and Road 193 in the east; and encompasses 1.3 square miles of land. Poplar/Cotton Center is an agriculturally oriented service community surrounded on all sides by lands in agricultural production, vacant lands, and scattered rural residential homes. Cities and communities surrounding Poplar/Cotton Center include Porterville to the east, Lindsay to the northeast, Tulare to the northwest, Woodville to the northwest, and Tipton to the east. The Tulare County/Kern County Line is located approximately 18 miles south of Poplar/Cotton Center."85

⁸² Tulare County General Plan 2030 Update Background Report. Page 8-11. February 2010. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf

⁸³ National Oceanic and Atmospheric Administration, 2018. What is a tsunami? https://oceanservice.noaa.gov/facts/tsunami.html.

⁸⁴ Federal Emergency Management Agency, 2018. Mudflows And Mudslides? It Makes A Difference To Insurers. https://www.fema.gov/news-release/2004/06/28/mudflows-and-mudslides-it-makes-difference-insurers.

⁸⁵ 2018 Draft Poplar-Cotton Center Community Plan Update. Page 20.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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The existing Urban Development Boundary contains approximately 915 acres (including Rights-of-way) and the Poplar CSD.⁸⁶ The Proposed UDB would be expanded by 670 across and will encompass approximately 1,585 acres (see **Figure 3**).⁸⁷

"The expansion of urban development within the Planning Area could significantly affect the area's environmental character, most noticeably as urban development replaces existing agricultural lands and rural open spaces. Urbanization may also adversely impact other aspects of the local environment such as ambient noise levels, air quality, indigenous wildlife and flora, surface water drainage patterns, and the underground water reservoir. The Land Use and Circulation portions of this Plan provide the mechanism to minimize or avoid the potential adverse impacts of urban growth. An orderly, harmonious land use pattern and appropriate implementation measures are designed to reduce potential conflict between neighboring uses." 88

"Land Use patterns in the community are typical of many other unincorporated valley towns. The dominant land use is single-family residential. It should be noted, however, that many lots in Poplar-Cotton Center have second residential units. Mobile homes are also used on many parcels." 89

"Commercial uses are generally concentrated along Road 192, the main north/south thoroughfare in the communities. Along this street are several markets, garages, truck storage yards, churches, and other commercial operations. There are also a number of dwellings located along this street. Cotton Center contains concentration of service commercial uses related to trucking. These operations exist on all four corners of Road 192 and Avenue 152."90

"Heavy industrial uses are generally absent from Poplar/Cotton Center. This is largely due-to there being no community sewer facility to handle industrial strength effluent. Additionally, the lack of rail lines has prohibited the development of industries dependent on rail transport (typically cold storage facilities)." ⁹¹

"The Residential designation is intended to allow the development of single-family and multi-family residential uses, to be implemented with zoning at locations appropriate for densities ranging from one (1) dwelling unit per acre to not more than twenty-eight (28) dwelling units per acre. The Residential land use designation is subdivided into three categories – Low Density Residential, Medium Density Residential and High Density Residential. In addition, the plan sets aside a certain amount of area as "Residential Reserve." Within the approximate 915 acres Planning Area, approximately 476 acres are designated either Residential or Residential Reserve."

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: *LU-1.2 Innovative Development; LU-1.8 Encourage Infill Development; PF-1.3 Land Uses in UDBs/HDBs; PF-2.4 Community Plans; PF-2.6 Land Use Consistency); PF-2.7 Improvement Standards in Communities;* and *AQ-3.6 Mixed Land Uses*.

In addition to Tulare County General Plan policies, the Poplar-Cotton Center Community Plan Update includes policies specific to the community. See the Policy Plan discussion of the Poplar-Cotton Center Community Plan Update.

a) *No Impact* - The Community Plan Update anticipates a 1.3% annual growth rate and the implementation of the Complete Streets over the course of the 2030 planning horizon. While the community may see the expansion of its existing

87 Ibid. 96

⁸⁶ Ibid. 27.

⁸⁸ Op. Cit. 27.

⁸⁹ Op. Cit. 27

Op. Cit.
90 Op. Cit.

⁹¹ Op. Cit.

⁹² Op. Cit.

	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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UDB, no development projects are proposed with this project. Growth of the community anticipated by this Project will be encouraged within the UDB boundaries. As future development will likely occur along the expansion areas of the communities' core, such growth will not physically divide the established community. Therefore, the Project would have no impact related to this Checklist item.

- b) Less Than Significant Impact The Community Plan Update anticipates a 1.3% annual growth rate and the implementation of the Complete Streets Program over the course of the 2030 planning horizon. Any improvements, developments and/or improvements made as part of the Update would be required to comply with applicable land use plans, policies, or regulations of agencies with jurisdiction over the project (such as the Tulare County General Plan, Zoning Ordinance, Valley Air District, Regional Water Quality Control Board, etc.). Therefore, the Project would result in a less than significant related to this Checklist Item will occur.
- c) *No Impact* See Checklist item4. Biological Resources, item f), No known habitat conservation plan (HCP) or natural community conservation plan (NCCP) are in effect for the Community Plan Update planning area. As such, the Community Plan Update is not expected to conflict with local policies or any state or federal habitat conservation plans; there will be no impact to this resource.

11.	MINERAL RESOURCES							
	Wo	uld 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?				\boxtimes		
	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?						

Analysis:

The Tulare County General Plan Background Report indicates that Mineral Resource Zones (MRZ) have been documented by the California State Geologist as existing in Tulare County. Generally these sites are deposited along the foothill corridor of the Sierra Nevada Mountains. The Tulare County General Plan 2030 Update defines mineral resources as naturally occurring materials in the earth that can be utilized for commercial purposes. He Background Report states that the most important minerals extracted in Tulare County are sand, gravel, crushed rock and natural gas. According to the California Department of Conservation, the Poplar-Cotton Center planning area lies west of a designated MRZ-3 and southwest of an area under production for Porterville Ready–Mix (Sand Pit). MRZ-3 is described by the

⁹³ Tulare County General Plan 2030 Update Background Report. Figure 10-1 Mineral Resources. Page 10-19. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf

Tulare County General Plan 2030 Update, Seismic/Geologic Hazards and Microzone. Figure 10-5. Page 8-2. http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20a nd%20Part%20II/GENERAL%20PLAN%202012.pdf.

Tulare County General Plan 2030 Update Background Report. Page 10-17. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf.

Oralifornia Department of Conservation, 1997. Active Aggregate Producers in the Tulare County Production – Consumption Region. Plate 1 of 7 (Map). http://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR 97-01/OFR 97-01 Plate1.pdf.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT	
Deparavaila		t of Conservation as an area containing ata. ⁹⁷	g mineral deposits,	the significance of v	which cannot be ev	valuated from	
no de uninc plan u antici	As noted previously, the Poplar-Cotton Center Community Plan Update is an update to the existing community plan and no development proposals are being considered at this time. The update is being prepared to accommodate an unincorporated community growth rate of 1.3% and is consistent with the Tulare County General Plan. As part of the plan update, it is anticipated that expansion of the Urban Development Boundary (UDB) will occur; however, it is not anticipated that the expansion would impact mineral resources as the expansion generally would move away from zone MRZ-3.						
Cons	erve I	ving Tulare County General Plan 2030 Mineral Deposits; ERM-2.2 Recogniz Minimize Adverse Impacts.					
a) <i>No Impact</i> - The Community Plan Update contemplates a wide variety of potential end uses, including residential, urban and open space and Update would not lead to a loss of availability of a known mineral resource as the CPU does not contain projects, proposed developments or construction activity that would currently, or upon build-out, fall inside of a Mineral Resource Zone. Accounting for the County's unincorporated 1.3 percent population growth rate, the planning area would remain confined to the proposed UDB outside of, a Class 3 MRZ. As such, no impact related to this Checklist Item will occur.							
resid	ential	act - As noted earlier, the Community P., urban and open space over the course apact related to this Checklist Item will	e of the 2030 planr				
12.	NO	ISE					
		uld the project result in:					
	a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				\boxtimes	
	b)	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?				\boxtimes	
	c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				\boxtimes	
	d)	A substantial temporary or periodic increase in ambient noise levels in				\boxtimes	

⁹⁷ Ibid.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	the project vicinity above levels existing without the project?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes

Analysis:

The State of California General Plan Guidelines identify rules for the Noise Elements of city and county General Plans, including a sound level/land-use compatibility chart that is categorized, by land use, outdoor Ldn ranges in up to four categories (normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable). These guidelines provide the State's recommendations for city and county General Plan Noise Elements (see Figure 11 of the Poplar-Cotton Center CPU)."98

The 2010 Recirculated Environmental Impact Report (RDEIR) prepared for the Tulare County General Plan Update included data regarding freeway and railroad noise. Baseline traffic noise contours for major roads in the County were developed using Sound 32 (Caltrans' computer implementation of the FHWA Traffic Noise Prediction Model).⁹⁹ Table 3.5-3 in the RDEIR summarized the daily traffic volumes, and the predicted Ldn noise level at 100 feet from the roadway centerline is approximately 79 feet, and the distance from the roadway centerline to the 60-, 65-, and 70-dB-Ldn contours are 82 feet, 1,813 feet, and 3,907 feet respectively. 100

"The Noise Element identifies noise-impacted areas throughout Tulare County. These areas include lands which have existing or projected noise levels exceeding 60 decibels (dBa) Ldn. This decibel figure is considered to be the maximum normally acceptable noise level for single family residential areas. In Poplar/Cotton Center, the primary noise impacts come from traffic along the main roads, State Route (SR) 190, Road 192, and Avenue 152. The trucking operation in Cotton Center also generates elevated noise levels. Fortunately, the development of the community has mostly kept residential uses away from this source."101

"The Noise Element includes performance standards for new residential or other noise-sensitive land uses which are to be located near noise-impacted areas. The Element indicates that these uses will not be permitted unless effective design measures can be integrated into the development to mitigate the impact of noise. Table 18 [See Poplar-Cotton CPU] summarizes the daily traffic volumes along Avenue 152 from SR 99 to Road 192 and Road 192 to Road 222. Also, along Road 192 from Avenue 196 to Avenue 152 and Avenue 152 to Avenue 65."102

101

⁹⁸ 2018 Draft Poplar-Cotton Center Community Plan Update. Noise. Page 60.

⁹⁹ Ibid., page 61.

Op. Cit.

Op. Cit.

Op. Cit.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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As noted earlier, the Poplar-Cotton Center Community Plan Update is an update to the existing community plan and no development proposals are being considered at this time. As such, implementation of the Community Plan Update will not in and of itself create or induce impacts from noise in the planning area; however, buildout and urban infill over the course of the 2030 planning horizon may create the conditions wherein noise issues become a factor for sensitive receptors. As development proposals are received, they will be evaluated on a case-by-case basis to determine what, if any, noise impact they may have on the community and if mitigation to minimize noise impacts are necessary.

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: HS-8.2 Noise Impacted Areas; HS-8.3 Noise Sensitive Land Uses; HS-8.5 State Noise Standards; HS-8.6 Noise Level Criteria; HS-8.7 - Inside Noise; HS-8.8 Adjacent Uses; HS-8.9County Equipment; HS-8.11 Peak Noise Generators; and HS-8.13 Noise Analysis.

a) *No Impact* - The proposed Project does not include any proposed development or construction-related activities, as such, it does not involve long- or short-term noise sources. During the construction phase of a development or activity, noise from construction activities (for example; earth-shaping activities, construction of roads, trenching to install water/sewer lines, etc.) would contribute to the noise environment in the immediate proposed Project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in the table below, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers, well maintained equipment, shielding noisier equipment parts, and/or time and activity constraints) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise control. Although the noise generated from earthmoving equipment may exceed the 65 dB Ldn during earthmoving operations, the impact is short-term, temporary, and will only occur during normal business hours, typically from 8:00 a.m-5:00 p.m. Existing General Plan policies and draft Community Plan policies will be implemented to minimize noise exposure. **Table 12-1** shows typical noise levels from various construction-related equipment. Therefore, the proposed Community Plan Update will result in no impact to this Checklist item.

Table 12-1 Typical Construction Noise Levels							
Type of Equipment	dBA at :	50 feet					
	Without Feasible Noise Control	With Feasible Noise Control ¹					
Dozer or Tractor	80	75					
Excavator	88	80					
Scraper	88	80					
Front End Loader	79	75					
Backhoe	85	75					
Grader	85	75					
Truck	91	75					

Source: U.S. Department of Transportation, Federal Transit Administration. 2006.

b) *No Impact* - Vibration is the periodic oscillation of a medium or object. Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. Similar to airborne sound, ground borne vibrations may be described by amplitude and frequency. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or

¹ Feasible noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds operating in accordance with manufacturers specifications.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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root mean squared (RMS), as in RMS vibration velocity. The PPV and RMS (VbA) vibration velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal and is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings. ¹⁰³

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. As it takes some time for the human body to respond to vibration signals, it is more prudent to use vibration velocity when measuring human response. The vibration velocity level is reported in decibels relative to a level of 1x10-6 inches per second and is denoted as VdB.¹⁰⁴ The typical background vibration-velocity level in residential areas is approximately 50 VdB.¹⁰⁵ Ground-borne vibration is normally perceptible to humans at approximately 65 VdB.¹⁰⁶ For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2006).¹⁰⁷

Examples of outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. The approximate threshold of such vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day (FTA 2006).¹⁰⁸ **Table 12-2** describes the typical construction equipment vibration levels.

Table 12-2					
Typical Construction Vibration Levels					
Equipment	VdB at 25 feet ²				
Small Bulldozer	58				
Jackhammer	79				
Source: U.S. Department of Transportation H	Sederal Transit Administration				

Source: U.S. Department of Transportation. Federal Transit Administration, Transit Noise and Vibration Impact Assessment. Page 12-12, Table 12-2, 2006.

The proposed Project does not include any construction-related activity; as such, it does not involve long- or short-term noise sources. Vibration from future construction-related activities will be evaluated on a case-by-case basis. As construction-related activity is short term and temporary, it is not anticipated to exceed the FTA threshold for the nearest potential receptors. Therefore, the Project would result in no impact of exposure of persons to, or generation of, excessive ground-borne vibration or ground-borne noise levels.

c - d) *No Impact* - Existing and future-year temporary or permanent noise impacts resulting from implementation of the Poplar-Cotton Center Community Plan Update will not exceed Tulare County General Plan noise thresholds. The proposed Project does not include any construction-related activity, as such, it does not involve long- or short-term noise sources from construction-related activities (for example, earthmoving equipment operations). Future construction-related activities will be evaluated on a case-by-case basis and will be required to comply with County Noise standards as defined in the Tulare County General Plan 2030 Update. Intermittent construction-related activities would result in

Federal Transit Administration, 2006, page 7-3. Transit Noise and Vibration Impact Assessment. Chapter 7: Basic Ground-Borne Vibration Concepts. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf.

¹⁰⁴ Ibid. 7-4.

¹⁰⁵ Op. Cit. 7-5.

¹⁰⁶ Op. Cit. 7-8.

¹⁰⁷ Op. Cit.

¹⁰⁸ Op. Cit.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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avoidance of a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the Project. Existing General Plan policies and draft Community Plan policies will be implemented to minimize noise exposure. Therefore, the Community Plan Update will result in no impact to a substantial permanent or temporary increase in ambient noise levels.

e - f) *No Impact* - As discussed in item 8 e), the proposed Project is not located within an airport land use plan or, within two miles of a public airport project nor is it within the vicinity of a private airstrip. There is no possibility of exposing people residing or working in the project area to excessive noise levels in or near an existing airport public or private airstrip. As such, there will be no impact as a result of the Project.

13.	POPULATION AND HOUSING							
	Wo	uld the project:						
	a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?						
	b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?						
	c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?						

Analysis:

As noted previously, the Project is an update to the Poplar-Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). If approved, an expansion to the Urban Development Boundary (UDB) will be realized; as such, it is anticipated that changes to the landscape beyond the current UDB will occur. The proposed Project is intended to result in a comprehensive update to the Poplar-Cotton Center Community Plan and as such, will be consistent with the adopted/certified Tulare County Housing Element and the 2014 Regional Housing Needs Assessment (RHNA) prepared by the Tulare County Association of Governments (TCAG).

The following Tulare County General Plan 2030 Update policies for this resource that apply to this Project: General Plan Housing Element Housing Guiding Principle 1.1; Housing Policy 1.11; Housing Policy 1.12; Housing Policy 1.16; Housing Guiding Principle 1.3; Housing Policy 1.42; Housing Guiding Principle 1.6; Housing Policy 2.11; Housing Guiding Principle 2.2; Housing Policy 2.21; Housing Policy 2.22; Housing Policy 3.15; Housing Policy 3.21; Housing Policy 3.22; Housing Policy 3.23; and Housing Policy 4.12.

a) *No Impact* - The Community Plan Update will update the land use designations within the existing UDB to be consistent with the General Plan, and will bring non-compliant properties into conformity with the Tulare County Zoning Ordinance. The communities' UDB at present anticipates potential future development based on the projections for the community's anticipated growth through the Year 2030 planning horizon. Potential growth and development is based on

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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the existing land uses, census population data, and the projected 1.3% annual growth rate for unincorporated areas of Tulare County consistent with the County's General Plan. This project is intended to accommodate projected growth regardless of the Community Plan Update being approved and is consistent with the 2014-2023 Tulare County Regional Housing Needs Plan.

The proposed Community Plan Update includes designating additional land for urban development beyond the existing UDB boundary. At full build-out, the proposed residential land use designations (see Figure 20 of the draft Community Plan Update) would be increased to 29%, commercial increased to 9.18%, industrial increased to 13%, and public/quasi-public decreased to 11% acres of the proposed UDB area (see Table 28 of the draft Community Plan Update). 109

The population growth rate as identified by the County of Tulare is expected to remain at 1.3%; any land use change, rezoning, and/or UDB expansion is intended to provide more area to accommodate projected growth in Poplar-Cotton Center. Therefore, the Community Plan Update is intended to allow greater flexibility and availability of suitable developable lands while accommodating anticipated growth consistent with the Tulare County General Plan and Regional Housing Needs Plan. As such, the Community Plan Update will not result in substantial population growth in an area. Therefore, no impact related to this Checklist Item would occur as a result of adopting the Community Plan Update.

- b) *No Impact* As noted in Checklist Item 13 a), the Existing UDB Project intended to accommodate growth within the community at an annual growth rate of 1.3 percent (as well as proposed expansion of the existing UDB) over the course of the Year 2030 planning horizon; however, no specific developments are proposed within the existing UDB. As there is sufficient land within the existing UDB to accommodate anticipated growth, the Project is not anticipated to displace substantial numbers of existing housing or necessitate the construction of replacement housing. Furthermore, the project will bring non-compliant properties into conformity with the Tulare County Zoning Ordinance and improves upon pre-existing infrastructure (such as curbs, gutters, sidewalks, etc.) that would provide a benefit to housing in the project area. Therefore, the Project would result in no impact to this Checklist item.
- c) *No Impact* As previously discussed, the Project is intended to accommodate an annual growth rate of 1.3 percent, as well as an expansion of the existing UDB programs over the course of the Year 2030 planning horizon. No specific developments are proposed within the proposed Project area. As there is sufficient land within the existing UDB to accommodate anticipated growth, the Project is not anticipated to displace substantial numbers of people or necessitate the construction of replacement housing. Furthermore, the Project will bring non-compliant properties into conformity with the Tulare County Zoning Ordinance and improves upon pre-existing infrastructure that will be a benefit to housing in the project area. Therefore, the Project would result in no impact to this Checklist item.

14.	PUBLIC SERVICES							
	Woi	ald the project result in substantial adve	erse physical impa	cts associated with th	e provision of new	or physically		
		red governmental facilities, need for r						
	which	ch could cause significant environmenta	al impacts, in orde	er to maintain acceptal	ole service ratios, re	esponse times		
	or other performance objectives for any of the public services:							
	a)	Fire protection?				\boxtimes		
	b)	Police protection?				\square		
	c)	Schools?				\boxtimes		
	d)	Parks?				\boxtimes		
	e)	Other public facilities?				\square		

¹⁰⁹ 2018 Draft Poplar-Cotton Center Community Plan Update. Table 28, Page 98; Figure 20, Page 100.

	SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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Analysis:

As noted earlier, the Project is an update to the Poplar – Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3 percent and is consistent with the Tulare County General Plan. If adopted as proposed, expansion to the Urban Development Boundary will occur and changes to public or utility services outside of the established UDB area will also occur accordingly. As the Project does not contain any development proposal, the need to expand public or utility services will be evaluated on a case-by-case basis as development occurs.

"Fire protection and emergency medical services are provided by the Tulare County Fire Department. The community of Poplar/Cotton Center is served by Tulare County Fire Department Station # 19 located at 22315 Avenue 152 in Porterville, California. Station #19 is staffed with Patrol 19 and Engine 19 at this location." 110

"Police protection is provided to the community by the Tulare County Sheriff's Department. This department operates out of the Porterville substation located at 379 N 3rd St., in Porterville, California. This station handles police services to County Line Road. The substation is staffed with 30 deputies, five (5) sergeants and one (1) lieutenant. The Substation operates 24-hours a day/7-days a week/365-days per year. Additional Sheriff resources are available as needed via dispatch from the main Sheriff's Office in Visalia, California."111

"The Poplar/Cotton Center Community Plan Area is within the Pleasant View School District and served by two (2) schools: Pleasant View Elementary located at 14004 Road 184, Poplar, California, and offers Kindergarten through fourth grade education and Pleasant View West, located at 14004 Road 184, Poplar, California, and offers fifth through eighth grade education. Pleasant View School District reports a total of 476 students. Students in high school are bussed to schools in Porterville. Porterville Community College is located approximately eight (8) miles to the east."112

"Currently the only park facility in the planning area is the five acre Tule River Community Center Park owned and operated by the Poplar Community Services District. The park is located on the northeast corner of Road 192 and Avenue 146 in Poplar, California."113

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: **PFS-7.1 Fire** Protection: PFS-7.2 Fire Protection Standards: PFS-7.3 Visible Signage for Roads and Buildings: PFS-7.4 Interagency Fire Protection Cooperation; and PFS-7.5 Fire Staffing and Response Time Standards.

In addition to fire protection services, the General Plan contains policies to ensure police services (provided by the Tulare County Sherriff's Office) meets the needs of the affected community such as *PFS-7.8 Law Enforcement Staffing Ratios*; PFS-7.9 Sheriff Response Time; PFS-7.10 Interagency Law Enforcement Protection Cooperation; and PFS-7.11 Locations of Fire and Sheriff Stations/Sub-stations wherein the County shall strive to locate fire and sheriff sub-stations in areas that ensure the minimum response times to service calls.

a) No Impact - As previously noted, the Tulare County Fire Department has a fire sub-station in west Porterville (Station 19), located within 5 miles of the planning area. The Poplar-Cotton planning area currently encompasses approximately 1.3 square miles of land and the urbanized portion of the planning area is within a 6-minute response time of the Station

This information was obtained during a telephone communication between Tulare County RMA staff and Tulare County Fire Captain J. Elizaldi on September 26, 2018.

¹¹¹ 2018 Draft Poplar-Cotton Center Community Plan Update. Page 68.

¹¹² Ibid 71.

¹¹³ Op. Cit.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
		Tulare County Fire Department will b				
		naintenance of acceptable service ratios				
		The proposed Community Plan Update		•	-	Department's
respo	mse u	mes. Therefore, the Project would result	it in no impact reia	ned to this Checklist	nem.	
Upda horiz Upda will respo	nsion, ite, fu on. F ite will be resonse ti	act - The existing Community Plan Up over the course of the 2030 planning iture growth is anticipated to occur we Public safety components of the CPU at all comply with Tulare County's General sponsible for law enforcement for this mes or other performance objectives for lif will not significantly impact the Sheri atted to this Checklist Item will occur.	horizon. While no ithin the proposed nd General Plan 20 Plan policies and its community and or any of the public	o development project Urban Development D30 Update require tregulations. The Tular ensuring maintenance services. The proposition	cts are proposed a nt Boundary over hat activities relate are County Sheriff's ce of acceptable so sed Community Pl	s part of thi the planning of to the Plan is Department ervice ratios an Update in
expar even will e Scho	nded s within exceed of Dis	act - As the proposed Project does not in school facilities. The estimated growth in the planning timeframe (Year 2030) of the capabilities of the Pleasant View Ustrict (grades 9-12) to provide school factor.	rate applied to the it is not anticipate Union Elementary S	is community is proj d that the population school District (grade	ect at 1.3% per year growth of school or Porter	ar. As such age children wille Unified
d) <i>No Impact</i> - The only park facility in the planning area is the five-acre Tule River Community Center Park, owned and operated by the Poplar Community Services District. The park is located at the northeast corner of Road 192 and Avenue 146 in Poplar. The nearest County owned/operated parks are Bartlett Park (approximately 12 miles east of the planning area) and Woodville Park (in the unincorporated community of Woodville) located approximately four miles northwest of Poplar-Cotton Center ¹¹⁶ . The proposed Project does not include plans for a future park within the community. As such, there will be no impact to this resource related to this Checklist item. e) <i>No Impact</i> - The proposed Project does not involve any development proposals that could contribute to the need for expanded electrical power, communications, natural gas services, or other public services causing an increase in consumer demand and/or subsequent service provision. Development proposals will be evaluated on a case-by-case basis and						
		the local electricity and gas service pro would result in no impact related to the		ie the availability of	me respective serv	ice. As such
15.	RECREATION					
	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?				\boxtimes

This information was obtained during a telephone communication between Tulare County RMA staff and Tulare County Fire Captain J. Elizaldi on September 26, 2018.

115 2018 Draft Poplar-Cotton Center Community Plan Update. Parks. Page 71.

116 Tulare County Parks and Recreation, 2018. Home. https://tularecountyparks.org/.

would occur or be accelerated?

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
b) Does the project is recreational facilis construction or expression and the construction of the co	ties or require the spansion of ties which might obysical effect on				\boxtimes

Analysis:

As noted previously, the Project is an update to the Poplar-Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). Changes to the UDB will occur; as such, it is likely that recreational opportunities/facilities outside of the existing UDB area will occur. Adoption of the Community Plan Update would result in no impact as future projects are viewed as "growth accommodating" rather than growth-inducing.

The Poplar-Cotton Center planning area includes the five-acre Tule River Community Center Park, owned and operated by the Poplar Community Services District. ¹¹⁷ The planning area is within an area with several regional recreational areas including federal and state parks. The nearest County facilities are Bartlett Park (approximately 12 miles east of the planning area) and Woodville Park (in the unincorporated community of Woodville) located approximately four miles northwest of Poplar-Cotton Center. ¹¹⁸

The Community Plan Update contains no development proposals and will not result in the need for expanded or new recreational facilities. As development occurs within the expanded UDB the need for additional park or recreational facilities will be evaluated on a case-by-case basis, and as appropriate, a development proposal may result in the need for the project proponent to accommodate recreational needs. However, as this Project does not include any development proposals, the Project would result in no impact.

The only other improved recreational facilities currently accessible to the general public and the community when they are not in use by students or during school hours are Pleasant View Elementary, Pleasant View West, and Rockford School District school grounds The proposed Project does not include planning for additional parks or other recreational facilities. As noted in the discussion at item 14 Public or Utility Services d) parks, there are no County owned/operated parks in Poplar-Cotton Center. The nearest County owned/operated parks are Bartlett Park (eight miles east of Porterville) approximately 12 miles east of Poplar-Cotton Center and Woodville Park (in the unincorporated community of Woodville) located approximately 4 miles northwest of Poplar-Cotton Center.

a) and b) *No Impact* - The proposed Project does not include plans for a future park or other recreational facilities within the Planning area. The proposed Project will not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated; nor will it include recreational facilities which might have an adverse physical effect on the environment. There will be no impact to this resource as a result of this Project.

Tulare County, 2018, page 71. Draft Poplar-Cotton Center Community Plan Update. Parks.

Tulare County, 2010, page 4-4. Background Report Tulare County General Plan. Table 4-1. Recreational Areas in Tulare County. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
16.	TR	ANSPORTATION/TRAFFIC			l	
	Wo	ould the project:				
	a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
	b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				\boxtimes
	c)	Result in a change in air traffic patterns, including either increase in traffic levels or a change in location that results in substantial safety risks?				
	d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, (e.g., farm equipment)?				\boxtimes
	e)	Result in inadequate emergency access?				\boxtimes
	f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				\boxtimes
Anal	-	previously, the Project is an update to the	Ponlar-Cotton Ce	nter Community Pla	n and no develonm	ent proposals

are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). Changes to the UDB will occur; as such, there is the possibility of changes to circulation

Initial Study/Mitigated Negative Declaration Poplar-Cotton Center Community Plan 2018 Update

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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patterns outside of the already established UDB area. However, future projects are viewed as "growth accommodating" rather than growth-inducing and as such, no impact will occur as a result of updating Community Plan.

Poplar-Cotton Center's circulation system depends largely on the movement of vehicular traffic through the planning area. Vehicle traffic (i.e., cars, heavy-duty trucks, buses, etc.), generally use SR 190 and the local street network. 119 There is one designated "Arterial" street within the Planning Area (SR 65), two designated collector roads (Roads 192 and 152), and the balance of all streets in the planning area are classified as "local streets". 120

"In recent years the concept of "Complete Streets" has evolved. Under this concept, while streets may still carry a primary functional classification, the design of streets aims to allow all modes and trip purposes to be safely accommodated to the extent feasible and as warranted by local needs and conditions."121

"While the private automobile is the dominant mode of travel within Poplar/Cotton Center, as it is throughout Tulare County, other modes of transportation are important. The latest available Census survey data for Poplar/Cotton Center indicates that about two-third of commuters drive alone to work, while one-third use other means: 14 percent carpool or vanpool, 9 percent walked, 6 percent used public transportation and 5 percent worked at home. The Census Bureau does not collect data on non-work trips, which represent a greater share of travel than work trips, but tend to be less concentrated in peak traffic periods. Off-peak trips also tend to have a greater proportion of shared ride and active (walk and bike) trips. While congestion is not a major issue in Poplar/Cotton Center, overreliance on automobiles creates other costs for both society and households, and means that many in the community who cannot drive (the young, the old, the disabled, the poor) must rely on those who can drive for their mobility. For this reason, it is important to encourage public transit systems and increased use of active modes of transportation, including bicycles and walking. The public transit system alternatives for Poplar/Cotton Center include fixed route public transit systems, common bus carriers, and other local agency transit and paratransit services."122

Economic considerations play a role in the decision making processes utilized by the County to the end of managing its unincorporated communities' economic growth and development. The ability of Tulare County to compete domestically and internationally on an economic basis requires an efficient and cost-effective system for distributing and receiving goods and services. Poplar/Cotton Center is a part of this system with its proximity to SR 190, SR 65, and SR 99. Trucking is likely to be the predominant mode for freight movement within the County and the Central Valley for the foreseeable future; statewide, over three-quarters of all freight is shipped by truck. 123 It is anticipated that the region's truck volumes will grow faster than auto traffic through 2040.124

SR 99 is the primary truck corridor in Tulare County. 125 SR 190 is a major truck corridor on the State Highway System in Tulare County that feeds into SR 99 (from SR 65 to SR 99). 126

The level of service (LOS) for operating State highway facilities is based upon measures of effectiveness (MOEs). These MOEs describe the measures best suited for analyzing State highway facilities (i.e., freeway segments, signalized

²⁰¹⁸ Draft Poplar-Cotton Center Community Plan Update. Page 174.

¹²¹ Op. Cit.

¹²² Op. Cit. 177.

Op. Cit.

Op. Cit. 183.

¹²⁶ Op. Cit.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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intersections, on- or off-ramps, etc.). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities. 127

Tulare County General Plan Policy TC - 1.16 County Level of Service (LOS) Standards states; "The County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of "D" or better in accordance with the LOS definitions established by the Highway Capacity Manual." 128

"LOS is categorized by two parameters, uninterrupted flow and interrupted flow. Uninterrupted flow facilities have no fixed elements, such as traffic signals, that cause interruptions in traffic flow (e.g., freeways, highways, and controlled access, some rural roads). Interrupted flow facilities have fixed elements that cause an interruption in the flow of traffic such as stop signs and signalized intersections." LOS descriptions and attendant definitions may be viewed in Tables 43 and 44 of the Community Plan Update.

The Community Plan Update also takes into account all modes of transportation including non-motorized travel and relevant components of the circulation system, including but not limited to, pedestrian and bicycle paths, and mass transit.

"A complete street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Every complete street looks different, according to its context, community preferences, the types of road users, and their needs." ¹³⁰

The Tulare County Board of Supervisors approved the Complete Streets Program in December of 2016. Integration of the Complete Streets Program in the Poplar-Cotton Center Community Circulation Element will aid to establish a comprehensive multi-modal transportation system that is efficient, environmentally and financially sound, and coordinated with the Land Use Element of the Tulare County General Plan.

The Poplar-Cotton Center Community Plan Update is intended to implement a multi-modal transportation system that will serve projected future travel demand, minimize congestion, and address future growth in Poplar-Cotton Center.

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: AQ-3.3 Street Design; LU-7.1 Friendly Streets; TC-1.2 Intermodal Connectivity; TC-4.7 Bicycle/Pedestrian Trail System; and TC-5.2 Consider Non-Motorized Modes in Planning and Development.

a)- b) *No Impact* - The proposed Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system nor will it conflict with an applicable congestion management program. Over the course of the 2030 planning horizon, development within the Planning Area is intended to accommodate the projected 1.3% population growth rate. LOS as a performance measure for highway travel (i.e., speed, travel time, freedom to maneuver, convenience and safety) depends to some degree on the volume of traffic transiting a roadway.¹³² Over the planning horizon it is anticipated that traffic in the Planning Area will increase along with area population; however, it is anticipated that the current street system will function adequately (and barring major unforeseen development in Poplar-Cotton Center) will continue to do so through the year 2030 planning horizon. New

¹³⁰ Caltrans, 2018. Complete Streets Program. http://www.dot.ca.gov/transplanning/ocp/complete-streets.html.

¹²⁷ Caltrans. Guide for the Preparation of Traffic Impact Studies. Page 1. http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf.

¹²⁸ 2018 Draft Poplar-Cotton Center Community Plan Update. Page 177.

¹²⁹ Op. Cit

³¹ 2018 Draft Poplar-Cotton Center Community Plan Update. Page 181.

Sauer, S., 2015. Caltrans' Division of Mass Transportation. Level of Service and Caltrans. https://pdfs.semanticscholar.org/presentation/2eee/4d9e08ad85519cebea225f6d9ade1cef6410.pdf

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit will not be required by the Update as the CPU does not contain plans for development, construction or new transportation infrastructure. If future proposals are submitted that have the potential to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system; and/or, conflict with an applicable congestion management program, a new analysis may be warranted to identify potential impacts. As such, the Community Plan Update will result in no impact to this Checklist item.

- c) *No Impact* As discussed in item 8 e), the proposed Project is not located within an airport land use plan or, within two miles of a public airport project nor is it within the vicinity of a private airstrip. The Community Plan Update is not near an airport and will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. There will be no impact to this checklist item as a result of this Project.
- d) *No Impact* The Poplar-Cotton Center Community Plan Update will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, e.g., farm equipment. As noted previously, the Project is an update to the Poplar-Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). Changes to the Urban Development Boundary (UDB) will occur; however, any future growth will be required to comply with laws and regulations governing urban design and use. As such, the Project would result in no impact to this Checklist item.
- e) *No Impact* The Tulare County General Plan Update contains policies and guidelines that mandate where feasible, road networks (public and private) will provide for safe and ready access for emergency equipment and evacuation routes. ¹³³ The Update to the Poplar-Cotton Center Community Plan contains no development proposals and is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). Changes to the Urban Development Boundary (UDB) will occur; however, any future growth will be required to comply with all laws and regulations governing emergency response, both facilitating and enhancing emergency access. There will be no impact related to this Checklist item.
- f) *No Impact* The Community Plan Update will not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. The County works to ensure that, whenever possible, roadway, highway, and public transit systems will interconnect with other modes of transportation. The physical plan includes a bicycle network and connected pedestrian travel system incorporating complete safe routes to school network.¹³⁴ As noted earlier, Public transit is currently available in Poplar-Cotton Center. Tulare County Area Transit (TCaT) has been providing rural route service between various cities and towns since 1981 and provides both rural route service and local demand responsive service in and around various County communities.¹³⁵ Poplar-Cotton Center is connected via TCaT along the Woodville-Poplar-Porterville Route.¹³⁶ Woodville-Poplar-Porterville Route has three eastbound and westbound buses serving Poplar-Cotton Center on weekdays.¹³⁷ Stops are currently located at the Community Service Center in Poplar and in Cotton Center at the Auto

Tulare County General Plan 2030 Update. August 2012. Goals and Policy Report. Page 10-20 <a href="http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20Plan%202030%20Part%20I%20Plan%202030%20Part%20I%20Plan%2020I%20Plan%202030%20Part%20I%20Plan%2020I%2020I%2020I%2020I%2020I%2020I%2020I%2020I%2020I%2020I%2020I%2020I%20Plan%2020I%2020I%2020I%2020I%2020I%2020I%2020I%2020I%2020I%2020I%

²⁰¹⁸ Draft Poplar-Cotton Center Community Plan Update. Page 194.

Tulare County Association of Governments (TCAG. 2014 Regional Transportation Plan & Sustainable Communities Strategy. For Tulare County – 18th Edition. Adopted June 30, 2014. Page 3-58. http://www.tularecog.org/wp-content/uploads/2015/06/Final-2014-Regional-Transportation-Plan-Sustainable-Communities-Strategy-FULL-DOCUMENT.pdf

¹³⁶ 2018 Draft Poplar-Cotton Center Community Plan Update. Page 191.

¹³⁷ Ibid.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Popl	ar-Co	e. ¹³⁸ The Woodville, Poplar, Porterville otton Center Community Plan contains	s no development	proposals and is being	ng prepared to acc	commodate a
		te of 1.3% (consistent with the Tulare rill occur; however, any future growt				
proc	esses	that address forecast growth impacts co impact related to this Checklist item.				
17.	TR	IBAL CULTURAL RESOURCES	S			
	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					
		ive American tribe, and that is: Listed or eligible for listing in the				
	a)	California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section		\boxtimes		
	b)	5020.1(k)? 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, the lead agency shall consider the significance of the resource to a California Native American tribe?				
Analy	sis:					

As noted previously, the Project is an update to the Popular-Cotton Center Community Plan and no development proposals are being considered at this time. The update is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). Limited changes to the Urban Development Boundary (UDB) will occur and such changes would incorporate areas that have historically been under heavy agricultural production; as such, there is no possibility of

The Southern San Joaquin Valley Information Center, Bakersfield (SSJVIC or Center) conducted a cultural resources records search at the request of RMA Planning Branch staff. The Center records search (dated October 5, 2018 is included in see Attachment "C" of this document) included historic sites listed on the National Register of Historic Places, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historical Resources, and California Points of Historical Interest. According to the California Historical Resources Information System, there are four (4) recorded cultural resources within the planning area and one within a one-half mile radius of the planning area. There are no recorded cultural resources within the project area or radius that are listed in the National

changes to cultural resources outside of the already established UDB area.

¹³⁸ Op. Cit.

Tulare County Association of Governments. 2014. Regional Transportation Plan & Sustainable Communities Strategy. For Tulare County – 18th Edition. Adopted June 30, 2014. Page 3-58. http://www.tularecog.org/wp-content/uploads/2015/06/Final-2014-Regional-Transportation-Plan-Sustainable-Communities-Strategy-FULL-DOCUMENT.pdf

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks in or near Poplar-Cotton Center.

According to the information provided by the SSJVIC, there have been 15 previous cultural resource studies conducted within the project area, TU-00269, 00413, 00751, 00952, 00953, 01135, 01136, 01169, 01170, 01225, 01498, 01572, 01757, 01763, and 01764. There have been two additional studies conducted within the one-half mile radius, TU-00340 and TU-01674. However, until; the specific location of a development proposal occurs, the locations and nature of the resources will remain confidential and will only be shared with an applicant and remain confidential until otherwise determined by the courts.

The following Native American tribes were contacted on September 11, 2018, in order to solicit their interest regarding tribal consultation: Kern Valley Indian Council; Santa Rosa Racheria Tachi Yokut Tribe, Torres-Martinez Desert Cahuilla Indians; Tubatulabals of Kern County; Tule River Indian Tribe; and Wuksache Indian Tribe. No responses have been received to date. The Native American Heritage Commission (NAHC) was also contacted on September 17, 2018, with a request that they conduct a sacred lands files (SLF) search. The SLF records search was completed with negative results.

The SSJVIC acknowledges that the Project essentially consists of a General Plan Update for the Poplar-Cotton Center Community. They further acknowledge that no immediate ground disturbance will take place as a result of this update and conclude that no further cultural resource investigation is recommended at this time. However, prior to any future ground disturbance project activities, the SSJVIC recommends that a new record search be conducted so their office can then make project specific recommendations for further cultural resources study, if needed. Once specific projects are proposed, location specific studies can be conducted to determine the appropriateness of avoiding or minimizing impacts to cultural resources as applicable.

The Tulare County General Plan has a number of policies that relate to the proposed Project area including *ERM-6.1* Evaluation of Cultural and Archaeological Resources; *ERM-6.2* Protection of Resources with Potential State or Federal; *ERM-6.4* Mitigation; *ERM-6.10* Grading Cultural Resources Sites; and *ERM-6.9* Confidentiality of Archaeological Sites which allows the County to (within its authority) maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

a) and b) Less Than Significant Impact With Mitigation - As noted in Checklist Item 5 Cultural Resources, a CHRIS records search was conducted by the SSJVIC. Four previously recorded historic-period sites have been recorded within the study area and one historic-period site identified within one-half mile of the study area. These resources consist of two historic era ditches, an historic era transmission line, an historic era commercial building, and a prehistoric era lithic and bead scatter. The records search included an examination of the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historic Interest, the California Inventory of Historic Resources, or the California State Historic Landmarks (see Attachment "C"). Also, as noted earlier, 15previous cultural resources studies have been completed within the project area and two additional studies have been conducted within the one-half mile radius. The planning area consists of existing residential, commercial and light commercial uses. Future UDB expansion will encompass areas to the west and southwest of the existing UDB. These areas are currently under agricultural cultivation and as such, unlikely to contain surface tribal resources. Until an actual development project is initiated, it remains unknown if subsurface tribal resources would be encountered.

While the proposed Community Plan Update contains no plans for development or construction, over the planning horizon, future development within the UDB may result in the eventual construction of residences, and establishment of commercial and industrial use, and streets (and other infrastructure such as curbs, gutters, sidewalks, sewer and water

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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collection/distribution systems, etc.). Such future activity could cause a substantial adverse change in the significance of a historical resource were any such resources to be located within the planning area. The proposed Project would not result in a substantial adverse change in the significance of an historical, archaeological, or paleontological resource as defined in Section 15064.5 of the CEQA Guidelines. Although no cultural resources were identified in the records search, there will, nonetheless, be a potentially significant impact if cultural resources were uncovered during proposed specific development project construction; however, implementation of the **Mitigation Measures 5-1 and 5-2** (and also contained in the Mitigation Monitoring and Reporting Program) are included as part of this Mitigated Negative Declaration to reduce potential impacts to historical, archaeological, or paleontological resources to less than significant with mitigation.

No formal cemeteries or other places of human internment are known to exist within the Project site; however, there will, nonetheless, be a potentially significant impact if human remains were uncovered during proposed specific development project construction. Implementation of **Mitigation Measures 17-1** (and also contained in the Mitigation Monitoring and Reporting Program) is included as part of this Mitigated Negative Declaration to reduce potential impacts to this checklist item to a less than significant with mitigation.

Mitigation Measure 17-1. Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during Project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

- 1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
 - a. The Tulare County Coroner/Sheriff must be contacted to determine that no investigation of the cause of death is required; and
 - b. If the coroner determines the remains to be Native American:
 - i. The coroner shall contact the Native American Heritage Commission within 24 hours.
 - ii. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
 - iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or
- 2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
 - a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
 - b. The descendant fails to make a recommendation; or
 - c. The landowner or his authorized representative rejects the recommendation of the descendent.

Implementation of **Mitigation Measures 5-1, 5-2, and 17-1** will reduce potential Project impacts on tribal cultural resources to a less than significant level.

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18.	UT	ILITIES AND SERVICE SYSTE	MS			
	Wo	uld the project:				
	a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			\boxtimes	
	b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
	e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
	f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			\boxtimes	
	g)	Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes
Analy	vsis:					

"Domestic water and sewer service in Poplar-Cotton Center is provided by the Poplar Community Services District (CSD), which was formed in December 1959. Table 12 -1 (See Tulare County Housing Element – Action Program 9) shows the number of existing water and sewer connections, the capacity of each system, and the number of additional connections the systems can accommodate for new development (Housing Element, May 2012). Maps of the sewer and water systems are currently unavailable." ¹⁴⁰

^{140 2014} Tulare County Housing Element Action Program 9 Existing Infrastructure April 2014. Page 12-1

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Consultants Keller Wegley Engineering provided an update via letter (Letter, see Attachment "E") regarding the Poplar Community Service District (District or CSD) water and wastewater capacity. The update indicated that, "The District currently uses two active groundwater wells to meet water system demand. The District's water system is regulated by the State Water Resources Control Board-Division of Drinking Water (SWRCB-DDW). The highest District water demand occurred in 2009 with a Maximum Day Demand (MDD) of approximately 1,253 gpm."¹⁴¹ "The District has a total of 290,000 gallons of storage of which we are assuming only 200,000 gallons is available at a reasonable delivery pressure."¹⁴² "The District has received funding to replace a District Well that exceeds the State's Maximum Contaminant Level for Nitrates. Construction is scheduled to occur in 2019. The capacity of the well has yet to be determined, but would be additive to the maximum amounts in Table B (of the Letter)."¹⁴³

In addition to water, "The Poplar CSD is also responsible for providing sanitary sewer service to residents within its Boundary. There are approximately 658 Single Family Residential Equivalents (SFRUE) contributory to the District's sewer system. Raw sewage located southwest of the community.

The District's WWTF is operated under the provisions of Waste Discharge Requirements Order No. 98-214 issued by the Regional Water Quality Control Board (RWQCB). The District's WWTF is currently operating in full compliance with Order No. 98-214 issued by the RWQCB. Order No. 98-214 prescribes that the monthly average discharge flow shall not exceed 0.31 million gallons per day (MGD). The highest maximum month flow recorded in the past 10 years occurred July, 2011. The flow at the WWTF in the month of July, 2011, was approximately 0.263 MGD. The District's WWTF is currently operating at approximately 85% of its rated capacity. At 100% of permitted flow, it is estimated that the District's WWTF could support a total of 774 SFRUE.

Capacity estimates are for wastewater treatment and do not consider collection system capacity constraints. Capacity availability and disposal elements in the collection system are evaluated on a case-by-case basis with deficiencies being addressed by developers that wish to connect to the District's system.

The Poplar CSD currently recycles its wastewater by irrigating 41 acres of alfalfa on land owned by the District. The land used for wastewater reclamation is anticipated to increase upon the District's receipt of financial assistance, currently applied for. The District purchased additional acreage in 2001 for this purpose. The District's wastewater reclamation activities promote water conservation and groundwater recharge and demonstrate the District's desire to conserve its available water resources "144"

Available data indicates that current average dry weather flow at the WWTF is 0.22 MGD, indicating that the WWTF is currently operating at about 71% of its capacity." ¹⁴⁵

"A storm drainage system is designed to drain excess rain and groundwater (from roads, sidewalks, etc.) to some point where it is discharged into a channel, ponding basin, or piped system. The system itself typically consists of pipes connecting inlets and is facilitated by curbs and gutters, manholes, and sumps. The operation of the system consists of runoff being collected in the inlets and transported by pipes to a discharge location. Manholes provide access to storm

http://tularecounty.ca.gov/rma/assets/File/Tulare%20County%20Action%20Program%209%20Existing%20Infrastructure%20041014.pdf

Poplar Community Service District. Letter provided by consultants Keller Wegley Engineering. October 3, 2018. Page 1 (see Attachment "E" of this MND).

¹⁴² Ibid. 2.

¹⁴³ Op. Cit.

¹⁴⁴ Op. Cit. 3.

¹⁴⁵ Ibid. 12-2.

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drain pipes for inspection and cleanout. A sump is a shallow, artificial pond designed to infiltrate storm water through permeable soils into the groundwater aquifer. It does not typically discharge to a detention basin."¹⁴⁶

"Poplar-Cotton Center does have a storm drainage system, but system information and mapping is currently unavailable." ¹⁴⁷

Table 18-1 Existing and Capacity of Water & Wastewater Connections in Poplar-Cotton Center CSD ¹⁴⁸						
*Drinking Water			**Waste Water in SFRUE			
No. of Existing Connections	Capacity	Available	No. of Existing Connections	Capacity	Available	
640	965	325	658	774	116	
Source: * Tulare County Housing Element – Action Program 9 Existing Infrastructure, page 12-2 ** Keller Wegley Letter. Page 3.						

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: *PFS-1.1 Existing Development; PFS-1.2 Maintain Existing Levels of Services; PFS-1.3 Impact Mitigation; PFS-1.7 Coordination with Service Providers; PFS-2.1 Water Supply; PFS-2.2 Adequate Systems; PFS-2.4 Water Connections; PFS-3.2 Adequate Capacity; PFS-3.3 New Development Requirements;* and *PFS-3.7 Financing*.

In addition to Tulare County General Plan policies, the Poplar-Cotton Center Community Plan Update contains policies specific to infrastructure including water supply and water systems. See the "Existing Water & Wastewater Connections" discussion of the Poplar-Cotton Center Community Plan Update.

Solid Waste Disposal

The Tulare County General Plan has a number of policies that apply to existing development and future development projects regarding solid waste disposal within the County of Tulare. The nearest solid waste disposal facility, the Teapot Dome Landfill, is owned and operated by the County. The Teapot Dome has the capacity to accommodate solid waste refuse generated within the planning area through the year 2025. According to Solid Waste Management Supervisor J. Traviño, the Teapot Dome landfill has a current net remaining capacity of 666,281 cubic yards or 11% of total capacity. Per the Tulare County Solid Waste Department the Teapot Dome landfill is scheduled to close in 2025 and solid waste from the planning area will be disposed of in the Woodville landfill. The Woodville landfill is currently under temporary closure and is not accepting waste, however the landfill is slated to open in 2022. The Woodville landfill has a current net remaining capacity of 5,319,859 cubic yards or 64% of the landfill's total capacity.

¹⁴⁶ Op. Cit. 12-3.

¹⁴⁷ Op. Cit.

Drinking water data current as of May 2012; Waste water data current as of October 2018

¹⁴⁹ This information was obtained during an in-person interview conducted between Tulare County RMA staff and Tulare County Solid Waste Management Supervisor Jonah Treviño on October 1, 2018.

¹⁵⁰ Ibid.

¹⁵¹ Op. Cit.

¹⁵² Op. Cit.

¹⁵³ Op. Cit.

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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The adopted 2030 General Plan contains policies that would apply to existing and future development in the Project area regarding solid waste such as: *PFS-5.3 Solid Waste Reduction*; *PFS-5.5 Private Use of Recycled Products*; *PFS-5.6 Ensure Capacity*; and *PFS-5.7 Provisions for Solid Waste Storage*, *Handling*, *and Collection*.

- a) and b) *Less Than Significant Impact* The Update to the Poplar-Cotton Center Community Plan contains no development proposals and is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). If adopted, the Urban Development Boundary (UDB) will be expanded to accommodate potential growth projections and will be consistent with the Tulare County General Plan are not anticipated to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. However, as full build-out occurs over time, capacity availability and disposal elements in the collection system would be evaluated on a case-by-case basis with deficiencies being addressed by developers that wish to connect to the District's system. As such, the Project would result in a less than significant impact.
- c) *Less Than Significant Impact* The Update to the Poplar-Cotton Center Community Plan contains no development proposals and is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). If adopted, the Urban Development Boundary (UDB) will be expanded to accommodate potential growth projections and will be consistent with the Tulare County General Plan and would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. As such, the Project would result in a less than significant impact.
- d) *Less Than Significant Impact* The Update to the Poplar-Cotton Center Community Plan contains no development proposals and is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). If adopted, the Urban Development Boundary (UDB) will be expanded to accommodate potential growth projections and will be consistent with the Tulare County General Plan and should have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed. As noted earlier, development proposal would be evaluated on a case-by-case basis by the Poplar CSD to determine if a project proponent would be required to pay their fair share as applicable. As such, the Project would result in a less than significant impact.
- e) *Less Than Significant Impact* 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. See Checklist Items a) and b). As such, the Project would result in a less than significant impact.
- f) *Less Than Significant Impact* The Update to the Poplar-Cotton Center Community Plan contains no development proposals and is being prepared to accommodate a growth rate of 1.3% (consistent with the Tulare County General Plan). If adopted, the Urban Development Boundary (UDB) will be expanded to accommodate potential growth projections and will be consistent with the Tulare County General Plan are not anticipated to exceed permitted capacities of area landfills.

Tulare County Operates the Teapot Dome Landfill i.e. Mid Valley Disposal Site located at 20801-21169 Teapot Dome Ave, Porterville, CA 93257. According to the Tulare County Solid Waste Department, the Teapot Dome facility has sufficient permitted capacity to accommodate the project's solid waste disposal needs until 2025, at which time it is anticipated that the Woodville landfill will become the primary solid waste disposal facility for the planning area. ¹⁵⁴ Subsequently, the planning area will be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Therefore, the Project would result in a less than significant impact is anticipated to occur to this Checklist Item.

¹⁵⁴ Op. Cit.

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
g) <i>No Impact</i> - The update to the Poplar-Cotton Center Community Plan contains no development proposals and is being prepared to accommodate a growth rate of 1.3% consistent with the Tulare County General Plan. If adopted, the Urban Development Boundary (UDB) will be expanded to accommodate potential growth projections and will be consistent with the Tulare County General Plan. Upon any eventual buildout, all solid waste disposal will be required to comply with the requirements of the contracted waste hauler, which follows federal, state, and local statutes and regulations related to the collection and disposal of solid waste. As such, no impact related to this Checklist Item will occur.						
19.	MA	ANDATORY FINDINGS OF SIGN	NIFICANCE			
	a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal species, 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?				\boxtimes
a) Les Plan c Tular	Analysis: a) <i>Less Than Significant Impact With Mitigation</i> – As noted earlier, The update to the Poplar-Cotton Center Community Plan contains no development proposals and is being prepared to accommodate a growth rate of 1.3% consistent with the Tulare County General Plan. If adopted, the Urban Development Boundary (UDB) will be expanded to accommodate potential growth projections and will be consistent with the Tulare County General Plan.					

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As discussed in Item 4 Biological Resources, impacts associated with future development of proposed Project planning area would be less than significant, as defined by the California Environmental Quality Act (CEQA), for special status plant species, wildlife movement corridors, downstream water quality, and sensitive habitats. Loss of habitat for special status animal species would also be considered less than significant under CEQA. **Mitigation Measures 4-1 through 4-8** contained in the Mitigation Monitoring and Reporting Program are included as part of this Mitigated Negative Declaration which are intended to prevent or minimize disturbance or accidental take of species of concern. In the unlikely event of discovery of a special species on the site, protocols established by the U.S. Fish and Wildlife Service (USFW) or California Department of Fish and Game (DFG) will be implemented before any future construction-related activities are allowed to commence. If discovery occurs during future construction-related activities, all activities will be immediately ceased until a qualified biologist determines which course of action to implement per USFW or DFG protocols.

As noted in item 5. Cultural Resources and item 17. Tribal Cultural Resources, a CHRIS records search was conducted by the SSJVIC. Four previously recorded historic-period sites have been recorded within the study area and one historicperiod site identified within one-half mile of the study area. These resources consist of two historic era ditches, an historic era transmission line, an historic era commercial building, and a prehistoric era lithic and bead scatter. The records search included an examination of the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historic Interest, the California Inventory of Historic Resources, or the California State Historic Landmarks (see Attachment "C"). Also, as noted earlier, 15 previous cultural resources studies have been completed within the project area and two additional studies have been conducted within the one-half mile radius. The planning area consists of existing residential, commercial and light commercial uses. Future UDB expansion will encompass areas to the west and southwest of the existing UDB. These areas are currently under agricultural cultivation and as such, unlikely to contain surface. Until an actual development project is initiated, it remains unknown if subsurface historic resources would be encountered. While the proposed Community Plan Update contains no plans for development or construction, over the planning horizon, future development within the UDB may result in the eventual construction of residences, and establishment of commercial and industrial use, and streets (and other infrastructure such as curbs, gutters, sidewalks, sewer and water collection/distribution systems, etc.). Such future activity could cause a substantial adverse change in the significance of a historical resource were any such resources to be located within the planning area. The proposed Project would not result in a substantial adverse change in the significance of an historical or archaeological resource as defined in Section 15064.5 of the CEQA Guidelines. Although no cultural resources were identified in the records search, there will, nonetheless, be a potentially significant impact if historical resources were uncovered during proposed specific development project construction; however, implementation of the Mitigation Measures 5-1, 5-2, and 17-1 (and also contained in the Mitigation Monitoring and Reporting Program) are included as part of this Mitigated Negative Declaration to reduce potential impacts to historical or archaeological resources to less than significant with mitigation.

Therefore, the proposed Project does not 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, reduce the number or restrict the range of an endangered, rare or threatened plant or animal species, or eliminate important examples of the major periods of California history or prehistory. Therefore, there will be a less than significant impact with mitigation to these resources.

b) Less Than Significant Impact - As noted earlier, The update to the Poplar-Cotton Center Community Plan contains no development proposals and is being prepared to accommodate a growth rate of 1.3% consistent with the Tulare County General Plan. If adopted, the Urban Development Boundary (UDB) will be expanded to accommodate potential growth projections and will be consistent with the Tulare County General Plan Use and Zoning designation contained in the Community Plan. It is not growth inducing, however, development is anticipated to occur consistent with the policies contained in the Tulare County General Plan, the Poplar-Cotton Center Community Plan, and other agencies (for example,

		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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the Valley Air District and Regional Water Quality Control Board). As such, it will result in Less Than Significant Impacts to resources such as air quality, noise, Greenhouse Gas Emissions, hazard or hazardous materials, hydrology and water quality, population and housing, pubic services, transportation/traffic, or utilities and service systems. Therefore, the proposed Project will result in less than significant impacts.

c) *No Impact* - The proposed Project is a comprehensive update to the Poplar-Cotton Center Community Plan. It is intended to accommodate projected growth and to provide a mechanism to stimulate economic development within the existing geographic area and consistent with current General Plan Land Use and Zoning designations contained in the Community Plan. The proposed Project will not result in environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. There will be no adverse impact.

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Attachment "A"

Air Quality Technical Memorandum



RESOURCE MANAGEMENT AGENCY

5961 South Mooney BLVD VISALIA, CA 93277

PHONE (559) 624-7000 FAX (559) 730-2653 Michael Washam Reed Schenke Sherman Dix Economic Development and Planning Public Works Fiscal Services

TECHNICAL MEMORANDUM AIR QUALITY EMISSIONS ANALYSIS

DATE: October 21, 2018

TO: Resource Management Agency – Environmental Planning

FROM: Jessica Willis, Planner IV

SUBJECT: Air Quality Emissions Analysis for the Poplar-Cotton Center Community Plan

Update (GPA 17-010, PZC 18-014, PZC 18-012, PZC 18-013)

PURPOSE AND NEED FOR ASSESSMENT

This document is intended to assist Tulare County Resource Management Agency (RMA) staff in the preparation of the Air Quality component of the Mitigated Negative Declaration (MND) being prepared for the Poplar-Cotton Center Community Plan Update (Project). The assessment is intended to provide sufficient detail regarding potential impacts of Project implementation and to identify mitigation measures, if necessary, to reduce potentially significant impacts. The background information and supporting documentation used in this assessment is provided in the following attachments:

Attachment 1: Supporting Documentation and Summary Tables

Attachment 2: CalEEMod Emissions Modeling

The air quality assessment provided in this document was prepared to evaluate whether the estimated air pollutant emissions generated from implementation of the Project (i.e., future development projects) would cause significant impacts to air quality and health risks to nearby receptors. The air quality assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The assessment is intended to provide the County of Tulare (County) with sufficient detail regarding potential impacts of Project implementation and to identify mitigation measures, if necessary, to reduce potentially significant impacts.

The estimated emissions are compared to federal and state ambient air quality standards (AAQS) and the thresholds of significance established by the San Joaquin Valley Unified Air Pollution Control District (Air District). The methodology for the air quality assessment follows the Air District recommendations for quantification of emissions and evaluation of potential impacts as provided in their guidance document *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI), adopted March 19, 2015.¹

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Air District. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2015. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf. Accessed August 15, 2018.

PROJECT DESCRIPTION

The primary purpose of the Poplar-Cotton Center Community Plan Update (Project) is to outline community goals regarding physical development and to promote the general welfare of the community. The Community Plan serves as a general guide for both public and private decisions affecting the community, and provides for the overall direction, density, and type of growth consistent with the needs of the community. The objective in the preparation of the Poplar-Cotton Center Community Plan Update is to develop a plan which can accurately reflect the needs and priorities of the unincorporated communities of Poplar and Cotton Center.

The Community Plan Update is intended to implement the Tulare County 2030 General Plan through the following actions: (1) Update Zoning Map to match the Community Plan Land Use Map; (2) Addition of Design Standards to replace Use Permit standards; (3) Update Zoning text to outline allowed uses in this Community Plan; (4) Introduction of a Mixed Use Overlay Zoning District; (5) Provides an updated analysis of Poplar-Cotton Center's population and housing characteristics; and (6) Defines an economic development strategy.²

Tulare County is proposing new land use and zoning designations within an expanded UDB. The proposed Community Plan Update, if adopted, will update these designations to be consistent with the General Plan, and will bring existing non-compliant properties into conformity with the Tulare County Zoning Ordinance. The Community Plan Update also includes the Complete Streets and Road Maintenance programs and the community's anticipated growth through year 2030 based on the existing land uses, census population data, and the projected 1.3% annual growth rate in unincorporated areas of Tulare County.³ Other than the Complete Streets and Road Maintenance Programs, there are no specific development projects (such as residential, commercial, or industrial uses) proposed as part of this project. As an unknown number of proposals may occur within the lifetime of the Community Plan Update, the Community Plan is intended to direct the density, intensity, and types of growth needed to meet the needs of the community. Future developments within the Project planning area will be required to undergo additional CEQA evaluation on a project-by-project basis at such time development is proposed to determine potential environmental impacts.

Complete Streets and Road Maintenance.

The Poplar-Cotton Center Complete Streets and Road Maintenance Programs are included in the Circulation Element of the proposed Community Plan Update. The Complete Streets Program has thoroughly analyzed the alternative forms of transportation, including transit, bicycle ways, and pedestrian circulation. Improvements proposed in the Complete Streets Program include, but are not limited to, installation of streetlights, bus shelters, street signage and striping, curbs, gutters, sidewalks, drainage system, and utilities.⁴ Road maintenance activities vary by road segment dependent upon the condition of the road and may include chip seal, overlay resurfacing, and asphalt reconstructions.⁵

² Draft Poplar/Cotton Center Community Plan Update, Page 80.

³ Ibid. 90

⁴ Op. Cit. 253

⁵ Op. Cit. 72

Table 1 identifies the road segments planned for improvements within the proposed Poplar-Cotton Center UDB.

Table 1: Complete Streets and Road Maintenance Segments Scheduled for Improvements ^a										
Roadway From To Length (miles) ^b										
Avenue 145	West of Walker Road	Road 193	0.55							
Avenue 147	Kilroy Road	Road 192	0.08							
Avenue 150	Road 190	Road 192	0.25							
Avenue 151	Road 190	Road 192	0.25							
Kilroy Road	Avenue 145	Avenue 146	0.15							
Road 190	North of Avenue 144	Avenue 145	0.08							
Road 191	Avenue 145	Avenue 148	0.40							
Road 192	State Route 190	Avenue 152	1.00							
Tobias Road	Avenue 144 (SR 190)	Avenue 146	0.25							
Tule Avenue	East of Walker Road	Road 190	0.08							

^a This is a summary of all segments identified in both programs; roadways with multiple segments planned for improvements have been combined into one in this table.

Source: Draft Poplar/Cotton Center Community Plan Update, pages 72, 73, 256, 259

Growth Projections.

The US Census Bureau indicates that the population in Poplar-Cotton Center increased from 1,295 in 1980 to 1,901 in 1990, decreased to 1,496 in 2000, and increased to 2,470 in 2010.⁶ The existing Community Plan indicates that the population in Poplar-Cotton Center swells by about 800 persons during summer harvest months due to in-migration of seasonal farmworkers.⁷ Population and residential unit growth through planning horizon year 2030 was estimated by applying a 1.3% annual growth rate (consistent with the Tulare County 2030 General Plan) to the 2016 baseline population as provided in the 2016 American Community Survey (ACS) data.⁸ **Table 2** summarizes the projected growth of the community through horizon Year 2030.

	Table 2. Projected Growth through Year 2030										
	Res	Indus	trial								
Year	Population ¹	Dwelling Units ²	Square Feet ³	Acres ⁴	Square Feet ³	Acres ⁴					
2016	3,009	811	503,776	57.86	319,643	36.69					
2020	3,169	854	540,804	60.93	336,592	38.64					
2030	3,605	972	603,988	69.33	382,999	43.96					
Overall Growth	596	161	100,212	11.47	63,356	7.27					

¹ Source: Draft Poplar/Cotton Center Community Plan Update, Page 149. Projections based on 2016 American Community Survey data applying an annual growth rate of 1.3%.

b Length was approximated using Google Earth

² Source: Draft Poplar/Cotton Center Community Plan Update, Page 150. Projections based on 2016 American Community Survey data applying an annual growth rate of 1.3%.

³ Source: Tulare County GIS. Projections based on existing land uses assuming developments/improvements with a Floor to Area Ratio of 0.2 and annual growth rate of 1.3%.

⁴ Source: Tulare County GIS. Projections based on existing land uses and annual growth rate of 1.3%

⁶ Op. Cit. 31

⁷ Op. Cit. 23

⁸ Op. Cit. 149

SIGNIFICANCE THRESHOLDS

CEQA Guidelines define a significant effect on the environment as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. To determine if a project would have a significant impact on air quality and climate change, the type, level, and impact of criteria pollutant and GHG emissions generated by the project must be evaluated. Appendix G of the CEQA Guidelines provides the criteria (as Checklist Items) for evaluating potential impacts on the environment. The CEQA criteria and the Air District's significance thresholds and guidance for evaluation are provided below.

Air Quality Plans

The Air District has established thresholds of significance for criteria pollutant emissions. These thresholds are based on District New Source Review (NSR) offset requirements for stationary sources. "Stationary sources in the District are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of District offset requirements are a major component of the District's air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan"." 10

The Air District has three sets of significance thresholds based on the source of the emissions. According to the GAMAQI, "The District identifies thresholds that separate a project's short-term emissions from its long-term emissions. The short-term emissions are mainly related to the construction phase of a project and are recognized to be short in duration. The long-term emissions are mainly related to the activities that will occur indefinitely as a result of project operations." ¹¹

Long-term (operational) emissions are further separated into permitted and non-permitted equipment and activities. Stationary (permitted) sources that comply or will comply with Air District rules and regulations are generally not considered to have a significant air quality impact. Specifically, the GAMAQI states, "District Regulation II ensures that stationary source emissions will be reduced or mitigated to below the District's significance thresholds... District implementation of New Source Review (NSR) ensures that there is no net increase in emissions above specified thresholds from New and Modified Stationary Sources for all nonattainment pollutants and their precursors. Furthermore, in general, permitted sources emitting more than the NSR Offset Thresholds for any criteria pollutant must offset all emission increases in excess of the thresholds..." 12

The Air District's significance thresholds are provided in **Table 3**.

⁹ CEQA §§ 15002(g), 15382

¹⁰ Air District, GAMAQI, Section 7.12, Page 65.

¹¹ Air District, GAMAQI, Section 8.1, Page 75

¹² Air District, GAMAQI, Section 8.2.1, Page 76

Tabl	Table 3. Air District Criteria Pollutant Significance Thresholds								
	Construction	Operati	onal Emissions						
Pollutant/ Precursor	Emissions	Permitted Equipment and Activities	Non- Permitted Equipment and Activities						
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)						
СО	100	100	100						
NOx	10	10	10						
ROG	10	10	10						
SOx	27	27	27						
PM_{10}	15	15	15						
PM _{2.5}	15	15	15						

Source: Air District, GAMAQI, Table 2, page 80; and http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf, accessed May 30, 2018.

Air Quality Violations

"Determination of whether project emissions would violate any ambient air quality standard is largely a function of air quality dispersion modeling. If project emissions would not exceed State and Federal ambient air quality standards at the project's property boundaries, the project would be considered to not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The need to perform an air quality dispersion modeling analysis for any project (urban development, commercial, or industrial projects) is determined on a case-by-case basis depending on the level of emissions associated with the proposed project. If such modeling is found necessary, the project consultant should check with the District to determine the appropriate model and input data to use in the analysis. Specific information for assessing significance, including screening tools and modeling guidance is available on-line at the District's website www.valleyair.org." 13

"The thresholds of significance for Ambient Air Quality are based on the California Ambient Air Quality Standard (CAAQS) and National Ambient Air Quality Standard (NAAQS). A project would be considered to have a significant impact if its emissions are predicted to cause or contribute to a violation of an ambient air quality standard by exceeding any of the following:

- 1. Any of the CAAQS, or
- 2. Any of the NAAQS, and if available, the associated Significant Impact Level (SIL)."14

Table 4 provides the California and National Ambient Air Quality Standards.

¹³ Air District, GAMAQI, Section 7.13, Page 65

¹⁴ Air District, GAMAQI, Section 8.4, Page 90

Table 4. Ambient Air Quality Standards									
Pollutant	Averaging Time	California Standards	National S	Standards					
1 onuum	Tiveraging Time	Concentration	Primary	Secondary					
Ozone (O ₃)	1 Hour	0.09 ppm (180 μg/m³)		Same as Primary					
Ozone (Os)	8 Hour	0.070 ppm (137 μg/m³)	0.070 ppm* (137 μg/m³)	Same as Timary					
Respirable Particulate	24 Hour	50 μg/m ³	$150 \ \mu g/m^3$	Same as Primary					
Matter (PM ₁₀)	Annual Arithmetic Mean	20 μg/m ³		Same as i iiiiai y					
Fine Particulate	24 Hour		$35 \mu g/m^3$	Same as Primary					
Matter (PM _{2.5})	Annual Arithmetic Mean	12 μg/m ³	12.0 μg/m ³	15.0 μg/m ³					
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)						
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)						
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)							
Nitrogen Dioxide	1 Hour	0.18 ppm (339 μg /m³)	100 ppb (188 μg/m³)	Same as Primary					
(NO_2)	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)						
	1 Hour	0.25 ppm (655 μg/m³)	75 ppb (196 μg/m³)						
Sulfur Dioxide (SO ₂)	3 Hour			0.5 ppm (1300 µg/m^3)					
Sultui Dioxide (SO ₂)	24 Hour	0.04 ppm (105 μg/m³)	0.14 ppm (for certain areas)						
	Annual Arithmetic Mean		0.030 ppm (for certain areas)						
	30 Day Average	1.5 μg/m ³							
Lead	Calendar Quarter		1.5 μg/m ³ (for certain areas)	Same as Primary					
	Rolling 3-Month Average		0.15 μg/m ³						
Visibility Reducing Particles	8 Hour	Extinction of 0.23/km; visibility of 10 miles or more	f						
Sulfates	24 Hour	25 μg/m ³	%T_ %T_4*	l Cton dond					
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	No Nationa	l Standards					
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m³)							

^{*} The standard at the time of the GAMAQI was 0.075 ppm; the standard presented here was finalized on October 26, 2015. Abbreviations: ppm = parts per million; mg/m^3 = milligram per cubic meter; $\mu g/m^3$ = micrograms per cubic meter. Sources: Air District, GAMAQI, Table 3, page 91; ARB, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, accessed May 30, 2018.

"The District ISR rule exempts small development projects (see Table 4 [of the GAMAQI]) from project-specific mitigation requirements. The District performed extensive analysis to identify small projects for which additional mitigation is not feasible. For instance, the exemptions include small residential housing developments of less than 50 units and commercial developments of less than 2,000 square feet. All projects on the exemption list emit less than 2 tons per year of either PM10 or NOx, which is substantially lower than the District's 10-ton per year significance thresholds. Furthermore, as the tailpipe emissions from motor vehicles continue to decline, these projects will emit even less today than was estimated in 2005 when this rule was adopted. In addition, two tons per year is expected to result in daily emissions of less than the 100 lb/day screening level for either NOx or PM10 that the District has concluded that projects under the ISR exemption thresholds will have a less than significant impact on air quality. Consequently, projects below ISR applicability thresholds are not expected to exceed the thresholds of significance for criteria pollutants emissions (see Section 8.3 [of the GAMAQI]). In addition, projects below the ISR applicability thresholds are not expected to violate any air quality standards or contribute substantially to an existing or projected air quality violation and will not exceed the thresholds of significance for ambient air quality. In this case, the District concludes no emission calculation is needed and no ambient air quality analysis is required."¹⁵

Table 5 provides the Air District's ambient air quality analysis (AAQA) screening levels for development projects. For projects that exceed the screening thresholds identified in Table 6, the Air District provides further guidance on how to evaluate the 100 pound per day screening level in their guidance document *Ambient Air Quality Analysis Project Daily Emissions Assessment*. ¹⁶

Table 5: AAQA Screening Levels For Development Project								
Development Project Type	Space / Size							
Residential	50 dwelling units							
Commercial	2,000 square feet							
Light Industrial	25,000 square feet							
Heavy Industrial	100,000 square feet							
Medical Office	20,000 square feet							
General Office	39,000 square feet							
Educational	9,000 square feet							
Governmental	10,000 square feet							
Recreational	20,000 square feet							
Transportation / Transit	Construction exhaust emissions equal or exceeding 2.0 tons NOx or 2.0 tons PM ₁₀							
Source: Air District, GAMAQI, Table 4, page	2 96							

¹⁵ Air District, GAMAQI, Section 8.4.4, Page 95

Air District, http://www.valleyair.org/transportation/CEQA%20Rules/Ambient-Air-Quality-Analysis-Project-Daily-Emissions-Assessment.pdf, accessed May 30, 2018.

Cumulative Increase in Emissions

"By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development. Future attainment of State and Federal ambient air quality standards is a function of successful implementation of the District's attainment plans. Consequently, the District's application of thresholds of significance for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. A Lead Agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program, including, but not limited to an air quality attainment or maintenance plan that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located [CCR §15064(h)(3)]. Thus, if project specific emissions exceed the thresholds of significance for criteria pollutants the project would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the District is in non-attainment under applicable Federal or State ambient air quality standards. This does not imply that if the project is below all such significance thresholds, it cannot be cumulatively significant."17

Table 6 provides the San Joaquin Valley Air Basin attainment status for federal and state ambient air quality standards.

Table 6. San Joaquin Valley Attainment Status									
Pollutant	Designation								
ronutant	Federal Standards	State Standards							
Ozone—1-hour	No Federal Standard	Nonattainment/Severe							
Ozone—8-hour	Nonattainment/Extreme	Nonattainment							
PM_{10}	Attainment	Nonattainment							
PM _{2.5}	Nonattainment	Nonattainment							
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified							
Nitrogen dioxide	Attainment/Unclassified	Attainment							
Sulfur dioxide	Attainment/Unclassified	Attainment							
Lead (Particulate)	No Designation/Classification	Attainment							
Hydrogen sulfide	No Federal Standard	Unclassified							
Sulfates	No Federal Standard	Attainment							
Visibility-reducing particles	No Federal Standard	Unclassified							
Vinyl chloride	No Federal Standard	Attainment							
Source: Air District, http://www.valle	eyair.org/aqinfo/attainment.htm, accessed Ma	y 30, 2018							

¹⁷ Air District, GAMAQI, Section 7.14, Pages 65-66

Exposure Risks

The location of a project is a major factor in determining whether the project will result in localized air quality impacts. The potential for adverse air quality impacts increases as the distance between the source of emissions and receptors decreases. From a health risk perspective, there are two (2) categories of projects that have the potential to cause long-term health risks impacts:

- > Type A Projects: Land use projects that will place new toxic sources in the vicinity of existing receptors. This category includes sources of toxic emissions such as gasoline dispensing facilities, asphalt batch plants, warehouse distribution centers, freeways and high traffic roads, and other stationary sources that emit toxic substances.
- > Type B Projects: Land use projects that will place new receptors in the vicinity of existing toxic sources. This category includes residential, commercial, and institutional developments proposed in the vicinity of existing sources such as stationary sources, freeways and high traffic roads, rail yards, and warehouse distribution centers. 18

"Various tools already exist to perform a screening analysis from stationary sources impacting receptors (Type A projects) as developed for the AB2588 Hot Spots and air district permitting programs. Screening tools may include prioritization charts, AERSCREEN and various spreadsheets. For projects being impacted by existing sources (Type B projects), one screening tool is contained in the ARB Handbook: *Air Quality and Land Use Handbook: A Community Health Perspective*. The document includes a table entitled "*Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities*" with recommended buffer distances associated with various types of common sources. If a proposed project is located within an established buffer distance to any of the listed sources, a health risk screening and/or assessment should be performed to assess risk to potential sensitive receptors. These guidelines are intended only for projects that are impacted by a single source. Another useful tool is the CAPCOA Guidance Document: *Health Risk Assessments for Proposed Land Use Projects*. CAPCOA prepared the guidance to assist Lead Agencies in complying with CEQA requirements. The guidance document describes when and how a health risk assessment should be prepared and what to do with the results." 19

Table 7 presents the Air District's and ARB's siting recommendations for projects proposing sensitive land uses.

¹⁸ Air District, GAMAQI, Section 6.5, Page 44

¹⁹ Air District, GAMAQI, Section 6.5, Page 45

Table 7: AR	RB Recommendations on Siting New Sensitive Land Uses
Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week).
	Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district.
	Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.
Sources:	<u> </u>

Sources

Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, Table 1-1, https://www.arb.ca.gov/ch/handbook.pdf, accessed May 30, 2018.

California Air Pollution Control Officers Association, *Health Risk Assessments for Proposes Land Use Projects*, Table 2, http://www.valleyair.org/transportation/CAPCOA HRA LU Guidelines 8-6-09.pdf, accessed May 30, 2018.

"Determination of whether project emissions would expose sensitive receptors to substantial pollutant concentrations is a function of assessing potential health risks. Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. When evaluating whether a development proposal has the potential to result in localized impacts, Lead Agency staff need to consider the nature of the air pollutant emissions, the proximity between the emitting facility and sensitive receptors, the direction of prevailing winds, and local topography. Lead Agencies are encouraged to use the screening tools for Toxic Air Contaminant presented in section 6.5 (Potential Land Use Conflicts and Exposure of Sensitive Receptors [pages 44 – 45 of the GAMAQI]) to identify potential conflicts between land use and sensitive receptors and include the result of their analysis in the referral document." ²⁰

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²⁰ Air District, GAMAQI, Section 7.15, Page 66

Nuisance Odors

"Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine the presence of a significant odor impact. Rather, the District recommends that odor analyses strive to fully disclose all pertinent information. The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley. These are presented in Chapter 8 [of the GAMAQI] along with a reasonable distance from the source within which, the degree of odors could possibly be significant."²¹

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing receptor. The second occurs when a new receptor locates near an existing source of odor. "An analysis of potential odor impacts should be conducted for the following two situations:

- 1. Generators projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and
- 2. Receivers residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources." ²²

"The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley Air Basin. These are presented in Table 6 (Screening Levels For Potential Odor Sources) [of the GAMAQI] along with a reasonable distance from the source within which, the degree of odors could possibly be significant. Table 6 (Screening Levels for Potential Odor Sources) [of the GAMAQI], can be used as a screening tool to qualitatively assess a project's potential to adversely affect area receptors. This list of facilities is not all-inclusive. The Lead Agency should evaluate facilities not included in the table or projects separated by greater distances if warranted by local conditions or special circumstances. If the proposed project would result in sensitive receptors being located closer than the screening level distances, a more detailed analysis should be provided."²³

Table 8 presents the Air District's screening levels for potential nuisance odor sources.

²¹ Air District, GAMAQI, Section 7.16, Pages 66-67

²² Air District, GAMAQI, Section 8.6, Page 102

²³ Air District, GAMAQI, Section 8.6, Pages 102-103

Table 8. Air District Screening Levels for Potent	ual Odor Sources
Odor Generator / Type of Facility	Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile

EMISSION MODELING

Pursuant to Air District recommendations, Project-related GHG emissions were quantified using CalEEMod 2016.3.2.²⁴ "CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use."²⁵

There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. To evaluate a worst-case emissions scenario, this assessment assumes that all projected growth through planning horizon year 2030 will occur in one phase beginning in January 2019, with operation beginning in 2020. One (1) modeling run was conducted to quantify construction- and operations-related criteria pollutant emissions as a result of implementation of the Project (see Attachment 2). This modeling includes reductions resulting from compliance with existing rules and regulations. Default model values were used, except where Air District-approved changes are accepted or changes are supported with documentation (see Attachment 1).

Air District, GAMAQI, Section 7.7.2, Page 56; and Air District, Transition from CalEEMod 2013 to CalEEMod 2016 http://www.valleyair.org/transportation/ceqa_idx.htm, accessed May 30, 2018

²⁵ Air District, GAMAQI, Section 7.7.2, Page 56

IMPACT EVALUATION

AIR QUALITY IMPACTS

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Project Impact Analysis: Less Than Significant Impact

There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. However, the Plan does include updates to land use designations that could increase the buildout potential of the planning area. As such, the analysis estimates the increase in emissions based on the 1.3% annual growth rate projected for the County in the Tulare County 2030 General Plan. The growth rate was applied to the existing development in the 2016 base year to determine the amount of development that would occur by 2030. Although other types of development may be constructed consistent with the existing General Plan and Zoning designations, the land uses selected for evaluation are representative of common development types found in rural communities and provide a reasonable estimate for determining potential impacts. Project-related criteria pollutant emissions are summarized in **Table 9**.

Table 9. Project-Related Criteria Air Pollutant Emissions										
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}				
Construction Emissions										
Total Construction through Planning Horizon (tons/year)	6.7699	24.2355	23.3386	0.0665	4.4113	1.8024				
Average Annual Construction (tons/year)	0.6770	2.4326	2.3339	0.0064	0.4411	0.1802				
CEQA Significance Threshold (tons/year)	10	10	100	27	15	15				
Exceeds CEQA Threshold?	No	No	No	No	No	No				
Average Daily Construction (pounds/day) a	5.1284	18.3602	17.6808	0.0504	3.3419	1.3655				
AAQA Screening Threshold (pounds/day)	100	100	100	100	100	100				
Exceeds Screening Threshold?	No	No	No	No	No	No				
Operational Emissions										
Total Operations at Full Buildout (tons/year)	11.9923	69.0009	70.7950	0.2003	10.5799	3.0159				
Average Annual Operations	1.1992	6.9001	7.0795	0.0200	1.0580	0.3016				
CEQA Significance Threshold (tons/year)	10	10	100	27	15	15				
Exceeds CEQA Threshold?	No	No	No	No	No	No				
Average Daily Operation (pounds /day) b	6.5711	37.8087	38.7918	0.1098	5.7972	1.6525				
AAQA Screening Threshold (pounds/day)	100	100	100	100	100	100				
Exceeds Screening Threshold?	No	No	No	No	No	No				
Source: Summary Tables 8 & 9 (see Attachment 1) and CalF	EMod report (see Attachme	nt 2)		•	•				

Using the model's default construction timeline, it would take approximately five (5) years for projected growth to be completely built out. However, the default construction timeline does not take into consideration that for large projects there may be overlap in construction activities. As

there are no developments proposed with the Project and most construction phases will occur with each new development project depending on project specifications, it is assumed that construction would occur throughout the remaining life of the Project (that is, between 2019 and 2029). Likewise, it is assumed that operations would also occur throughout the remaining life of the Project (between 2020 and 2030). To provide a conservative estimate, the projected growth between 2016 and 2019 was included in the analysis thereby resulting in higher emissions than would occur assuming the projected growth has already been realized for that 3-year period. As such, the total emissions were assessed using a worst-case emissions scenario using 2020 emission factors for operations of full buildout as estimated for the period 2016-2030. Total emissions from that 14-year planning period were then divided by the remaining 10 years to estimate annual average operations.

As demonstrated in **Table 9**, the estimated average annual criteria pollutant emissions resulting from future buildout of the UDB do not exceed the Air District CEQA thresholds of significance identified in **Table 2** for either construction or operations. There are no specific development projects associated with the Community Plan Update that would result in emissions exceeding Air District thresholds; but, because future development is unknown and dependent upon the timing that actual developments are proposed and their project-specific details, there is potential for annual emissions to exceed the emissions presented in **Table 9**. However, future developments will be subject to additional CEQA review and project-specific emissions will be evaluated at the time of submittal. The County will consult with the Air District on a project-by-project basis as new developments are proposed to evaluate potential impacts based on project-specific details and determine whether a localized pollutant analysis (such as an Ambient Air Quality Analysis or Health Risk Assessment) would be required. Future developments will comply with all applicable Air District rules and regulations. As such, the Project would not conflict with or obstruct implementation of the applicable Air Quality Plans. Therefore, the Project will have a *Less Than Significant Project-specific Impact* related to this Checklist Item.

Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Air Basin. The emissions analysis demonstrates the Project will not exceed the Air District's thresholds of significance. As such, the Project will not conflict with or obstruct implementation of the applicable air quality plans. Furthermore, the County will consult with the Air District on a project-by-project basis, and future developments will be required to implement all applicable General Plan policies and to comply with all applicable Air District rules and regulations. Therefore, the Project will result in a *Less Than Significant Cumulative Impact* related to this Checklist Item.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

As previously noted, the Project will not exceed the Air District's thresholds of significance and will not conflict with or obstruct implementation of the applicable air quality plans. Therefore, *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Project Impact Analysis: Less Than Significant Impact

Nearly all development projects have the potential to generate pollutants that will worsen air quality, so it is necessary to evaluate air quality impacts to comply with California Environmental Quality Act. Pursuant to Air District guidance, if project emissions would not exceed State and Federal ambient air quality standards at the project property boundaries, the project would be considered to not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The Air District applies a screening threshold of 100 pounds per day (lb/day) of any criteria pollutant to determine whether an ambient air quality analysis (AAQA) would be required to determine significance of potential impacts. As presented in **Table 9**, the estimated annual daily emissions do not exceed the 100 lb/day AAQA screening threshold. However, to ensure that future development would not contribute substantially to existing or projected air quality violations, the County will consult with the Air District on a project-by-project basis as new developments are proposed to determine whether an AAQA is warranted. Future developments will be required to implement all applicable General Plan and Community Plan policies and to comply with all applicable Air District rules and regulations. Therefore, the Project will have a Less Than Significant Project-specific Impact related to this Checklist Item.

Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is San Joaquin Valley Air Basin. Project-related emissions fall below the Air District's 100 lb/day AAQA screening threshold. As such, the Project will not violate any air quality standards or contribute substantially to an existing or projected air quality violation. The County will consult with the Air District on a project-by-project basis as new developments are proposed to determine whether an AAQA is warranted. The Project will be required to implement all applicable General Plan policies and to comply with all applicable Air District rules and regulations. Therefore, the Project will have a *Less Than Significant Cumulative Impact* related to this Checklist Item.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

As previously noted, the Project will not will not violate any air quality standards or contribute substantially to an existing or projected air quality violation. Therefore, *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Project Impact Analysis: Less Than Significant Impact

The Project would be considered to have a significant cumulative impact on air quality if project-specific impacts are determined to be significant. As previously noted, the emissions analysis confirms that Project-specific emissions are below the Air District's thresholds of significance at a project-specific level, and that the Project will not cause or contribute to an existing air quality violation. Furthermore, the County will consult with the Air District on a project-by-project basis to ensure that future developments are implemented consistent with Air District rules and regulations, including Regulation VIII and Rule 9510 (Indirect Source Review). The Project will be required to implement all applicable General Plan policies and to comply with all applicable Air District rules and regulations. Therefore, because the Project would have *Less Than Significant Project-specific Impacts*, the Project will have a *Less Than Significant Cumulative Impact* on air quality.

<u>Cumulative Impact Analysis:</u> Less Than Significant Impact

The Project would be considered to have a significant cumulative impact on air quality if project-specific impacts are determined to be significant. Because project-specific impacts are less than significant, the Project will have a *Less Than Significant Cumulative Impact* on air quality.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

As previously noted, Project-related criteria pollutant emissions fall below the Air District's significance thresholds and the Project will be required to implement all applicable General Plan policies and to comply with all applicable Air District rules and regulations. Therefore, the Project will have a *Less Than Significant Cumulative Impact* related to this Checklist Item.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Project Impact Analysis: Less Than Significant Impact

Sensitive receptors are those individuals who are sensitive to air pollution and include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. The Air District considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units.²⁶

Construction-Related Emissions

Construction Equipment TACs/HAPs: Particulate emissions from diesel powered construction equipment are considered a TAC by the California Air Resources Board. There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. However, future development projects have the potential to temporarily expose receptors to increased pollutant emission concentrations from diesel powered construction equipment during the short-term construction phase. However, construction emissions are temporary and would cease upon completion of construction activities. The short-

²⁶ Air District, Guidance for Assessing and Mitigating Air Quality Impacts, page 10

term nature of construction-related emissions would not expose nearby receptors to substantial TAC concentrations. *Less Than Significant Project-specific Impacts* related to this Checklist Item will occur.

Dust-borne TACs/HAPs: There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. However, future development projects have the potential to temporarily expose nearby receptors to fugitive particulate (dust) emissions during the short-term construction phase or from landscaping activities once the development project is operational. As of August 17, 2018, there were no listings within the Project planning area in the California Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List.²⁷ A query performed on the DTSC Envirostor indicated that there are no superfund, state response, voluntary cleanup, school cleanup or corrective actions within three (3) miles of the Project planning area.²⁸ A query of the State Water Resources Control Board (WRCB) GeoTracker Site and Facilities mapping programs revealed three (3) leaking underground storage tank (LUST) sites within the Project planning area; however, cleanup of each of these sites has been completed and the cases closed.²⁹ A query performed on the U.S. Environmental Protection Agency (EPA) Superfund Enterprise Management System (SEMS) website found that there are no listed polluted sites within the Project planning area. 30 Therefore, fugitive dust emissions resulting from earthmoving activities during construction or landscaping activities during operations, would not expose future residents or nearby receptors to substantial pollutant concentrations. Less Than Significant *Project-specific Impacts* related to this Checklist Item will occur.

There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. However, future development projects have the potential to temporarily expose nearby residences to other airborne hazards from generation of fugitive dust emissions during construction-related earthmoving activities. Although not specifically required by CEQA, the following discussions related to valley fever and asbestos are included to satisfy requirements for full disclosure of potential Project-related impacts and are for information purposes only.

Valley Fever: Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). According to the Centers for Disease Control (CDC), the San Joaquin Valley is considered an endemic area for valley fever.³¹ "People can get Valley fever by breathing in the microscopic fungal spores from the air, although most people who breathe in the spores don't get sick. Usually, people who get sick with Valley fever will get better on their own within weeks to months, but some people will need antifungal medication."³² Construction-related activities generate fugitive dust that could potentially contain *C. immitis* spores. The Project will be required to implement General Plan Policy AQ-4.2 (Dust

²⁷ DTSC. Hazardous Waste and Substance Site List.

https://www.envirostor.dtsc.ca.gov/public/search.asp?page=8&cmd=search&business_name=&main_street_name=&city=&zip=&county=&st atus=ACT%2CBKLG%2CCOM&branch=&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&npl=&funding=&reporttitle=HAZARDO US+WASTE+AND+SUBSTANCES+SITE+LIST&reporttype=CORTESE&federal_superfund=&state_response=&voluntary_cleanup=&sch ool_cleanup=&operating=&corrective_action=&tiered_permit=&evaluation=&spec_prog=&national_priorit y_list=&senate=&congress=&assembly=&critical_pol=&business_type=&case_type=&searchtype=&hwmp_site_type=&cleanup_type=&ocie_erp=&hwmp=False&permitted=&permitted=&inspections=&complaints=&censustract=&cesdecile=&school_district=&orderby=county. Accessed August 17, 2018.

²⁸ DTSC. Envirostor. Sites and Facilities mapping website. https://www.envirostor.dtsc.ca.gov/public/map/, Accessed August 17, 2018.

²⁹ WRCB, GeoTracker, Sites and Facilities mapping website. https://geotracker.waterboards.ca.gov/. Accessed August 17, 2018.

³⁰ EPA, SEMS Search, https://www.epa.gov/enviro/sems-search, accessed August 17, 2018.

³¹ CDC, https://www.cdc.gov/features/valleyfever/index.html, accessed July 25, 2018.

³² CDC, https://www.cdc.gov/fungal/diseases/coccidioidomycosis/index.html, accessed July 25, 2018.

Suppression Measures), which was specifically designed to address impacts from the generation of dust emitted into the air. The Project will be required to comply with Air District Regulation VIII (Fugitive PM10 Prohibitions) requirements, including submittal of construction notification and/or dust control plan(s), which minimize the generation of fugitive dust during construction-related activities. Therefore, implementation of General Plan policies and compliance with Air District rules and regulations would reduce the chance of exposure to valley fever during construction-related activities. *Less Than Significant Project-specific Impacts* related to this Checklist Item will occur.

Naturally Occurring Asbestos: In areas containing naturally occurring asbestos, earthmoving construction-related activities, such as grading and trenching, could expose receptors to windblown asbestos. According to a United States Geological Soil Survey map of areas where naturally occurring asbestos in California are likely to occur, the Project is not located in an area known to contain naturally occurring asbestos.³³ The Project planning area and the immediate vicinity has been previously disturbed by agricultural operations and by residential development. Future development projects will be required to implement General Plan Policy AQ-4.2 (Dust Suppression Measures) to comply with Air District Regulation VIII (Fugitive PM10 Prohibitions) requirements, thereby reducing the chance of exposure to valley fever during construction-related activities. Therefore, Less Than Significant Project-specific Impacts related to this Checklist Item will occur.

Operations-Related Emissions

Operations from Future Development: There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update that would be a source of TAC or HAP emissions. However, construction- and operation-related activities associated with future development projects may require the transport and use of hazardous materials Consumer products and gasoline are regulated by the State and use of these products would not pose a significant risk to residents or nearby receptors. Medium- and Heavyduty diesel trucks would be a source of diesel particulate matter, which is considered to be a TAC. The County will work with the Air District on a project-by-project basis to determine whether health risk assessments would be required for projects generating diesel truck trips travelling through the Project planning area, and for other equipment that may require Air District permits. Furthermore, future applicants will be required to comply with all local, state, and federal policies related to emission of TACs/HAPs in the event such pollutants require control efforts to minimize their impacts. Tulare County Environmental Health Division will require a Hazardous Waste Business Plan if materials exceed 55 gallons (liquids), 500 pounds (solids), or 200 cubic feet (compressed gas) handled or stored on site.³⁴ As such, the Project will not expose sensitive receptors to substantial pollutant concentrations. Less Than Significant **Project-specific Impacts** related to this Checklist Item will occur.

Existing Sources: There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update that would be a source of TAC or

³³ USGS, Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California, http://pubs.usgs.gov/of/2011/1188/, accessed July 25, 2018.

Tulare County Health and Human Services Agency, Environmental Health Division. Hazardous Material Business Plan. https://tularecountyeh.org/eh/index.cfm/our-services/hazardous-materials-cupa/hazardous-materials-business-plan-hmbp/ and https://tularecountyeh.org/eh/index.cfm/guidance-library/hazmat-cupa/hazardous-materials-business-plan-hmbp/business-plan-faqs/. Accessed August 17, 2018.

HAP emissions, and the location of future development projects in close proximity to sensitive receptors cannot be determined until future projects are identified. To ensure that development within the Project planning area does not expose sensitive receptors to significant impacts from TAC emissions, the County will review individual projects on a project-by-project basis to determine if ARB's Air Quality Land Use Handbook screening criteria presented in **Table 7** are exceeded. Projects that exceed the screening criteria will be subject to analysis using screening models or may require dispersion modeling and a health risk assessment. Tulare County will also consult with the Air District during the CEQA process for guidance on the appropriate screening tools and modeling protocols for future development projects within the Plan Update area. Therefore, existing sources of TAC/HAP emissions would not expose receptors to substantial pollutant concentrations. *Less Than Significant Project-specific Impacts* related to this Checklist Item will occur.

Existing Agricultural Operations: The Project planning area is located in a rural area with urban built up land as well as active agricultural operations. Agricultural operations typically include the use of chemicals on crops for activities such as pest control, damage control, weed abatement, etc. However, these chemicals are regulated by the State and would not pose a significant risk to the existing and future residents within the Project planning area. Furthermore, the Tulare County General Plan includes Policy AG-1.14 Right-to-Farm Noticing which requires new property owners to acknowledge and accept the inconveniences associated with normal farming activities. Future development projects adjacent to agricultural lands will be required to sign a "Right to Farm" notice. Less Than Significant Project-specific Impacts related to this Checklist Item will occur.

<u>Cumulative Impact Analysis:</u> Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. The Tulare County General Plan includes policies, which were specifically designed to engage responsible agencies in the CEQA process, to reduce air pollutant emissions through project design, require compliance with emission-reducing regulations, and to address potential impacts from siting incompatible uses in close proximity to each other. Applicable General Plan policies will be implemented for the Project. The County will consult with the Air District on a project-by-project basis as new developments are proposed to evaluate project-specific impacts based on project-specific details and to determine whether a health risk assessment would be needed. Compliance with applicable Air District rules and regulations would further reduce potential impacts from exposure to TAC and HAP emissions, as well as valley fever and asbestos. As such, the development of the proposed Project would not expose the public to substantial pollutant concentrations. Therefore, a *Less Than Significant Cumulative Impact* related to this Checklist Item will occur.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

The Project is not a source nor are there any known existing sources of HAPs or TACs within the Project vicinity. Therefore, the proposed Project would not expose the public to substantial pollutant concentrations. *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

e) Would the project create objectionable odors affecting a substantial number of people?

Project Impact Analysis: Less Than Significant Impact

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update that would be a source of nuisance odors. However, as the Community Plan is built out, dependent upon the location and nature of operations, potential exists for odor impacts to occur resulting from existing and/or new agricultural, commercial, and industrial land uses.

Potential odor sources associated with construction-related activities could originate from diesel exhaust from construction equipment and fumes from architectural coating and paving operations. However, construction-related odors, if perceptible, would dissipate as they mix with the surrounding air and would be of very limited duration. As such, objectionable odors during construction would not affect a substantial number of people.

As presented in **Table 8**, the Air District has determined the common land use types that are known to produce odors in the San Joaquin Valley Air Basin. As previously noted, there are no specific development projects associated with the Community Plan Update. However, the existing wastewater treatment facility located southwest of the community and the animal confinement facilities located to the northwest and northeast of the community could be a source of nuisance odors. All projects, with the exception of agricultural operations, are subject to Air District Rule 4102 (Nuisance). Therefore, odors from agriculture-related operations would not be subject to complaint reporting. There is potential for these agricultural operations to generate objectionable odors; however, these odors would be temporary or seasonal. Furthermore, the Tulare County General Plan includes Policy AG-1.14 Right-to-Farm Noticing which requires new property owners to acknowledge and accept the inconveniences associated with normal farming activities. If future developments are proposed adjacent to active agricultural uses, future residents will be required to sign a "Right to Farm" notice. To ensure potential impacts are addressed, if proposed developments were to result in sensitive receptors being located closer than the recommended distances to any odor generator identified in Table 8, a more detailed analysis, is recommended. The detailed analysis would involve contacting the Air District's Compliance Division for information regarding odor complaints Implementation of the applicable General Plan policies and compliance with applicable Air District rules and regulations specifically designed to address air quality and odor impacts, would reduce potential odor impacts. Therefore, the Project would not create or expose existing residents to objectionable odors. Less Than Significant Project-specific Impacts related to this Checklist Item will occur.

Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. As there are no development projects proposed with the Project, the Project does not include any new sources of odors. Future developments will be subject to Air District Rule 4102 (Nuisance) and General Plan Policy AG-1.14 Right-to-Farm Noticing will be implemented. As such, the Project will not

expose a substantial number of people to objectionable odors. Therefore, *Less Than Significant Cumulate Impacts* related to this Checklist Item will occur.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

The Project is not a source of nuisance odors, nor are there existing sources of permanent odors in the Project vicinity that would affect future residents. As such, the Project will not expose a substantial number of people to objectionable odors. Therefore, *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

ATTACHMENT 1

Changes Made to CalEEMod Defaults Air District Residential Fleet Mix Summary Tables

	Changes to CalEEMod Default	SS .
CalEEMod Module	Project Applicability / Source for Change	Change Made
Project Characteristics: Land Use Setting	The Project is located within an Urban Development Boundary (UDB) but is not considered an urban setting	From Urban to Rural
Project Characteristics: CO ₂ , CH ₄ , and N ₂ O Intensity Factors	Electricity purchased for use at the project site is subject to the 33 percent by 2020 and 50% by 2030 RPS mandate CalEEMod adjusted energy intensity factors with SCE emission factors that show the company will exceed the 33% mandates required in 2020. ¹	Year 2020 values: • CO ₂ – 592.736 • CH ₄ – 0.024 • N ₂ 0 – 0.005
Land Use: Population	The 2016 American Community Survey population and housing data indicate a population density of 3.71 persons per household (3,009 persons / 811 dwelling units)	Population densities were increases across the three residential land use types to add up to the total projected population growth of 161 dwellings and 596 residents.
Land Use: Lot Acreage	Non-residential growth projections are based on existing land uses within the proposed UDB planning area, assumes a floor to area ratio of 0.20, and a 1.3% growth rate.	Acres changed to reflect projection of what is reasonably forseeable for future development. Retail: convenience market, strip mall, and fast food Commercial: general office Industrial: general light industrial
Operation: Residential Vehicle Fleet	Air District accepted residential fleet mix. ²	Year 2020 values LDA - 54.02% LTD1 - 19.72% LTD2 - 16.68% MDV - 5.40% LHDT1 - 0.16% LHDT2 - 0.09% MHDT - 0.91 % HHDT - 2.06% OBUS -0.00% UBUS - 0.44% MCY - 0.26% SBUS - 0.11% MH - 0.15%

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Based on default SCE 2012 rate and calculated back for 33% emission factor for 2020 & 50% emission factor for 2030, which based on current reports is still higher than the actual achieved. The 2017 Sustainability Report Scorecard states that in 2015 SCE obtained an RPS of 24.3% with a delivered emission rate of 517; in 2016 SCE obtained an RPS of 28.3% and an emission rate of 529 lbs/MWh; and, in 2017 SCE obtained an RPS of 31.6 % with an emission rate of 549 (see https://www.edison.com/content/dam/eix/documents/sustainability/eix-2017-sustainability-report.pdf). As such, these revised values represent a conservative (worst-case) estimate for CEQA purposes.

San Joaquin Valley Unified Air Pollution Control District. http://www.valleyair.org/ISR/Documents/Residential-Fleet-Mix.pdf. Accessed August 3, 2018

Changes to CalEEMod Defaults								
Project Applicability / Source for Change	Change Made							
Air District Rule 4901 requirements allows 1 wood burning fireplace or stove per home if density is ≤2 units per acre	It is assumed that new residential growth will be consistent with or exceeding the density of the existing community (greater than 2 du per acre).							
Compliance with Air District Regulation VIII requirements	Water Exposed Area: water twice daily							
Compliance with Air District Regulation VIII requirements	Unpaved Road Mitigation: limit vehicle speed to 15 mph							
The project is located within 8 miles of the City of Porterville	Improve Destination Accessibility – Distance to Downtown/Job Center: 8 miles							
The boundaries of the entire community is only approximately 1 mile going north-south and 1 mile going east-west.	Distance to Transit Accessibility: 1 mile.							
County building code requires sidewalks in new developments within an UDB	Improve Pedestrian Network: Project Site							
It is assumed that new residential growth will be consistent with or exceeding the density of the existing community (greater than 2 du per acre).	Only Natural Gas Hearth: Checked							
Air District has accepted defaults for electric landscaping equipment of 3%	3% for electric mower, electric leafblower, and electric chainsaw							
California 2019 Title 24 is in effect until January 1, 2020.	Exceed Title 24: 7%							
Current (2016) California Building Code	Indoor Water Use: Low Flow Fixtures							
The project landscaping will comply with the California Water Efficient Landscape Ordinance regulation.	Outdoor Water Use: Use Water- Efficient Irrigation Systems – 6.1% reduction ⁴							
	Project Applicability / Source for Change Air District Rule 4901 requirements allows 1 wood burning fireplace or stove per home if density is ≤2 units per acre Compliance with Air District Regulation VIII requirements Compliance with Air District Regulation VIII requirements The project is located within 8 miles of the City of Porterville The boundaries of the entire community is only approximately 1 mile going north-south and 1 mile going east-west. County building code requires sidewalks in new developments within an UDB It is assumed that new residential growth will be consistent with or exceeding the density of the existing community (greater than 2 du per acre). Air District has accepted defaults for electric landscaping equipment of 3% California 2019 Title 24 is in effect until January 1, 2020³ Current (2016) California Building Code The project landscaping will comply with the California Water Efficient							

³ California Energy Commission. 2019 Building Energy Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf. Accessed August 2, 2018.

California Department of Water Resources. California Water Efficient Landscape Ordinance.
 https://water.ca.gov/LegacyFiles/wateruseefficiency/docs/MWELO09-10-09.pdf. Accessed August 2, 2018.

District Accepted Fleet Mix for Residential Projects

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
2013	0.5322	0.1901	0.1671	0.0628	0.0020	0.0011	0.0097	0.0243	0.0000	0.0047	0.0032	0.0012	0.0016
2014	0.5352	0.1905	0.1673	0.0609	0.0019	0.0010	0.0095	0.0232	0.0000	0.0047	0.0030	0.0012	0.0016
2015	0.5376	0.1911	0.1676	0.0591	0.0018	0.0010	0.0096	0.0219	0.0000	0.0047	0.0029	0.0011	0.0016
2016	0.5398	0.1917	0.1674	0.0576	0.0018	0.0010	0.0094	0.0213	0.0000	0.0046	0.0028	0.0011	0.0015
2017	0.5410	0.1927	0.1671	0.0563	0.0017	0.0010	0.0093	0.0210	0.0000	0.0045	0.0028	0.0011	0.0015
2018	0.5412	0.1941	0.1669	0.0553	0.0017	0.0009	0.0092	0.0209	0.0000	0.0045	0.0027	0.0011	0.0015
2019	0.5411	0.1955	0.1669	0.0545	0.0016	0.0009	0.0091	0.0208	0.0000	0.0044	0.0026	0.0011	0.0015
2020	0.5402	0.1972	0.1668	0.0540	0.0016	0.0009	0.0091	0.0206	0.0000	0.0044	0.0026	0.0011	0.0015
2021	0.5373	0.2000	0.1671	0.0542	0.0014	0.0009	0.0090	0.0206	0.0000	0.0044	0.0026	0.0009	0.0016
2022	0.5343	0.2030	0.1673	0.0545	0.0013	0.0009	0.0086	0.0207	0.0000	0.0044	0.0025	0.0007	0.0018
2023	0.5305	0.2058	0.1673	0.0550	0.0011	0.0009	0.0085	0.0218	0.0000	0.0043	0.0025	0.0004	0.0019
2024	0.5277	0.2090	0.1675	0.0556	0.0009	0.0009	0.0080	0.0214	0.0000	0.0043	0.0025	0.0002	0.0020
2025	0.5244	0.2120	0.1677	0.0563	0.0008	0.0009	0.0076	0.0212	0.0000	0.0043	0.0025	0.0001	0.0022
2026	0.5215	0.2146	0.1681	0.0569	0.0008	0.0009	0.0075	0.0203	0.0000	0.0044	0.0025	0.0002	0.0023
2027	0.5185	0.2170	0.1684	0.0575	0.0008	0.0010	0.0074	0.0195	0.0000	0.0044	0.0025	0.0005	0.0025
2028	0.5159	0.2192	0.1686	0.0582	0.0008	0.0010	0.0074	0.0187	0.0000	0.0044	0.0025	0.0007	0.0026
2029	0.5134	0.2212	0.1688	0.0587	0.0008	0.0010	0.0074	0.0181	0.0000	0.0044	0.0025	0.0009	0.0028
2030	0.5110	0.2231	0.1690	0.0593	0.0008	0.0010	0.0074	0.0173	0.0000	0.0044	0.0025	0.0012	0.0030
2031	0.5076	0.2254	0.1693	0.0598	0.0008	0.0010	0.0074	0.0174	0.0000	0.0044	0.0026	0.0012	0.0031
2032	0.5044	0.2274	0.1696	0.0602	0.0008	0.0010	0.0075	0.0176	0.0000	0.0044	0.0026	0.0012	0.0033
2033	0.5014	0.2291	0.1700	0.0606	0.0008	0.0010	0.0075	0.0178	0.0000	0.0044	0.0027	0.0012	0.0035
2034	0.4987	0.2308	0.1703	0.0609	0.0008	0.0010	0.0076	0.0180	0.0000	0.0044	0.0027	0.0012	0.0036
2035	0.4960	0.2323	0.1707	0.0613	0.0008	0.0010	0.0076	0.0182	0.0000	0.0044	0.0027	0.0012	0.0038
2036	0.4933	0.2333	0.1709	0.0615	0.0008	0.0010	0.0077	0.0191	0.0000	0.0044	0.0029	0.0012	0.0039
2037	0.4907	0.2341	0.1710	0.0618	0.0009	0.0010	0.0078	0.0202	0.0000	0.0044	0.0030	0.0011	0.0040
2038	0.4883	0.2348	0.1712	0.0620	0.0009	0.0010	0.0078	0.0213	0.0000	0.0044	0.0031	0.0011	0.0041
2039	0.4857	0.2356	0.1714	0.0623	0.0009	0.0010	0.0079	0.0223	0.0000	0.0043	0.0032	0.0011	0.0043
2040	0.4834	0.2363	0.1716	0.0625	0.0009	0.0010	0.0079	0.0233	0.0000	0.0043	0.0033	0.0011	0.0044

Table 1. Utility Information for RPS Requirements - Southern California Edison

	CalEEMod						
	Default with RPS						
	(based on 2012	2012 RPS	2012 adjusted	2020 RPS	2020	2030 RPS	2030
Intensity	data)	Reductions [*]	without RPS	requirements	Adjusted	requirements	Adjusted
CO2	702.440	0.206	884.685	0.33	592.739	0.5	442.343
CH4	0.029	0.206	0.037	0.33	0.024	0.5	0.018
N20	0.00617	0.206	0.008	0.33	0.005	0.5	0.004

^{*} per CalEEMod Appendix D, Table 1.2 - based on SCE's 2012 Corporate Responsibility & Sustainability report

Table 2. RPS Actually Achieved - Southern California Edison

Year	RPS	Source of RPS Achieved
2013	21.6%	https://www.sce.com/wps/wcm/connect/c0fceef5-e04a-4287-8301-
2014	72.5%	8e66e3e5fbac/2014 Corporate+Responsibility+Report FINAL+single-page.pdf?MOD=AJPERES&ContentCache=NONE
2015	24.3%	8e66e5e5fbac/2014 Corporate+Responsibility+Report Final+Single-page.pdiFinOD=AJPERE5&ContentCache=NONE
2016	28.3%	https://www.edison.com/content/dam/eix/documents/investors/corporate_responsibility/2016-eix-corporate_
2017	31.6%	https://www.edison.com/content/dam/eix/documents/sustainability/eix-2017-sustainability-report.pdf

According to the SCE Scorecard for 2015, 2016, and 2017, SCE are on target to meet the RPS requirements

TABLE 3. Population Growth

Year	Population	Total Housing
2016	3,009	811
2017	3,048	822
2018	3,088	832
2019	3,128	843
2020	3,169	854
2021	3,210	865
2022	3,251	876
2023	3,294	888
2024	3,337	899
2025	3,380	911
2026	3,424	923
2027	3,468	935
2028	3,513	947
2029	3,559	959
2030	3,605	972

Growth based on 2016 ACS data and 1.3% annual growth rate.

TABLE 4. Projected Housing Needs

				Increase f	rom 2016
	% Total Units	Total Units	Population	Units	Population
Baseline Year 2016					
Single-family homes	72.6%	589	2,185		
Multi-family homes	13.4%	109	403		
Mobile homes	13.1%	106	394		
Other	0.9%	7	27		
Total Units	100.0%	811	3,009		
Operational Year 2020					
Single-family homes	72.6%	620	2,301	31	116
Multi-family homes	13.4%	114	425	6	21
Mobile homes	13.1%	112	415	6	21
Other	0.9%	8	29	0	1
Total Units	100.0%	854	3,169	43	160
Horizon Year 2030					
Single-family homes	72.6%	706	2,617	117	433
Multi-family homes	13.4%	130	483	22	80
Mobile homes	13.1%	127	472	21	78
Other	0.9%	9	32	1	5
Total Units	100.0%	972	3,605	161	596

Housing unit types and percentages based on 2016 ACS data; growth based on 1.3% annual growth rate.

TABLE 5. Commercial Growth

Year	FAR	Total Acres	Bldg. Acres	Bldg. SF
2016	0.20	16.24	3.25	141,483
2017	0.20	16.45	3.29	143,322
2018	0.20	16.66	3.33	145,185
2019	0.20	16.88	3.38	147,073
2020	0.20	17.10	3.42	148,985
2021	0.20	17.32	3.46	150,922
2022	0.20	17.55	3.51	152,883
2023	0.20	17.78	3.56	154,871
2024	0.20	18.01	3.60	156,884
2025	0.20	18.24	3.65	158,924
2026	0.20	18.48	3.70	160,990
2027	0.20	18.72	3.74	163,083
2028	0.20	18.96	3.79	165,203
2029	0.20	19.21	3.84	167,350
2030	0.20	19.46	3.89	169,526
Projected Commercia	l Growth	3.22	0.64	28,043

TABLE 6. Retail Growth

Year	FAR	Total Acres	Bldg. Acres	Bldg. SF
2016	0.20	41.62	8.32	362,593
2017	0.20	42.16	8.43	367,307
2018	0.20	42.71	8.54	372,082
2019	0.20	43.26	8.65	376,919
2020	0.20	43.83	8.77	381,819
2021	0.20	44.40	8.88	386,783
2022	0.20	44.97	8.99	391,811
2023	0.20	45.56	9.11	396,905
2024	0.20	46.15	9.23	402,064
2025	0.20	46.75	9.35	407,291
2026	0.20	47.36	9.47	412,586
2027	0.20	47.97	9.59	417,950
2028	0.20	48.60	9.72	423,383
2029	0.20	49.23	9.85	428,887
2030	0.20	49.87	9.97	434,462
Projected Retail Growth	1	8.25	1.65	71,869

TABLE 7. Industrial Growth

Year	FAR	Total Acres	Bldg. Acres	Bldg. SF
2016	0.20	36.69	7.34	319,643
2017	0.20	37.17	7.43	323,799
2018	0.20	37.65	7.53	328,008
2019	0.20	38.14	7.63	332,272
2020	0.20	38.64	7.73	336,592
2021	0.20	39.14	7.83	340,967
2022	0.20	39.65	7.93	345,400
2023	0.20	40.16	8.03	349,890
2024	0.20	40.68	8.14	354,439
2025	0.20	41.21	8.24	359,046
2026	0.20	41.75	8.35	363,714
2027	0.20	42.29	8.46	368,442
2028	0.20	42.84	8.57	373,232
2029	0.20	43.40	8.68	378,084
2030	0.20	43.96	8.79	382,999
Projected Industrial Growth		7.27	1.45	63,356

Notes:

Non-residential growth projections are based on existing land uses within the proposed UDB planning area and assumes a floor to area ratio of 0.20. Retail modeled equally between "convenience market", "strip mall", and "fast food".

Commercial modeled as "general office".

Industrial modeled as "light industrial".

TABLE 8. Construction-Related Criteria Pollutant Emissions

	ROG	NO _x	со	SO _x	PM ₁₀	PM _{2.5}		
CalEEMod Projected Construction Emissions ^{a, b}								
2019	0.6050	6.0268	4.0094	8.06E-03	0.7904	0.4678		
2020	0.6825	4.9567	5.0112	1.44E-02	0.9080	0.3537		
2021	0.6116	4.8590	4.6623	1.41E-02	0.8774	0.3267		
2022	0.5571	4.1126	4.3931	1.38E-02	0.8537	0.3064		
2023	0.5032	3.5295	4.1391	1.35E-02	0.8360	0.2897		
2024	3.8105	0.7509	1.1235	2.64E-03	0.1458	0.0581		
Total Construction Emissions (tons/year)	6.7699	24.2355	23.3386	0.0665	4.4113	1.8024		
Highest Annual Emissions (tons/year)	3.8105	6.0268	5.0112	0.0144	0.908	0.4678		
Average Annual Construction Emissions (tons/year) c	0.6770	2.4236	2.3339	0.0067	0.4411	0.1802		
CEQA Significance Threshold (tons/year)	10	10	100	27	15	15		
Exceed CEQA Threshold?	No	No	No	No	No	No		
Average Daily Construction Emission (pounds/day) d	5.1287	18.3602	17.6808	0.0504	3.3419	1.3655		
AAQA Screening Thresholds (pounds/day)	100	100	100	100	100	100		
Exceed AAQA Screening Threshold?	No	No	No	No	No	No		

^a Annual emissions are presented in tons per year; see CalEEMod report "*Poplar-Cotton Center Community Plan Update*", page 6. This timeline is the default timeline based on total projected buildout within the UDB through year 2030.

TABLE 9. Operation-Related Criteria Pollutant Emissions

	ROG	NO _x	со	SO _x	PM ₁₀	PM _{2.5}
CalEEMod Projected Operational Emissions a, b						
Area	2.0953	0.0740	1.2180	4.50E-04	0.0114	0.0114
Energy	0.0412	0.3640	0.2368	2.25E-03	0.0285	0.0285
Mobile	9.8558	68.5629	69.3402	0.1976	10.5400	2.9760
Waste					0.0000	0.0000
Water					0.0000	0.0000
Total Operational Emissions at Buildout (tons/year)	11.9923	69.0009	70.7950	0.2003	10.5799	3.0159
Average Annual Operational Emissions (tons/year) °	1.1992	6.9001	7.0795	0.0200	1.0580	0.3016
CEQA Significance Threshold (tons/year)	10	10	100	27	15	15
Exceed CEQA Threshold?	No	No	No	No	No	No
Average Daily Operational Emissions (pounds/day) ^d	6.5711	37.8087	38.7918	0.1098	5.7972	1.6525
AAQA Screening Threshold	10	10	100	27	15	15
Exceed AAQA Screening Threshold?	No	No	No	No	No	No

^a Annual emissions are in tons per year; see CalEEMod report " "Poplar-Cotton Center Community Plan Update", page 9.

^b Road Maintenance and Complete Streets are included in the paving operations as "Other Asphalt Surfaces".

^c CalEEMod assumes that all paving and architectural coatings occur at the end of construction. Because there are no developments included in this project and future development is unknown, it is assumed that construction will occur consistently through the life of the project (2019-2029). As such, the Average Total Construction Emissions is the sum of all construction divided by 10 years.

^d Average Daily Construction is the Average Annual Construction Emissions mulitplied by 2,000 pounds, then divided by 264 working construction days per year.

^b Road Maintenance and Complete Streets are included in the paving operations as "Other Asphalt Surfaces".

^c Because there are no developments included in this project and future development is unknown, it is assumed that future projects will develop consistently throughout the planning horizon (2020-2030). As such, the Average Annual Operational Emissions is the Total Operational Emissions at Buildout divided by 10 years.

d Average Daily Operation is the Average Annual Operational Emissions mulitplied by 2,000 pounds, then divided by 365 operating days per year.

ATTACHMENT 2

CalEEMod Emissions Modeling

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	28.00	1000sqft	3.22	28,000.00	0
General Light Industry	63.00	1000sqft	7.27	63,000.00	0
Other Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0
Fast Food Restaurant with Drive Thru	24.00	1000sqft	2.75	24,000.00	0
Apartments Low Rise	22.00	Dwelling Unit	1.38	22,000.00	80
Mobile Home Park	22.00	Dwelling Unit	2.77	26,400.00	83
Single Family Housing	117.00	Dwelling Unit	37.99	210,600.00	433
Convenience Market (24 Hour)	23.00	1000sqft	2.75	23,000.00	0
Strip Mall	24.00	1000sqft	2.75	24,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	7			Operational Year	2020
Utility Company	Southern California Ediso	n			
CO2 Intensity (lb/MWhr)	592.74	CH4 Intensity (lb/MWhr)	0.024	N2O Intensity (lb/MWhr)	0.005

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - 2020 RPS mandates

Land Use - population based on 3.71 person/unit per 2016 ACS data; non-residential lot acres based on 1.3% annual growth of existing uses; other asphalt is road maintenance activities

Energy Use -

Construction Off-road Equipment Mitigation - Regulation VIII requirements

Mobile Land Use Mitigation - UDB near City of Porterville; County building requirements within UDB

Area Mitigation - residential expected to be constructed with density exceeding 2 du/acre; Air District allowance for electrical equipment

Energy Mitigation - 2019 Title 24 effective 1/1/20

Water Mitigation - 2016 CA Building Code; Tulare County ordinance

Fleet Mix - Air District approved residential fleet for year 2020

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.08	0.02
tblFleetMix	HHD	0.08	0.02
tblFleetMix	HHD	0.08	0.02
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003

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tblFleetMix	LHD2	5.7980e-003	9.0000e-004
tblFleetMix	LHD2	5.7980e-003	9.0000e-004
tblFleetMix	LHD2	5.7980e-003	9.0000e-004
tblFleetMix	MCY	4.4020e-003	2.6000e-003
tblFleetMix	MCY	4.4020e-003	2.6000e-003
tblFleetMix	MCY	4.4020e-003	2.6000e-003
tblFleetMix	MDV	0.15	0.05
tblFleetMix	MDV	0.15	0.05
tblFleetMix	MDV	0.15	0.05
tblFleetMix	MH	8.1800e-004	1.5000e-003
tblFleetMix	MH	8.1800e-004	1.5000e-003
tblFleetMix	MH	8.1800e-004	1.5000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	OBUS	1.8190e-003	0.00
tblFleetMix	OBUS	1.8190e-003	0.00
tblFleetMix	OBUS	1.8190e-003	0.00
tblFleetMix	SBUS	1.1550e-003	1.1000e-003
tblFleetMix	SBUS	1.1550e-003	1.1000e-003
tblFleetMix	SBUS	1.1550e-003	1.1000e-003
tblFleetMix	UBUS	1.3710e-003	4.4000e-003
tblFleetMix	UBUS	1.3710e-003	4.4000e-003
tblFleetMix	UBUS	1.3710e-003	4.4000e-003
tblLandUse	LotAcreage	0.64	3.22
tblLandUse	LotAcreage	1.45	7.27
tblLandUse	LotAcreage	0.55	2.75

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tblLandUse	LotAcreage	0.53	2.75
tblLandUse	LotAcreage	0.55	2.75
tblLandUse	Population	63.00	80.00
tblLandUse	Population	63.00	83.00
tblLandUse	Population	335.00	433.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblWoodstoves	NumberCatalytic	0.00	1.38
tblWoodstoves	NumberCatalytic	0.00	2.77
tblWoodstoves	NumberCatalytic	0.00	37.99
tblWoodstoves	NumberNoncatalytic	0.00	1.38
tblWoodstoves	NumberNoncatalytic	0.00	2.77
tblWoodstoves	NumberNoncatalytic	0.00	37.99

2.0 Emissions Summary

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2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2019	0.6050	6.0268	4.0094	8.0600e- 003	0.9796	0.2719	1.2515	0.4344	0.2514	0.6858					1	
2020	0.6825	4.9567	5.0112	0.0144	0.7455	0.1624	0.9080	0.2008	0.1529	0.3537		, : : :			,	
2021	0.6116	4.4859	4.6623	0.0141	0.7427	0.1347	0.8774	0.2000	0.1267	0.3267		! ! ! !			1 	
2022	0.5571	4.1126	4.3931	0.0138	0.7398	0.1139	0.8537	0.1993	0.1072	0.3064		! ! ! !			1 	
2023	0.5032	3.5295	4.1391	0.0135	0.7399	0.0962	0.8360	0.1993	0.0905	0.2897		! ! ! !	 			
2024	3.8105	0.7509	1.1235	2.6400e- 003	0.1172	0.0286	0.1458	0.0314	0.0267	0.0581		! ! ! !	 		i i	
Maximum	3.8105	6.0268	5.0112	0.0144	0.9796	0.2719	1.2515	0.4344	0.2514	0.6858						

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	 	NBio-CO2		CH4	N20	CO2e
Maximum	3.8105	6.0268	5.0112	0.0144	0.7455	0.2719	0.9080	0.2164	0.2514	0.4678						
2024	3.8105	0.7509	1.1235	2.6400e- 003	0.1172	0.0286	0.1458	0.0314	0.0267	0.0581		·,		,		
2023	0.5032	3.5295	4.1391	0.0135	0.7399	0.0962	0.8360	0.1993	0.0905	0.2897			 		 	
2022	0.5571	4.1126	4.3931	0.0138	0.7398	0.1139	0.8537	0.1993	0.1072	0.3064		:			i !	
2021	0.6116	4.4859	4.6623	0.0141	0.7427	0.1347	0.8774	0.2000	0.1267	0.3267			i !	 	; ; ;	
2020	0.6825	4.9567	5.0112	0.0144	0.7455	0.1624	0.9080	0.2008	0.1529	0.3537		i !	i i		 	
2019	0.6050	6.0268	4.0094	8.0600e- 003	0.5185	0.2719	0.7904	0.2164	0.2514	0.4678		<u> </u>	i !	i ! !	i !	<u> </u>
Year					tor	ns/yr							M	Γ/yr		
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	BIO- CO2	NBIO- CO2	Total CO2	CH4	N2O	C

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	1.2697	1.2697
2	4-1-2019	6-30-2019	1.6896	1.6896
3	7-1-2019	9-30-2019	1.9556	1.9556
4	10-1-2019	12-31-2019	1.7201	1.7201
5	1-1-2020	3-31-2020	1.4108	1.4108

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6	4-1-2020	6-30-2020	1.3958	1.3958
7	7-1-2020	9-30-2020	1.4112	1.4112
8	10-1-2020	12-31-2020	1.4263	1.4263
9	1-1-2021	3-31-2021	1.2656	1.2656
10	4-1-2021	6-30-2021	1.2678	1.2678
11	7-1-2021	9-30-2021	1.2817	1.2817
12	10-1-2021	12-31-2021	1.2937	1.2937
13	1-1-2022	3-31-2022	1.1635	1.1635
14	4-1-2022	6-30-2022	1.1662	1.1662
15	7-1-2022	9-30-2022	1.1790	1.1790
16	10-1-2022	12-31-2022	1.1894	1.1894
17	1-1-2023	3-31-2023	1.0053	1.0053
18	4-1-2023	6-30-2023	1.0088	1.0088
19	7-1-2023	9-30-2023	1.0199	1.0199
20	10-1-2023	12-31-2023	1.0277	1.0277
21	1-1-2024	3-31-2024	0.6023	0.6023
22	4-1-2024	6-30-2024	1.6670	1.6670
23	7-1-2024	9-30-2024	2.2921	2.2921
		Highest	2.2921	2.2921

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2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	2.9546	0.2013	9.0258	0.0259		1.2838	1.2838		1.2838	1.2838						
Energy	0.0432	0.3813	0.2473	2.3600e- 003		0.0298	0.0298		0.0298	0.0298						
Mobile	10.0732	71.0126	74.4689	0.2183	11.9351	0.2375	12.1725	3.2063	0.2242	3.4305						
Waste	;					0.0000	0.0000		0.0000	0.0000					, , , ,	
Water	;					0.0000	0.0000		0.0000	0.0000					1 1 1 1	
Total	13.0710	71.5953	83.7420	0.2465	11.9351	1.5511	13.4861	3.2063	1.5378	4.7441						

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	2.0953	0.0740	1.2180	4.5000e- 004		0.0114	0.0114		0.0114	0.0114						
Energy	0.0412	0.3640	0.2368	2.2500e- 003		0.0285	0.0285		0.0285	0.0285					1 1	
Mobile	9.8558	68.5629	69.3402	0.1976	10.3261	0.2140	10.5400	2.7741	0.2020	2.9760					1 1 1	
Waste			1 1 1			0.0000	0.0000		0.0000	0.0000					1 1 1	
Water						0.0000	0.0000		0.0000	0.0000		,			1 1	
Total	11.9922	69.0009	70.7950	0.2003	10.3261	0.2539	10.5799	2.7741	0.2419	3.0159						

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	8.25	3.62	15.46	18.77	13.48	83.63	21.55	13.48	84.27	36.43	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	4/8/2019	5	70	
2	Site Preparation	Site Preparation	4/9/2019	6/3/2019	5	40	
3	Grading	Grading	6/4/2019	11/4/2019	5	110	
4	Building Construction	Building Construction	11/5/2019	2/5/2024	5	1110	
5	Paving	Paving	2/6/2024	5/20/2024	5	75	
6	Architectural Coating	Architectural Coating	5/21/2024	9/2/2024	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 14

Residential Indoor: 524,475; Residential Outdoor: 174,825; Non-Residential Indoor: 243,000; Non-Residential Outdoor: 81,000; Striped Parking Area: 36,590 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	390.00	144.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	78.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1230	1.2524	0.7721	1.3600e- 003		0.0628	0.0628	i i	0.0584	0.0584		i i				
Total	0.1230	1.2524	0.7721	1.3600e- 003		0.0628	0.0628		0.0584	0.0584						

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3.2 Demolition - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					 	,
1	3.8100e- 003	2.8100e- 003	0.0278	6.0000e- 005	6.5000e- 003	5.0000e- 005	6.5500e- 003	1.7300e- 003	4.0000e- 005	1.7700e- 003						,
Total	3.8100e- 003	2.8100e- 003	0.0278	6.0000e- 005	6.5000e- 003	5.0000e- 005	6.5500e- 003	1.7300e- 003	4.0000e- 005	1.7700e- 003						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirrioda	0.1230	1.2524	0.7721	1.3600e- 003		0.0628	0.0628		0.0584	0.0584						
Total	0.1230	1.2524	0.7721	1.3600e- 003		0.0628	0.0628		0.0584	0.0584						

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3.2 Demolition - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
1	3.8100e- 003	2.8100e- 003	0.0278	6.0000e- 005	6.5000e- 003	5.0000e- 005	6.5500e- 003	1.7300e- 003	4.0000e- 005	1.7700e- 003						
Total	3.8100e- 003	2.8100e- 003	0.0278	6.0000e- 005	6.5000e- 003	5.0000e- 005	6.5500e- 003	1.7300e- 003	4.0000e- 005	1.7700e- 003						

3.3 Site Preparation - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust	. !				0.3613	0.0000	0.3613	0.1986	0.0000	0.1986						
Off-Road	0.0867	0.9115	0.4413	7.6000e- 004		0.0478	0.0478		0.0440	0.0440					i i i	
Total	0.0867	0.9115	0.4413	7.6000e- 004	0.3613	0.0478	0.4091	0.1986	0.0440	0.2426						

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3.3 Site Preparation - 2019
Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
1	2.6100e- 003	1.9300e- 003	0.0191	4.0000e- 005	4.4600e- 003	3.0000e- 005	4.4900e- 003	1.1900e- 003	3.0000e- 005	1.2100e- 003						
Total	2.6100e- 003	1.9300e- 003	0.0191	4.0000e- 005	4.4600e- 003	3.0000e- 005	4.4900e- 003	1.1900e- 003	3.0000e- 005	1.2100e- 003						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Fugitive Dust					0.1626	0.0000	0.1626	0.0894	0.0000	0.0894		1				
Off-Road	0.0867	0.9115	0.4413	7.6000e- 004		0.0478	0.0478	1 1 1	0.0440	0.0440		 	 		 	: :
Total	0.0867	0.9115	0.4413	7.6000e- 004	0.1626	0.0478	0.2104	0.0894	0.0440	0.1334						

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3.3 Site Preparation - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					 	
Worker	2.6100e- 003	1.9300e- 003	0.0191	4.0000e- 005	4.4600e- 003	3.0000e- 005	4.4900e- 003	1.1900e- 003	3.0000e- 005	1.2100e- 003						
Total	2.6100e- 003	1.9300e- 003	0.0191	4.0000e- 005	4.4600e- 003	3.0000e- 005	4.4900e- 003	1.1900e- 003	3.0000e- 005	1.2100e- 003						

3.4 Grading - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.4770	0.0000	0.4770	0.1978	0.0000	0.1978						
Off-Road	0.2606	2.9986	1.8357	3.4100e- 003		0.1311	0.1311	1 1 1	0.1206	0.1206					 	
Total	0.2606	2.9986	1.8357	3.4100e- 003	0.4770	0.1311	0.6081	0.1978	0.1206	0.3184			-			

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3.4 Grading - 2019
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						,
I Worker	7.9700e- 003	5.8800e- 003	0.0582	1.3000e- 004	0.0136	1.0000e- 004	0.0137	3.6200e- 003	9.0000e- 005	3.7100e- 003						,
Total	7.9700e- 003	5.8800e- 003	0.0582	1.3000e- 004	0.0136	1.0000e- 004	0.0137	3.6200e- 003	9.0000e- 005	3.7100e- 003						

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust) 				0.2147	0.0000	0.2147	0.0890	0.0000	0.0890						
Off-Road	0.2606	2.9986	1.8357	3.4100e- 003		0.1311	0.1311	 	0.1206	0.1206						
Total	0.2606	2.9986	1.8357	3.4100e- 003	0.2147	0.1311	0.3457	0.0890	0.1206	0.2096						

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3.4 Grading - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
1	7.9700e- 003	5.8800e- 003	0.0582	1.3000e- 004	0.0136	1.0000e- 004	0.0137	3.6200e- 003	9.0000e- 005	3.7100e- 003						
Total	7.9700e- 003	5.8800e- 003	0.0582	1.3000e- 004	0.0136	1.0000e- 004	0.0137	3.6200e- 003	9.0000e- 005	3.7100e- 003						

3.5 Building Construction - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cii rtodd	0.0484	0.4321	0.3519	5.5000e- 004		0.0264	0.0264		0.0249	0.0249						
Total	0.0484	0.4321	0.3519	5.5000e- 004		0.0264	0.0264		0.0249	0.0249						

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3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0140	0.3788	0.0805	7.8000e- 004	0.0177	2.8900e- 003	0.0205	5.1000e- 003	2.7700e- 003	7.8700e- 003						
Worker	0.0580	0.0428	0.4230	9.6000e- 004	0.0990	7.0000e- 004	0.0997	0.0263	6.4000e- 004	0.0270						
Total	0.0719	0.4216	0.5035	1.7400e- 003	0.1167	3.5900e- 003	0.1203	0.0314	3.4100e- 003	0.0348						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0484	0.4321	0.3519	5.5000e- 004		0.0264	0.0264		0.0249	0.0249						
Total	0.0484	0.4321	0.3519	5.5000e- 004		0.0264	0.0264		0.0249	0.0249						

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3.5 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0140	0.3788	0.0805	7.8000e- 004	0.0177	2.8900e- 003	0.0205	5.1000e- 003	2.7700e- 003	7.8700e- 003						,
Worker	0.0580	0.0428	0.4230	9.6000e- 004	0.0990	7.0000e- 004	0.0997	0.0263	6.4000e- 004	0.0270						,
Total	0.0719	0.4216	0.5035	1.7400e- 003	0.1167	3.5900e- 003	0.1203	0.0314	3.4100e- 003	0.0348						

3.5 Building Construction - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2777	2.5134	2.2072	3.5300e- 003		0.1463	0.1463		0.1376	0.1376						
Total	0.2777	2.5134	2.2072	3.5300e- 003		0.1463	0.1463		0.1376	0.1376						

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3.5 Building Construction - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0704	2.2052	0.4365	4.9300e- 003	0.1128	0.0119	0.1246	0.0326	0.0113	0.0439						,
Worker	0.3344	0.2381	2.3675	5.9600e- 003	0.6328	4.2600e- 003	0.6370	0.1682	3.9200e- 003	0.1721						,
Total	0.4048	2.4433	2.8040	0.0109	0.7455	0.0161	0.7616	0.2008	0.0153	0.2161						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cil rioda	0.2777	2.5134	2.2072	3.5300e- 003		0.1463	0.1463		0.1376	0.1376						
Total	0.2777	2.5134	2.2072	3.5300e- 003		0.1463	0.1463		0.1376	0.1376						

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3.5 Building Construction - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0704	2.2052	0.4365	4.9300e- 003	0.1128	0.0119	0.1246	0.0326	0.0113	0.0439					 	
Worker	0.3344	0.2381	2.3675	5.9600e- 003	0.6328	4.2600e- 003	0.6370	0.1682	3.9200e- 003	0.1721					 	
Total	0.4048	2.4433	2.8040	0.0109	0.7455	0.0161	0.7616	0.2008	0.0153	0.2161						

3.5 Building Construction - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176						
Total	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176						

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3.5 Building Construction - 2021 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0571	2.0003	0.3798	4.8700e- 003	0.1123	5.5700e- 003	0.1179	0.0325	5.3300e- 003	0.0378					 	
Worker	0.3064	0.2107	2.1195	5.7500e- 003	0.6303	4.0600e- 003	0.6344	0.1676	3.7400e- 003	0.1713					 	
Total	0.3635	2.2110	2.4992	0.0106	0.7427	9.6300e- 003	0.7523	0.2000	9.0700e- 003	0.2091						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176						
Total	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176						

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3.5 Building Construction - 2021 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0571	2.0003	0.3798	4.8700e- 003	0.1123	5.5700e- 003	0.1179	0.0325	5.3300e- 003	0.0378						1
Worker	0.3064	0.2107	2.1195	5.7500e- 003	0.6303	4.0600e- 003	0.6344	0.1676	3.7400e- 003	0.1713						
Total	0.3635	2.2110	2.4992	0.0106	0.7427	9.6300e- 003	0.7523	0.2000	9.0700e- 003	0.2091						

3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2218	2.0300	2.1272	3.5000e- 003		0.1052	0.1052		0.0990	0.0990						
Total	0.2218	2.0300	2.1272	3.5000e- 003		0.1052	0.1052		0.0990	0.0990						

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3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0528	1.8955	0.3488	4.8100e- 003	0.1119	4.8300e- 003	0.1168	0.0324	4.6200e- 003	0.0370						
Worker	0.2825	0.1870	1.9172	5.5200e- 003	0.6279	3.8900e- 003	0.6318	0.1669	3.5800e- 003	0.1705		i				
Total	0.3353	2.0825	2.2659	0.0103	0.7398	8.7200e- 003	0.7486	0.1993	8.2000e- 003	0.2075						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
J. Trodu	0.2218	2.0300	2.1272	3.5000e- 003		0.1052	0.1052		0.0990	0.0990						
Total	0.2218	2.0300	2.1272	3.5000e- 003		0.1052	0.1052		0.0990	0.0990						

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3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0528	1.8955	0.3488	4.8100e- 003	0.1119	4.8300e- 003	0.1168	0.0324	4.6200e- 003	0.0370		1				
Worker	0.2825	0.1870	1.9172	5.5200e- 003	0.6279	3.8900e- 003	0.6318	0.1669	3.5800e- 003	0.1705						
Total	0.3353	2.0825	2.2659	0.0103	0.7398	8.7200e- 003	0.7486	0.1993	8.2000e- 003	0.2075						

3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirrioda	0.2045	1.8700	2.1117	3.5000e- 003		0.0910	0.0910		0.0856	0.0856						
Total	0.2045	1.8700	2.1117	3.5000e- 003		0.0910	0.0910		0.0856	0.0856						

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3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0368	1.4928	0.2914	4.6900e- 003	0.1119	1.4600e- 003	0.1134	0.0324	1.3900e- 003	0.0338						
Worker	0.2619	0.1667	1.7359	5.3100e- 003	0.6279	3.7500e- 003	0.6317	0.1669	3.4600e- 003	0.1704						
Total	0.2987	1.6594	2.0273	1.0000e- 002	0.7398	5.2100e- 003	0.7451	0.1993	4.8500e- 003	0.2041						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2045	1.8700	2.1117	3.5000e- 003		0.0910	0.0910		0.0856	0.0856						
Total	0.2045	1.8700	2.1117	3.5000e- 003		0.0910	0.0910		0.0856	0.0856						

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3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0368	1.4928	0.2914	4.6900e- 003	0.1119	1.4600e- 003	0.1134	0.0324	1.3900e- 003	0.0338						
Worker	0.2619	0.1667	1.7359	5.3100e- 003	0.6279	3.7500e- 003	0.6317	0.1669	3.4600e- 003	0.1704						
Total	0.2987	1.6594	2.0273	1.0000e- 002	0.7398	5.2100e- 003	0.7451	0.1993	4.8500e- 003	0.2041						

3.5 Building Construction - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cii rtodd	0.0191	0.1748	0.2102	3.5000e- 004		7.9700e- 003	7.9700e- 003		7.5000e- 003	7.5000e- 003						
Total	0.0191	0.1748	0.2102	3.5000e- 004		7.9700e- 003	7.9700e- 003		7.5000e- 003	7.5000e- 003						

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3.5 Building Construction - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	3.5500e- 003	0.1481	0.0274	4.7000e- 004	0.0112	1.4000e- 004	0.0113	3.2400e- 003	1.4000e- 004	3.3700e- 003						,
Worker	0.0244	0.0149	0.1597	5.1000e- 004	0.0628	3.6000e- 004	0.0632	0.0167	3.3000e- 004	0.0170					 	,
Total	0.0280	0.1630	0.1871	9.8000e- 004	0.0740	5.0000e- 004	0.0745	0.0199	4.7000e- 004	0.0204						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0191	0.1748	0.2102	3.5000e- 004		7.9700e- 003	7.9700e- 003		7.5000e- 003	7.5000e- 003						
Total	0.0191	0.1748	0.2102	3.5000e- 004		7.9700e- 003	7.9700e- 003		7.5000e- 003	7.5000e- 003						

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3.5 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	3.5500e- 003	0.1481	0.0274	4.7000e- 004	0.0112	1.4000e- 004	0.0113	3.2400e- 003	1.4000e- 004	3.3700e- 003		1				
Worker	0.0244	0.0149	0.1597	5.1000e- 004	0.0628	3.6000e- 004	0.0632	0.0167	3.3000e- 004	0.0170						
Total	0.0280	0.1630	0.1871	9.8000e- 004	0.0740	5.0000e- 004	0.0745	0.0199	4.7000e- 004	0.0204						

3.6 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0371	0.3572	0.5485	8.6000e- 004		0.0176	0.0176		0.0162	0.0162						
Paving	0.0183					0.0000	0.0000		0.0000	0.0000					 	
Total	0.0554	0.3572	0.5485	8.6000e- 004		0.0176	0.0176		0.0162	0.0162						

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3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					 	
1	2.7100e- 003	1.6600e- 003	0.0177	6.0000e- 005	6.9700e- 003	4.0000e- 005	7.0100e- 003	1.8500e- 003	4.0000e- 005	1.8900e- 003					 	
Total	2.7100e- 003	1.6600e- 003	0.0177	6.0000e- 005	6.9700e- 003	4.0000e- 005	7.0100e- 003	1.8500e- 003	4.0000e- 005	1.8900e- 003						

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0371	0.3572	0.5485	8.6000e- 004		0.0176	0.0176		0.0162	0.0162						
Paving	0.0183					0.0000	0.0000		0.0000	0.0000						
Total	0.0554	0.3572	0.5485	8.6000e- 004		0.0176	0.0176		0.0162	0.0162						

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
1	2.7100e- 003	1.6600e- 003	0.0177	6.0000e- 005	6.9700e- 003	4.0000e- 005	7.0100e- 003	1.8500e- 003	4.0000e- 005	1.8900e- 003						
Total	2.7100e- 003	1.6600e- 003	0.0177	6.0000e- 005	6.9700e- 003	4.0000e- 005	7.0100e- 003	1.8500e- 003	4.0000e- 005	1.8900e- 003						

3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	3.6844					0.0000	0.0000		0.0000	0.0000						
Off-Road	6.7800e- 003	0.0457	0.0679	1.1000e- 004		2.2800e- 003	2.2800e- 003	1	2.2800e- 003	2.2800e- 003					 	
Total	3.6912	0.0457	0.0679	1.1000e- 004		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003						

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3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1				
Worker	0.0141	8.6100e- 003	0.0922	2.9000e- 004	0.0362	2.1000e- 004	0.0364	9.6300e- 003	1.9000e- 004	9.8200e- 003						
Total	0.0141	8.6100e- 003	0.0922	2.9000e- 004	0.0362	2.1000e- 004	0.0364	9.6300e- 003	1.9000e- 004	9.8200e- 003						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	3.6844					0.0000	0.0000		0.0000	0.0000						
Off-Road	6.7800e- 003	0.0457	0.0679	1.1000e- 004	 	2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003					 	
Total	3.6912	0.0457	0.0679	1.1000e- 004		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003						

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3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		,				,
Worker	0.0141	8.6100e- 003	0.0922	2.9000e- 004	0.0362	2.1000e- 004	0.0364	9.6300e- 003	1.9000e- 004	9.8200e- 003						
Total	0.0141	8.6100e- 003	0.0922	2.9000e- 004	0.0362	2.1000e- 004	0.0364	9.6300e- 003	1.9000e- 004	9.8200e- 003						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	9.8558	68.5629	69.3402	0.1976	10.3261	0.2140	10.5400	2.7741	0.2020	2.9760						
Unmitigated	10.0732	71.0126	74.4689	0.2183	11.9351	0.2375	12.1725	3.2063	0.2242	3.4305						

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	nte	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	144.98	157.52	133.54	522,325	451,909
Convenience Market (24 Hour)	16,973.77	19,851.30	17444.35	12,150,719	10,512,649
Fast Food Restaurant with Drive Thru	11,906.88	17,328.72	13025.28	11,085,014	9,590,615
General Light Industry	439.11	83.16	42.84	1,281,318	1,108,581
General Office Building	308.84	68.88	29.40	647,799	560,468
Mobile Home Park	109.78	110.00	95.92	388,068	335,751
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,113.84	1,159.47	1008.54	3,977,849	3,441,585
Strip Mall	1,063.68	1,008.96	490.32	1,554,401	1,344,848
Total	32,060.88	39,768.01	32,270.19	31,607,493	27,346,405

4.3 Trip Type Information

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		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	16.80	7.10	7.90	38.40	22.60	39.00	86	11	3
Convenience Market (24 Hour)	14.70	6.60	6.60	0.90	80.10	19.00	24	15	61
Fast Food Restaurant with Drive	14.70	6.60	6.60	2.20	78.80	19.00	29	21	50
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Mobile Home Park	16.80	7.10	7.90	38.40	22.60	39.00	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	38.40	22.60	39.00	86	11	3
Strip Mall	14.70	6.60	6.60	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Convenience Market (24 Hour)	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
Fast Food Restaurant with Drive Thru	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
General Light Industry	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
General Office Building	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
Mobile Home Park	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Other Asphalt Surfaces	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
Single Family Housing	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Strip Mall	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						
NaturalGas Mitigated	0.0412	0.3640	0.2368	2.2500e- 003		0.0285	0.0285		0.0285	0.0285					,	
NaturalGas Unmitigated	0.0432	0.3813	0.2473	2.3600e- 003		0.0298	0.0298		0.0298	0.0298						

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5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					tor	ns/yr							МП	Г/уг	•	
Apartments Low Rise	366964	1.9800e- 003		7.2000e- 003			1.3700e- 003	1.3700e- 003		1.3700e- 003	1.3700e- 003				: : :	:	
Convenience Market (24 Hour)	131100	7.1000e- 004			4.0000e- 005		4.9000e- 004	4.9000e- 004	 	4.9000e- 004	4.9000e- 004	#	,		,		
Fast Food Restaurant with Drive Thru	+006	0.0128	0.1166	0.0979	7.0000e- 004		8.8600e- 003	8.8600e- 003		8.8600e- 003	8.8600e- 003						T
General Light Industry					3.1000e- 004		3.9400e- 003	3.9400e- 003		3.9400e- 003		#	i		 	:	
General Office Building	481320	2.6000e- 003	0.0236		1.4000e- 004	 	1.7900e- 003	1.7900e- 003		1.7900e- 003		#	,		,		
Mobile Home Park	444862		0.0205	8.7200e- 003	1.3000e- 004	;== == == == == == = = = = = = = = = =	1.6600e- 003	1.6600e- 003		1.6600e- 003			i		i		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		i		i	i	÷
Single Family Housing	3.01084e +006		0.1387	0.0590	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		i		i	i	÷
Strip Mall	136800	7.4000e- 004			4.0000e- 005		5.1000e- 004	5.1000e- 004		5.1000e- 004	5.1000e- 004		i		i 1 1 1	i	
Total		0.0432	0.3813	0.2473	2.3600e- 003		0.0298	0.0298		0.0298	0.0298						

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5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr							MT/yr								
Apartments Low Rise	348621	1.8800e- 003	0.0161	6.8400e- 003	1.0000e- 004		1.3000e- 003	1.3000e- 003		1.3000e- 003	1.3000e- 003						
Convenience Market (24 Hour)		6.6000e- 004	5.9800e- 003	5.0200e- 003	4.0000e- 005	 	4.5000e- 004	4.5000e- 004	1 1 1 1	4.5000e- 004	4.5000e- 004		i				
Fast Food Restaurant with Drive Thru	+006	0.0127	0.1151	0.0967	6.9000e- 004		8.7500e- 003	8.7500e- 003		8.7500e- 003	8.7500e- 003					 	
General Light Industry		5.3100e- 003		0.0406	2.9000e- 004		3.6700e- 003			3.6700e- 003	3.6700e- 003						
General Office Building		2.4300e- 003			1.3000e- 004		1.6800e- 003	1.6800e- 003		1.6800e- 003	1.6800e- 003						
Mobile Home Park		2.2700e- 003	0.0194	000	1.2000e- 004		1.5700e- 003			1.5700e- 003	1.5700e- 003						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000					,	
	2.83914e +006	0.0153	0.1308	0.0557	8.4000e- 004		0.0106	0.0106	 	0.0106	0.0106					,	
Strip Mall	127342	6.9000e- 004	6.2400e- 003	000	4.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004						
Total		0.0412	0.3640	0.2368	2.2500e- 003		0.0285	0.0285		0.0285	0.0285						

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5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e		
Land Use	kWh/yr	MT/yr					
Apartments Low Rise	101994						
Convenience Market (24 Hour)	234140						
Fast Food Restaurant with Drive Thru	803760						
General Light Industry	148680						
General Office Building	279160						
Mobile Home Park	123422						
Other Asphalt Surfaces	0						
Single Family Housing	1.000010						
Strip Mall	244320						
Total							

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5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
Apartments Low Rise	100988				
Convenience Market (24 Hour)	229052				
Fast Food Restaurant with Drive Thru	790656				
General Light Industry	146916	 			
General Office Building	273496	1			
Mobile Home Park	122549	1			
Other Asphalt Surfaces	0	1			
Single Family Housing	998713	1	 		
Strip Mall	239011	,			
Total					

6.0 Area Detail

6.1 Mitigation Measures Area

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Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Mitigated	2.0953	0.0740	1.2180	4.5000e- 004		0.0114	0.0114		0.0114	0.0114						
Unmitigated	2.9546	0.2013	9.0258	0.0259		1.2838	1.2838		1.2838	1.2838						

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6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr								МТ	7/yr					
Architectural Coating	0.3684					0.0000	0.0000	 	0.0000	0.0000					 	
Consumer Products	1.6836		 			0.0000	0.0000	 	0.0000	0.0000						
Hearth	0.8658	0.1875	7.8248	0.0258		1.2772	1.2772	 	1.2772	1.2772						
Landscaping	0.0367	0.0139	1.2010	6.0000e- 005		6.6000e- 003	6.6000e- 003	1 	6.6000e- 003	6.6000e- 003						
Total	2.9546	0.2013	9.0258	0.0259		1.2838	1.2838		1.2838	1.2838						

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6.2 Area by SubCategory Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr								MT	/yr					
Architectural Coating	0.3684		 			0.0000	0.0000	 	0.0000	0.0000					 	
Consumer Products	1.6836					0.0000	0.0000	 	0.0000	0.0000					 	
Hearth	7.0500e- 003	0.0602	0.0256	3.8000e- 004		4.8700e- 003	4.8700e- 003	 	4.8700e- 003	4.8700e- 003						
Landscaping	0.0362	0.0138	1.1924	6.0000e- 005		6.5500e- 003	6.5500e- 003	 	6.5500e- 003	6.5500e- 003						
Total	2.0953	0.0740	1.2180	4.4000e- 004		0.0114	0.0114		0.0114	0.0114						

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category		MT	-/yr	
willigated				
Unmitigated				

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Apartments Low Rise	1.43339 / 0.903658				
Convenience Market (24 Hour)	1.70367 / 1.04418				
	7.28481 / 0.464988				
General Light Industry	14.5688 / 0				
General Office Building	4.97654 / 3.05014			 	
	1.43339 / 0.903658				
Other Asphalt Surfaces	0/0	/			
Single Family Housing	7.62302 / 4.80582	/			
Strip Mall	1.77774 / 1.08958	/			
Total					

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
	1.14671 / 0.848535				
Convenience Market (24 Hour)	1.36293 / 0.980488				
	5.82785 / 0.436624				
General Light Industry	11.655 / 0				
General Office Building	3.98124 / 2.86408				
	1.14671 / 0.848535				
Other Asphalt Surfaces	0/0				
Single Family Housing	6.09842 / 4.51266				
Strip Mall	1.42219 / 1.02312				
Total					

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	√yr	
Willigatod				
ogatoa				

8.2 Waste by Land Use Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	√yr	
Apartments Low Rise	10.12				
Convenience Market (24 Hour)	69.12				
Fast Food Restaurant with Drive Thru	276.45			 	
General Light Industry	78.12				
General Office Building	26.04				
Mobile Home Park	10.12				
Other Asphalt Surfaces	0	/			
Single Family Housing	155.88	i			•
Strip Mall	25.2	,			
Total					

8.2 Waste by Land Use Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Apartments Low Rise	10.12				
Convenience Market (24 Hour)	69.12				
Fast Food Restaurant with Drive Thru	276.45				
General Light Industry	78.12				
General Office Building	26.04				
Mobile Home Park	10.12	/			
Other Asphalt Surfaces	0				
Single Family Housing	155.88	i			
Strip Mall	25.2	/			
Total					

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	

User Defined Equipment

Equipment Type	Number
Equipment Typo	rambor

11.0 Vegetation

Attachment "B"

CNDDB and NWI Evaluation Memorandum

RESOURCE MANAGEMENT AGENCY



INTRAOFFICE MEMORANDUM

October 16, 2018

TO: Hector Guerra, Chief Environmental Planner

FROM: Cheng (Tim) Chi, Planner I

SUBJECT: CNDDB and NWI Evaluation for Poplar-Cotton Center Community Plan Update

The most recent California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB)¹ and U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping tool² were accessed on October 16, 2018.

The Project site can be found on the U.S.G.S 7.5-minute Woodville Quadrangle, which contains approximately 1.42 square miles, Sections 02, 03, 26, 27, 34, 35, Townships 21 South and 22 South, Range 26 East, Mount Diablo Base and Meridian.

Special Status Plant and Animal Species

A search of the CNDDB RareFind 5 and BIOS indicated that 16 special status plant species and 24 special status animal species are within the Woodville Quadrangle (see attachment ElmList). However, only two special status animal species have been recorded within 5 miles of the UDB (see Figures 1-4): *Vulpes macrotis mutica* (San Joaquin Kit Fox) and *Taxidea taxus* (American Badger). No special status plant or animal species have been recorded within the Project site (i.e. the Poplar-Cotton Center Urban Development Boundary (UDB)). There is a possibility that migratory birds and raptors may be present within the UDB. Therefore, for each future development project within the UDB subject to subsequent CEQA analysis the following mitigation measure will be implemented to reduce potential impacts on special status species to less than significant.

BIO-1: Preconstruction survey shall be conducted on and in the vicinity of the project site by a qualified biologist prior to the start of ground disturbance activities. The survey shall be conducted according to methodologies deemed appropriate by California Department of Fish and Wildlife (CDFW). If the survey indicates that special status species are present within or in close proximity to the Project site, consultation with CDFW shall be required to identify actions to be taken as appropriate for the species identified.

¹ https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data

² https://www.fws.gov/wetlands/data/mapper.html

Waters of the State and the U.S.

Waters of the United States, specifically the Wood Central Ditch and Poplar Ditch, are located within the Project site. Therefore, for each future development project in which one of these ditches is located within or adjacent to the project site, the following mitigation measure will be implemented to reduce potential impacts on biological species, riparian habitats, and other protected wetlands to less than significant.

BIO-2: Prior to the start of ground disturbance activities, the applicant shall consult with the California Department of Fish and Wildlife (CDFW) and/or the U.S. Department of Fish and Wildlife Service (USFWS) to determine if a Wetland Delineation and a Lake or Streambed Alteration Agreement will be required.



Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria:

Taxonomic Group IS (Dune OR Scrub OR Herbaceous OR Marsh OR Riparian OR Woodland OR Forest OR Alpine OR Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi)
br /> AND (Federal Listing Status IS (Endangered OR Threatened OR Proposed Éndangered OR Proposed Threatened OR Candidate) OR State Listing Status IS (Endangered OR Threatened OR Rare OR Candidate Endangered OR Candidate Threatened))

by the color of the /> AND County IS (Tulare)

						Rare Plant Rank/CDFW
Species Appleion de la company	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Ambystoma californiense	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
California tiger salamander						
Ammospermophilus nelsoni	AMAFB04040	None	Threatened	G2	S2S3	
Nelson's antelope squirrel						
Anaxyrus canorus	AAABB01040	Threatened	None	G2G3	S2S3	SSC
Yosemite toad						
Branchinecta lynchi	ICBRA03030	Threatened	None	G3	S3	
vernal pool fairy shrimp						
Brodiaea insignis	PMLIL0C060	None	Endangered	G1	S1	1B.2
Kaweah brodiaea						
Buteo swainsoni	ABNKC19070	None	Threatened	G5	S3	
Swainson's hawk						
Caulanthus californicus	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
California jewelflower						
Charadrius alexandrinus nivosus	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
western snowy plover						
Clarkia springvillensis	PDONA05120	Threatened	Endangered	G2	S2	1B.2
Springville clarkia						
Coccyzus americanus occidentalis	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
western yellow-billed cuckoo						
Deinandra mohavensis	PDAST4R0K0	None	Endangered	G2	S2	1B.3
Mojave tarplant						
Desmocerus californicus dimorphus	IICOL48011	Threatened	None	G3T2	S2	
valley elderberry longhorn beetle						
Dipodomys nitratoides nitratoides	AMAFD03152	Endangered	Endangered	G3T1T2	S1S2	
Tipton kangaroo rat						
Empidonax traillii	ABPAE33040	None	Endangered	G5	S1S2	
willow flycatcher						



Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Eremalche parryi ssp. kernensis	PDMAL0C031	Endangered	None	G3G4T3	S3	1B.2
Kern mallow		-				
Eriastrum tracyi	PDPLM030C0	None	Rare	G3Q	S3	3.2
Tracy's eriastrum						
Eriogonum twisselmannii	PDPGN08610	None	Rare	G2	S2	1B.2
Twisselmann's buckwheat						
Euphorbia hooveri	PDEUP0D150	Threatened	None	G1	S1	1B.2
Hoover's spurge						
Fritillaria striata	PMLIL0V0K0	None	Threatened	G2?	S2?	1B.1
striped adobe-lily						
Gambelia sila	ARACF07010	Endangered	Endangered	G1	S1	FP
blunt-nosed leopard lizard						
Gulo gulo	AMAJF03010	Proposed Threatened	Threatened	G4	S1	FP
California wolverine		rmeatened				
Gymnogyps californianus	ABNKA03010	Endangered	Endangered	G1	S1	FP
California condor						
Haliaeetus leucocephalus	ABNKC10010	Delisted	Endangered	G5	S3	FP
bald eagle						
Lepidurus packardi	ICBRA10010	Endangered	None	G4	S3S4	
vernal pool tadpole shrimp						
Lupinus padre-crowleyi	PDFAB2B2Z0	None	Rare	G2	S2	1B.2
Father Crowley's lupine						
Monolopia congdonii	PDASTA8010	Endangered	None	G2	S2	1B.2
San Joaquin woollythreads						
Nemacladus twisselmannii	PDCAM0F0D0	None	Rare	G1	S1	1B.2
Twisselmann's nemacladus						
Oncorhynchus mykiss whitei	AFCHA0209B	Threatened	None	G5T2	S2	
Little Kern golden trout						
Orcuttia inaequalis	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
San Joaquin Valley Orcutt grass						
Ovis canadensis sierrae	AMALE04015	Endangered	Endangered	G4T2	S2	FP
Sierra Nevada bighorn sheep						
Pekania pennanti	AMAJF01021	None	Threatened	G5T2T3Q	S2S3	SSC
fisher - West Coast DPS						
Pseudobahia peirsonii	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin adobe sunburst						
Rana boylii	AAABH01050	None	Candidate	G3	S3	SSC
foothill yellow-legged frog			Threatened			
Rana muscosa	AAABH01330	Endangered	Endangered	G1	S1	WL
southern mountain yellow-legged frog						
Sidalcea keckii	PDMAL110D0	Endangered	None	G2	S2	1B.1
Keck's checkerbloom						



Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Strix nebulosa great gray owl	ABNSB12040	None	Endangered	G5	S1	
Tuctoria greenei Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	
Vulpes vulpes necator Sierra Nevada red fox	AMAJA03012	Candidate	Threatened	G5T1T2	S1	

Record Count: 40

Figure 1.

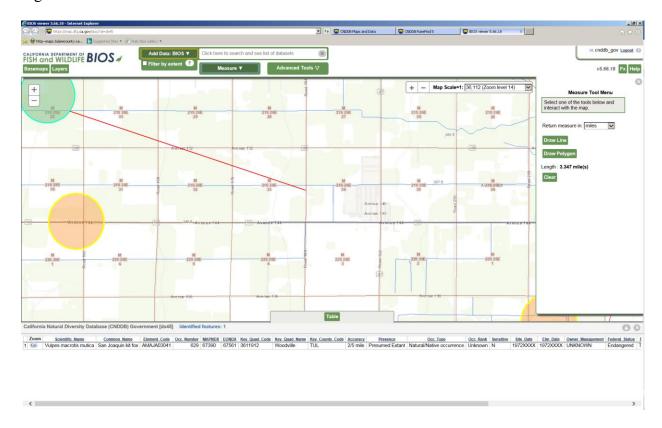


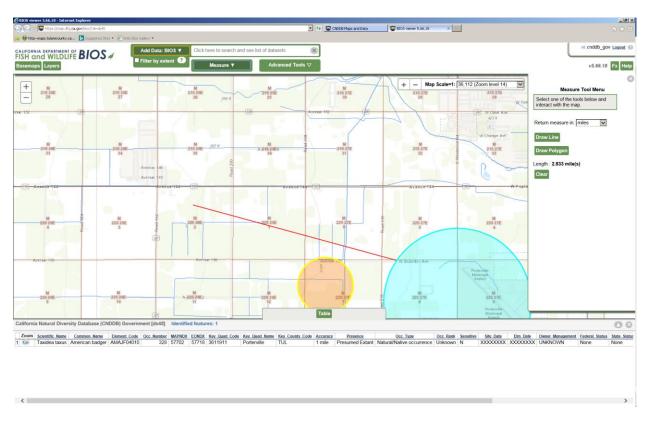
Figure 2.



Figure 3.



Figure 4.



Attachment "C"

CHRIS Results

<u>California</u>
<u>H</u>istorical
<u>R</u>esources
<u>I</u>nformation
<u>S</u>ystem



Fresno Kern Kings Madera Tulare Southern San Joaquin Valley Information Center

Record Search 18-405

California State University, Bakersfield

Mail Stop: 72 DOB 9001 Stockdale Highway Bakersfield, California 93311-1022 (661) 654-2289

E-mail: ssjvic@csub.edu Website: www.csub.edu/ssjvic

To: Hector Guerra

Tulare County Resource Management Agency

5961 South Mooney Blvd.

Visalia, CA 93277

Date: October 5, 2018

Re: General Plan Initiation No. GPI 17-001 – Poplar-Cotton Center Community Plan

County: Tulare

Map(s): Woodville 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, Historic Property Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND WITHIN THE ONE-HALF MILE RADIUS

According to the information in our files, there have been 15 previous cultural resource studies conducted within the project area, TU-00269, 00413, 00751, 00952, 00953, 01135, 01136, 01169, 01170, 01225, 01498, 01572, 01757, 01763, and 01764. There have been two additional studies conducted within the one-half mile radius, TU-00340 and TU-01674.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND WITHIN THE ONE-HALF MILE RADIUS

There are four recorded cultural resources within project area, P-54-002208, 004703, 004832, and 004897. There is one recorded resource within the one-half mile radius, P-54-000044. These resources consist of two historic era ditches, an historic era transmission line, an historic era commercial building, and a prehistoric era lithic and bead scatter.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project consists of a General Plan Update for the Poplar-Cotton Center Community. Further, we understand no immediate ground disturbance will take place as a result of this update. Therefore, no further cultural resource investigation is recommended at this time. However, prior to any future ground disturbance project activities, we recommend a new record search be conducted so our office can then make project specific recommendations for further cultural resources study, if needed. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file in order to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Celeste M. Thomson, Coordinator

Date: October 5, 2018

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment "D"

Greenhouse Gas Technical Memorandum



RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD VISALIA, CA 93277

PHONE (559) 624-7000 FAX (559) 730-2653 Michael Washam Reed Schenke Sherman Dix Economic Development and Planning Public Works Fiscal Services

TECHNICAL MEMORANDUM GREENHOUSE GAS EMISSIONS ANALYSIS

DATE: October 21, 2018

TO: Resource Management Agency – Environmental Planning

FROM: Jessica Willis, Planner IV

SUBJECT: Greenhouse Gas Emissions Analysis for the Poplar-Cotton Center Community

Plan Update (GPA 17-010, PZC 18-014, PZC 18-012, PZC 18-013)

PURPOSE AND NEED FOR ASSESSMENT

This document is intended to assist Tulare County Resource Management Agency (RMA) staff in the preparation of the Greenhouse Gas (GHG) component of the Mitigated Negative Declaration (MND) being prepared for the Poplar-Cotton Center Community Plan Update (Project). The assessment is intended to provide sufficient detail regarding potential impacts of Project implementation and to identify mitigation measures, if necessary, to reduce potentially significant impacts. The background information and supporting documentation used in this assessment are provided in the following attachments:

Attachment 1: Supporting Documentation and Summary Tables

Attachment 2: CalEEMod Emissions Modeling – Project Emissions with Regulation and

Project Design Features;

The GHG assessment was prepared to evaluate whether the estimated GHG emissions generated from the implementation of the Project (i.e., future development projects) would cause significant impacts on global climate change. The assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology for the GHG assessment follows Air District recommendations for quantification of GHG emissions and evaluation of potential impacts on global climate change as provided in their guidance documents:

- ➤ Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), adopted March 19, 2015.¹
- ➤ Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA, adopted December 17, 2009.²

Air District. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2015. http://www.valleyair.org/transportation/GAMAQI 3-19-15.pdf. Accessed August 15, 2018

PROJECT DESCRIPTION

The primary purpose of the Poplar-Cotton Center Community Plan Update (Project) is to outline community goals regarding physical development and to promote the general welfare of the community. The Community Plan serves as a general guide for both public and private decisions affecting the community, and provides for the overall direction, density, and type of growth consistent with the needs of the community. The objective in the preparation of the Poplar-Cotton Center Community Plan Update is to develop a plan that can accurately reflect the needs and priorities of the unincorporated communities of Poplar and Cotton Center.

The Community Plan Update is intended to implement the Tulare County 2030 General Plan through the following actions: (1) Update Zoning Map to match the Community Plan Land Use Map; (2) Addition of Design Standards to replace Use Permit standards; (3) Update Zoning text to outline allowed uses in this Community Plan; (4) Introduction of a Mixed Use Overlay Zoning District; (5) Provides an updated analysis of Poplar-Cotton Center's population and housing characteristics; and (6) Defines an economic development strategy.³

Tulare County is proposing new land use and zoning designations within an expanded UDB. The proposed Community Plan Update, if adopted, will update these designations to be consistent with the General Plan, and will bring existing non-compliant properties into conformity with the Tulare County Zoning Ordinance. The Community Plan Update also includes the Complete Streets and Road Maintenance programs and the community's anticipated growth through year 2030 based on the existing land uses, census population data, and the projected 1.3% annual growth rate in unincorporated areas of Tulare County.⁴ Other than the Complete Streets and Road Maintenance Programs, there are no specific development projects (such as residential, commercial, or industrial uses) proposed as part of this project. As an unknown number of proposals may occur within the lifetime of the Community Plan Update, the Community Plan is intended to direct the density, intensity, and types of growth needed to meet the needs of the community. Future developments within the Project planning area will be required to undergo additional CEQA evaluation on a project-by-project basis at such time development is proposed to determine potential environmental impacts.

Complete Streets and Road Maintenance.

The Poplar-Cotton Center Complete Streets and Road Maintenance Programs are included in the Circulation Element of the proposed Community Plan Update. The Complete Streets Program has thoroughly analyzed the alternative forms of transportation, including transit, bicycle ways, and pedestrian circulation. Improvements proposed in the Complete Streets Program include, but are not limited to, installation of streetlights, bus shelters, street signage and striping, curbs, gutters, sidewalks, drainage system, and utilities.⁵ Road maintenance activities vary by road segment dependent upon the condition of the road and may include chip seal, overlay resurfacing, and asphalt reconstructions.⁶

Air District. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA. December 17, 2009. https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf. Accessed August 15, 2018.

³ Draft Poplar/Cotton Center Community Plan Update, Page 80

⁴ Ibid. 90

⁵ Op. Cit. 253

⁶ Op. Cit. 72

Table 1 identifies the road segments planned for improvements within the proposed Poplar-Cotton Center UDB.

Table 1: Complete Streets and Road Maintenance Segments Scheduled for Improvements ^a						
Roadway From To Length (mi						
Avenue 145	West of Walker Road	Road 193	0.55			
Avenue 147	Kilroy Road	Road 192	0.08			
Avenue 150	Road 190	Road 192	0.25			
Avenue 151	Road 190	Road 192	0.25			
Kilroy Road	Avenue 145	Avenue 146	0.15			
Road 190	North of Avenue 144	Avenue 145	0.08			
Road 191	Avenue 145	Avenue 148	0.40			
Road 192	State Route 190	Avenue 152	1.00			
Tobias Road	Avenue 144 (SR 190)	Avenue 146	0.25			
Tule Avenue	East of Walker Road	Road 190	0.08			

^a This is a summary of all segments identified in both programs; roadways with multiple segments planned for improvements have been combined into one in this table.

Source: Draft Poplar/Cotton Center Community Plan Update, pages 72, 73, 256, 259

Growth Projections.

The US Census Bureau indicates that the population in Poplar-Cotton Center increased from 1,295 in 1980 to 1,901 in 1990, decreased to 1,496 in 2000, and increased to 2,470 in 2010.⁷ The existing Community Plan indicates that the population in Poplar-Cotton Center swells by about 800 persons during summer harvest months due to in-migration of seasonal farmworkers.⁸ Population and residential unit growth through planning horizon year 2030 was estimated by applying a 1.3% annual growth rate (consistent with the Tulare County 2030 General Plan) to the 2016 baseline population as provided in the 2016 American Community Survey (ACS) data.⁹ **Table 2** summarizes the projected growth of the community through horizon Year 2030.

	Table 2. Projected Growth through Year 2030						
	Res	idential	Commercia	al / Retail	Indus	trial	
Year	Population ¹	Dwelling Units ²	Square Feet ³	Acres ⁴	Square Feet ³	Acres ⁴	
2016	3,009	811	503,776	57.86	319,643	36.69	
2020	3,169	854	540,804	60.93	336,592	38.64	
2030	3,605	972	603,988	69.33	382,999	43.96	
Overall Growth	596	161	100,212	11.47	63,356	7.27	

¹ Source: Draft Poplar/Cotton Center Community Plan Update, Page 149. Projections based on 2016 American Community Survey data applying an annual growth rate of 1.3%.

b Length was approximated using Google Earth

² Source: Draft Poplar/Cotton Center Community Plan Update, Page 150. Projections based on 2016 American Community Survey data applying an annual growth rate of 1.3%.

³ Source: Tulare County GIS. Projections based on existing land uses assuming developments/improvements with a Floor to Area Ratio of 0.2 and annual growth rate of 1.3%.

⁴ Source: Tulare County GIS. Projections based on existing land uses and annual growth rate of 1.3%

⁷ Op. Cit. 31

⁸ Op. Cit. 23

⁹ Op. Cit. 149

SIGNIFICANCE THRESHOLDS

CEQA Guidelines define a significant effect on the environment as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. To determine if a project would have a significant impact on climate change, the type, level, and impact of GHG emissions generated by the Project must be evaluated. Appendix G of the CEQA Guidelines provides the criteria (as Checklist Items) for evaluating potential impacts on the environment. The CEQA criteria and the Air District's significance thresholds and guidance for evaluation are provided below.

2008 Climate Change Scoping Plan

The California State Legislature adopted Assembly Bill 32 (AB 32) on September 27, 2006. AB 32 focuses on reducing GHG emissions to 1990 levels by the year 2020 and to 80% below 1990 levels by the year 2050. Pursuant to the requirements in AB 32, the ARB adopted the Climate Change Scoping Plan (2008 Scoping Plan), which outlines actions recommended to obtain that goal. The 2008 Scoping Plan calls for an "ambitious but achievable" reduction in California's GHG emissions, cutting emissions approximately 29% from BAU emission levels projected for 2020, or about 10% from 2008 levels. On a per capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman, and child in California down to about 10 tons per person by 2020.¹¹

2017 Climate Change Scoping Plan

The California State Legislature adopted Senate Bill 32 (SB 32) on September 8, 2016. SB 32 focuses on reducing GHG emissions to 40% below 1990 levels by the year 2030. Pursuant to the requirements in SB 32, the ARB adopted the Climate Change Scoping Plan Update (2017 Scoping Plan), which outlines actions recommended to obtain that goal. ARB recommends statewide targets of no more than six (6) metric tons CO₂e per capita by 2030 and no more than two (2) metric tons CO₂e per capita by 2050. 12

Air District Guidance

On December 17, 2009, the District's Governing Board adopted the District Policy: Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The District's Governing Board also approved the guidance document: Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA. In support of the policy and guidance document, District staff prepared a staff report: Addressing Greenhouse Gas Emissions Under the California Environmental Quality Act. These documents adopted in December of 2009 continue to be the relevant policies to address GHG emissions under CEQA. As these documents may be modified under a separate process, the latest versions should be referenced to determine the District's current guidance at the time of analyzing a particular project." ¹³

¹⁰ CEQA §§ 15002(g), 15382

¹¹ Climate Change Scoping Plan website: http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm

ARB, California's 2017 Climate Change Scoping Plan, Page 99, https://www.arb.ca.gov/cc/scopingplan/scoping-plan_2017.pdf, accessed August 3, 20183

¹³ Air District, GAMAQI, Section 8.9, Page 110

"It is widely recognized that no single project could generate enough GHG emissions to noticeably change the global climate temperature. However, the combination of GHG emissions from past, present and future projects could contribute substantially to global climate change. Thus, project specific GHG emissions should be evaluated in terms of whether or not they would result in a cumulatively significant impact on global climate change. GHG emissions, and their associated contribution to climate change, are inherently a cumulative impact issue. Therefore, project-level impacts of GHG emissions are treated as one-in-the-same as cumulative impacts.

In summary, the staff report evaluates different approaches for assessing significance of GHG emission impacts. As presented in the report, District staff reviewed the relevant scientific information and concluded that the existing science is inadequate to support quantification of the extent to which project specific GHG emissions would impact global climate features such as average air temperature, average rainfall, or average annual snow pack. In other words, the District was not able to determine a specific quantitative level of GHG emissions increase, above which a project would have a significant impact on the environment, and below which would have an insignificant impact. This is readily understood, when one considers that global climate change is the result of the sum total of GHG emissions, both manmade and natural that occurred in the past; that is occurring now; and will occur in the future.

In the absence of scientific evidence supporting establishment of a numerical threshold, the District policy applies performance based standards to assess project-specific GHG emission impacts on global climate change. The determination is founded on the principal that projects whose emissions have been reduced or mitigated consistent with the California Global Warming Solutions Act of 2006, commonly referred to as "AB 32", should be considered to have a less than significant impact on global climate change. For a detailed discussion of the District's establishment of thresholds of significance for GHG emissions, and the District's application of said thresholds, the reader is referred to the above referenced staff report, District Policy, and District Guidance documents."¹⁴

"As presented in Figure 6 (Process of Determining Significance of Greenhouse Gas Emissions) [of the GAMAQI], the policy provides for a tiered approach in assessing significance of project specific GHG emission increases.

- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the Lead Agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the Lead Agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement Best Performance Standards (BPS).
- Projects implementing BPS would not require quantification of project specific GHG emissions. Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

¹⁴ Air District, GAMAQI, Section 8.9.1, Pages 111-112

• Projects not implementing BPS would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business as Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.

The District guidance for development projects also relies on the use of BPS. For development projects, BPS includes project design elements, land use decisions, and technologies that reduce GHG emissions. Projects implementing any combination of BPS, and/or demonstrating a total 29 percent reduction in GHG emissions from business-as-usual (BAU), would be determined to have a less than cumulatively significant impact on global climate change." ¹⁵

Figure 1 provides a visual summary of the Air District's process for determining significance of project-related GHG emissions.

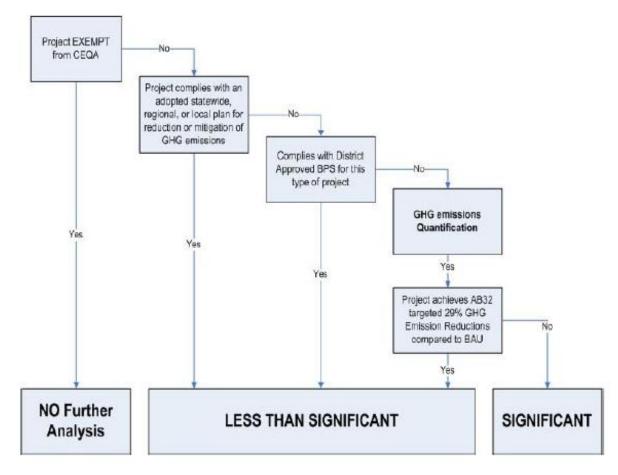


Figure 1. Process of Determining Significance of Greenhouse Gas Emissions

Source: Air District, GAMAQI, Figure 6, Page 113

¹⁵ Air District, GAMAQI, Section 8.9.1, Page 112

The Air District's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA states, "Projects implementing Best Performance Standards in accordance with this guidance would be determined to have a less than significant individual and cumulative impact on global climate change and would not require project specific quantification of GHG emissions. Projects exempt from the requirements of CEQA, and projects complying with an approved GHG emission reduction plan or mitigation program would also be determined to have a less than significant individual or cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified final CEQA document. Projects not implementing BPS would require quantification of project specific GHG emissions. To be determined to have a less than significant individual and cumulative impact on global climate changes, such projects must be determined to have reduced or mitigated GHG emissions by 29%, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Furthermore, quantification of GHG emissions would be expected for all projects for which the lead agency has determined that an Environmental Impact Report is required, regardless of whether the project incorporates Best Performance Standards."¹⁶

"If total GHG emissions reductions measures add up to 29% or more, are enforceable, and are required as a part of the development's approval process, the project achieves the Best Performance Standard (BPS) for the respective type of development project. Thus, the GHG emissions from the development project would be determined to have a less than individually and cumulatively significant impact on global climate change for CEQA purposes." ¹⁷

"By definition, BPS for development projects is achieving a project-by-project 29% reduction in GHG emissions, compared to BAU. Thus, it is reasonable to conclude that Lead Agencies implementing the proposed *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* threshold will achieve an overall reduction in GHG emissions consistent with AB 32 emission reduction targets..." 18

The Air District's guidance document was adopted to provide a basis for lead agencies to establish significance thresholds consistent with ARB's 2008 Scoping Plan. The Air District currently does not have a recommendation for establishing thresholds or assessing significance consistent with the reduction requirements established in ARB's 2017 Scoping Plan Update, which requires a 33.2% reduction from BAU to achieve the 2030 target. The County is currently undergoing review of the Tulare County Climate Action Plan (CAP) and, if needed will adopt revisions to demonstrate consistency with the new reduction targets.

EMISSION MODELING

Pursuant to Air District recommendations, Project-related GHG emissions were quantified using CalEEMod 2016.3.2.¹⁹ "CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions

¹⁶ Air District, Guidance for Valley Land-use Agencies, Page 4

¹⁷ Air District, Guidance for Valley Land-use Agencies, Pages 7-8

¹⁸ Air District, Guidance for Valley Land-use Agencies, Page 8

Air District, GAMAQI, Section 7.7.2, Page 56; and Air District, Transition from CalEEMod 2013 to CalEEMod 2016 http://www.valleyair.org/transportation/ceqa_idx.htm, accessed May 30, 2018

associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use."²⁰

There are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. To evaluate a worst-case emissions scenario, this assessment assumes that all projected growth through planning horizon year 2030 will occur in one phase beginning in January 2019, with operation beginning in 2020. One (1) modeling run was conducted to quantify construction- and operations-related GHG emissions resulting from implementation of the Project (see Attachment 2). The modeling includes reductions resulting from compliance with existing rules and regulations. Default model values were used, except where Air District-approved changes are accepted or changes are supported with documentation (see Attachment 1)

IMPACT EVALUATION

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Project Impact Analysis: Less Than Significant Impact

The Air District has determined that projects consistent with an adopted Climate Action Plan (CAP) would be considered to have a less than significant impact on the environment. The Tulare County Climate Action Plan was adopted in 2012 and serves as a guiding document for County actions to reduce GHG emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the Tulare County General Plan and builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets required by State of California legislation. The General Plan fulfills many sustainability and GHG reduction objectives at the program level. Projects implementing the General Plan will comply with these policies resulting in long-term benefits to GHG reductions that will help the County achieve the CAP reduction targets. The CAP identifies the policies from the various General Plan elements that promote more efficient development and reduce travel and energy consumption.

The CAP states, "The County has already planned a substantial number of lots for development. Development of some of these lots will be limited by various factors such as water supply, sewer/septic capability, road capacity, etc. that cannot be addressed during the planning horizon due to lack of resources. This means that the County expects that new development proposals will be received that are more likely to develop before existing lots are developed because the rural community, landowner, or developer has the resources to provide all improvements and services required for the site. As a rough estimate, this analysis assumes that 40 percent of the development will occur on existing lots and 60 percent will occur in new developments. Development occurring on existing lots will be subject to existing conditions of the approved subdivision and zoning standards. Development occurring in new subdivisions and projects [after 2012] would be subject to additional measures required to mitigate significant impacts. The County will encourage developers of existing lots [established prior to 2012] to implement

²⁰ Air District, GAMAQI, Section 7.7.2, Page 56

measures that reduce greenhouse gas emissions, but it has no authority to require additional reductions beyond those required by State regulation, the building code, and local ordinance."²¹

The CAP also states, "To demonstrate consistency with the CARB Scoping Plan 2020 target of 26.2 percent reduction in land use related sectors compared with business as usual, new development in the County subject to discretionary approval would need to provide an overall reduction of 6 percent beyond that provided by State and SJVAPCD regulation. Based on this analysis, implementation of the policies contained in the 2030 General Plan Update and available project specific measures can achieve an overall reduction of 6 percent of development-related greenhouse gas emissions under Tulare County jurisdiction. When reductions from regulations and programs are included, new development would produce approximately 31 percent fewer greenhouse gas emissions compared with the 2020 business-as-usual scenario."²²

Other than the Complete Streets and Road Maintenance programs, there are no specific development projects (such as residential, commercial, or industrial uses) associated with the Community Plan Update. As such, the proposed Project will not result in GHG emissions until specific development occurs. Future developments would be required to comply with the CAP to achieve a 6% reduction in GHG emissions beyond those reductions achieved through compliance with existing regulations. As such, Project-related GHG emissions were quantified to evaluate consistency with the CAP and the cumulative impact of the Project on the environment.

Construction Emissions: The Air District does not have a recommendation for lead agencies in assessing the significance of construction related GHG emissions. Emissions from construction would be temporary; however, to account for the construction emissions, the emissions were amortized based on the life of the development (30 years) and added to the operational emissions.²³ Project construction-related GHG emissions are provided in **Table 3**.

Table 3. Construction Greenhouse Gas Emissions				
Total Emissions from Full Buildout (MTCO2e per year) Amortized Emissions (MTCO2e per year)				
6,058.30 201.94				
Note: Amortized emissions are based on a 30-year project life.				
Source: Summary Table 8 (Attachment 1) and Cal	EEMod Report (Attachment 2)			

Operation Emissions: Operational GHG emissions occur over the life of the Project. Sources of emissions include energy usage, water usage, waste generation, landscaping activities, residential wood burning, and vehicle emissions (persons travelling to and from the Project site). Project-related emissions were assessed to determine consistency with the GHG reduction targets contained in the Tulare County CAP and the AB 32 2008 Scoping Plan. To determine consistency, and thereby the significance of these emissions, the analysis quantified Project-

²¹ Tulare County Climate Action Plan., pages 54 to 55

²² Ibid., 56

A The California Energy Commission has provided a 30-year lifespan for residential uses.

http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf. Access August 17, 2018.

Although different building materials may be used in commercial/retail developments, the 30-year lifespan is reasonable as the same types of construction (foundations, plumbing, electrical, etc.) and equipment (water heating/cooling, air conditioning, etc.) are implemented in both residential and non-residential units.

related greenhouse gas emissions at full buildout, utilizing model default construction timelines, and accounting for all reasonably foreseeable project-related design features and implementation of existing regulatory measures. The emissions reductions were then compared those required by the CAP. Project operation-related GHG emissions are provided in **Table 4**.

As demonstrated in **Table 4**, the Project design elements and implementation of existing regulation would achieve an overall reduction of 7.63%, which surpasses the 6% reduction requirement by the Tulare County CAP. The Air District has determined that emissions resulting from projects in compliance with an approved, CEQA-based GHG reduction plan would be determined to have a less than significant individual and cumulative impact for GHG emissions. As such, the Project would result in a **Less Than Significant Project-specific Impact** related to this Checklist Item.

Table 4. Operation-Related Greenhouse Gas Emissions (MTCO2e per Year)						
Sector	Total Emissions (Unmitigated)	Total Emissions (Unmitigated)	% Reduction			
Area	262.43	72.15	72.51			
Energy	1,223.41	1,193.01	2.48			
Mobile	20,256.79	18,345.56	9.44			
Waste	327.41	327.41	0.00			
Water	126.68	102.96	18.73			
Amortized Construction	6,058.85	6,058.85	0.00			
Total	28,255.59	26,099.94	7.63			
Significance Threshold 6%						
Emissions Significant? No						
Source: Summary Table 9 (Attachment 1) and CalEEMod Report (Attachment 2)						

As demonstrated in **Table 4**, the Project exceeds the 6% reduction requirement by the Tulare County CAP. As such, the Project also demonstrates continued progress towards the County achieving the 2017 Scoping Plan. In addition, the State anticipates increases in the number of zero emission vehicles operated in the State under the Advanced Clean Car Program. Compliance with SB 375 reduction targets for light duty vehicles will provide continued reductions in emissions from that source through SB 375's 2035 milestone year. Furthermore, the Project will provide a GHG emission reduction benefit as the Project supplies residents within the Poplar-Cotton Center UDB and immediate vicinity with greater shopping and employment opportunities, thereby reducing vehicle miles traveled from travelling to larger communities/cities for such opportunities. Since future development projects would undergo additional CEQA review, the Project will continue to comply with existing and future regulations, and the General Plan, Community Plan, and CAP will continue to be implemented through 2030, the growth projected for 2030 would not result in significant greenhouse gas impacts. Therefore, *Less Than Significant Project-specific Impacts* related to this Checklist Item will occur.

Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. The Project-related emissions would be considered to have a significant cumulative impact if project-

specific impacts are determined to be significant. As previously noted, the emissions analysis demonstrates that the Project is consistent with the Tulare County CAP and therefore, AB 32 reduction targets for years 2020 and 2030. As the proposed Project would result in Less Than Significant Project-specific Impacts, *Less Than Significant Cumulative Impacts* would also occur.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

As previously noted, the Project is consistent with the Tulare County CAP and the AB 32 scoping plan reduction targets established for 2020 and 2030. As such, the Project would not generate GHG emissions that would have a significant impact on the environment. *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

b) Would the project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis: Less Than Significant Impact

To be considered a less than significant impact, the Project must demonstrate consistency with the Tulare County CAP, the Air District's Climate Change Action Plan, and the ARB's 2008 Scoping Plan and 2017 Scoping Plan Update.

Tulare County CAP: The CAP identifies General Plan policies in place to assist the County in reducing GHG emissions. **Table 5**identifies these policies by policy titles. For a discussion of the benefits of the policies, refer to the CAP.²⁴ The Project will implement the applicable General Plan policies.

	Table 5. General Plan Policies Having Greenhouse Gas Emission Reductions						
	Sustainability and Greenhouse Gas Emissions						
PF-1.1	Maintain Urban Edges	ERM-1.2	Development in Environmentally Sensitive				
PF-1.2	Location of Urban Development		Areas				
PF-1.3	Land Uses in UDBs/HDBs	ERM-1.3	Encourage Cluster Development				
PF-1.4	Available Infrastructure	ERM-1.4	Protect Riparian Management Plans and				
AG-1.7	Conservation Easements		Mining Reclamation Plans				
AG-1.8	Agriculture Within Urban Boundaries	ERM-1.6	Management of Wetlands				
AG-1.11	Agricultural Buffers	ERM-1.7	Planting of Native Vegetation				
AG-1.14	Right to Farm Noticing	ERM-1.8	Open Space Buffers				
AG-2.11	Energy Production	ERM-1.14	Mitigation and Conservation Banking				
AG-2.6	Biotechnology and Biofuels		Program				
AQ-1.6	Purchase of Low Emission/Alternative Fuel	ERM-4.1	Energy Conservation and Efficiency				
	Vehicles		Measures				
AQ-1.7	Support Statewide Global Warming Solutions	ERM-4.2	Streetscape and Parking Area Improvements				
AQ-1.8	Greenhouse Gas Emissions Reduction Plan		for Energy Conservation				
AQ-1.9	Off-Site Measures to Reduce Greenhouse Gas	ERM-4.3	Local and State Programs				
	Emissions*	ERM-4.4	Promote Energy Conservation Awareness				
AQ-1.10	Alternative Fuel Vehicle Infrastructure**	ERM-4.6	Renewable Energy				
AQ-2.1	Transportation Demand Management	ERM-4.7	Reduce Energy Use in County Facilities**				

²⁴ The Tulare County CAP is available online at http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/ClimateActionPlan.pdf.

Table 5. General Plan Policies Having Greenhouse Gas Emission Reductions						
Sustainability and Greenhouse Gas Emissions						
	Programs	ERM-4.8	Energy Efficiency Standards**			
AQ-2.3	Transportation and Air Quality	ERM-5.1	Parks as Community Focal Points			
AQ-2.4	Transportation Management Associations	ERM-5.6	Location and Size Criteria for Parks			
AQ-2.5	Ridesharing	ERM-5.15	Open Space Preservation			
AQ-3.1	Location of Support Services	HS-1.4	Building and Codes			
AQ-3.2	Infill Near Employment	TC-2.1	Rail Service			
AQ-3.3	Street Design	TC-2.4	High Speed Rail (HSR)			
AQ-3.5	Alternative Energy Design	TC-2.7	Rail Facilities and Existing Development*			
AQ-3.6	Mixed Use Development	TC-4.4	Nodal Land Use Patterns that Support Public			
LU-1.1	Smart Growth and Healthy Communities		Transit			
LU-1.2	Innovative Development	TC-5.1	Bicycle/Pedestrian Trail System			
LU-1.3	Prevent Incompatible Uses	TC-5.2	Consider Non-Motorized Modes in Planning			
LU-1.4	Compact Development		and Development			
LU-1.8	Encourage Infill Development	TC-5.3	Provisions for Bicycle Use			
LU-2.1	Agricultural Lands	TC-5.4	Design Standards for Bicycle Routes			
LU-3.2	Cluster Development	TC-5.5	Facilities			
LU-3.3	High-Density Residential Locations	TC-5.6	Regional Bicycle Plan			
LU-4.1	Neighborhood Commercial Uses	TC-5.7	Designated Bike Paths			
LU-7.1	Distinctive Neighborhoods	TC-5.8	Multi-Use Trails			
LU-7.2	Integrate Natural Features	PFS-1.3	Impact Mitigation			
LU-7.3	Friendly Streets	PFS-1.15	Efficient Expansion			
LU-7.15	Energy Conservation	PFS-2.1	Water Supply			
ED-2.3	New Industries	PFS-2.2	Adequate Systems			
ED-2.8	Jobs/Housing Ratio	PFS-3.3	New Development Requirements			
ED-5.9	Bikeways	PFS-5.3	Solid Waste Reduction			
ED-6.1	Revitalization of Community Centers	PFS-5.4	County Usage of Recycled Materials and			
ED-6.2	Comprehensive Redevelopment Plan		Products			
ED-6.3	Entertainment Venues	PFS-5.5	Private Use of Recycled Products			
ED-6.4	Culturally Diverse Business	PFS-8.3	Location of School Sites			
ED-6.5	Intermodal Hubs for Community and Hamlet	PFS-8.5	Government Facilities and Services			
22 0.0	Core Areas	WR-1.5	Expand Use of Reclaimed Wastewater			
ED-6.7	Existing Commercial Centers	WR-1.6	Expand Use of Reclaimed Water			
SL-3.1	Community Centers and Neighborhoods	WR-3.5	Use of Native and Drought Tolerant			
ERM-1.1	Protection of Rare and Endangered Species	1710 3.3	Landscaping			

Source: Tulare County Climate Action Plan, Table 15, pages 63-64.

When combined with reductions anticipated from the ARB Scoping Plan measures and regional regulations and programs, Tulare County emissions would be 26.2% below 2020 BAU levels for development related sources, which is the amount needed for the State to reduce emissions to 1990 levels. The CAP requires projects to achieve an average reduction that is 6% in excess of the reductions established in ARB's 2008 Scoping Plan and by regional regulations and programs. As demonstrated in **Table 4**, the Project would achieve a 7.63% reduction, which exceeds the 6% reduction required by the CAP. As such, the Project is consistent with the Tulare County CAP. *Less Than Significant Project-specific Impacts* related to this Checklist Item will occur.

^{*} This GHG reduction policy is not included in the Tulare County CAP, but is included in the Tulare County General Plan 2030 Update.

^{**} This GHG reduction policy is not included in Table 15 of the CAP, but it is included in the detailed list of policies provided within pages 64-77 of the CAP.

Air District Climate Change Action Plan: The Air District adopted the Climate Change Action Plan (CCAP) in 2008, which included a carbon-exchange bank for voluntary GHG reductions. The Carbon Exchange Program is not applicable to this Project, and the Project would not require Voluntary Greenhouse Gas Mitigation Agreements. The Project would comply with all applicable GHG regulations contained in the CCAP. Less Than Significant Project-specific Impacts related to this Checklist Item will occur.

AB 32 Scoping Plans: The California State Legislature adopted AB 32 in 2006. AB 32 requires GHG emissions to be reduced to 1990 levels by the year 2020 and to 80% below 1990 levels by the year 2050. ARB adopted the 2008 Scoping Plan, which outlines actions recommended to obtain that goal. The 2008 Scoping Plan calls for a reduction in California's GHG emissions, cutting approximately 29% from BAU emission levels projected for 2020, or about 10% from 2008 levels. On a per capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman, and child in California down to about 10 tons per person by 2020 ²⁶

The 2008 Scoping Plan contains a variety of strategies to reduce the State's emissions. As shown in **Table 6**, the Project is either consistent with the State's strategies or the strategies are not applicable to the Project. Furthermore, the Project is consistent with the emissions reduction required by the Tulare County CAP and, the Air District has determined that projects that are consistent with an approved, CEQA-based GHG reduction plan would not have a significant impact. Furthermore, the Project provides a GHG emission reduction benefit as the Project supplies residents within the Poplar-Cotton Center UDB and other nearby residences with greater local shopping and employment opportunities thereby reducing vehicle miles traveled. For example, if each of the projected 161 households were to shop locally rather than driving to Porterville for just one trip per month, and assuming a 16-mile round trip, local residents could reduce annual VMT upward of 30,912miles.

	Table 6. Consistency with 2008 Scoping Plan Reduction Measures						
	Scoping Plan Reduction Measure	Project Consistency					
1.	California Cap-and-Trade Program Linked to Western Climate Initiative. Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.	Not applicable. Under the cap-and-trade system, products or services (such as electricity) would be covered and the cost of the cap-and-trade system would be transferred to the consumers.					
2.	California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted standards and planned second phase of the program. Align zero-emission vehicle,	Consistent. This is a statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the Project area would be subject to the standards.					

²⁵ SJVAPCD Climate Change Action Plan website: http://www.valleyair.org/Programs/CCAP/CCAP_menu.htm.

²⁶ Climate Change Scoping Plan website: http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm

	Table 6. Consistency with 2008	Scoping Plan Reduction Measures
	Scoping Plan Reduction Measure	Project Consistency
	alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	
3.	Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. This is a statewide measure for the state to increase its energy efficiency standards. The future developments will comply with the current Title 24 and CalGreen Building regulations.
4.	Renewable Portfolio Standard. Achieve 33 percent renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.	Consistent. This is a statewide measure that cannot be implemented by a project applicant or lead agency. In 2016, Southern California Edison obtained 28.3% of its power supply from renewable sources. ²⁷ The future developments will purchase power with increasing amounts of renewable energy content.
5.	Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	Consistent. This is a statewide measure that cannot be implemented by a project applicant or lead agency. However, the standard is applicable to the fuel used by vehicles that would access the Project area
6.	Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.	Consistent. The Project will provide additional shopping opportunities to the residents of Poplar-Cotton Center. As such, residents have the opportunity to reduce the miles travelled for some single-stop shopping trips. ²⁸ Therefore, Project implementation will assist the County in achieving its overall goals for reduction in housing related VMT identified in the Tulare County Association of Governments (TCAG) RTP/SCS. ²⁹
7.	Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	Consistent. This is a statewide measure. The standards would be applicable to the light-duty vehicles that would access the Project area.
8.	Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	Not applicable. The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
9.	Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	Consistent. This is a statewide measure to increase solar capacity throughout California, which is being done by various electricity providers and existing solar programs. Future developments may be able to take
		advantage of incentives that are in place at the time of construction.

²⁷: California Public Utilities Commission, https://www.cpuc.ca.gov/renewables/ and Southern California Edison, https://www.edison.com/content/dam/eix/documents/investors/corporate_responsibility/2016-eix-corporate-responsibility-and-sustainability-report.pdf, accessed August 3, 2018.
 ²⁸ For potential reductions, see Attachment 3.

For potential reductions, see Attachment 3.
 The 2014 Regional Transportation Plan and Sustainable Communities Strategy can be found online at http://www.tularecog.org/wp-content/uploads/2015/06/Final-2014-Regional-Transportation-Plan-Sustainable-Communities-Strategy-FULL-DOCUMENT.pdf. The 2018 RTP can be found online at http://www.tularecog.org/rtp2018/.

Table 6. Consistency with 2008	Scoping Plan Reduction Measures
Scoping Plan Reduction Measure	Project Consistency
medium and heavy-duty vehicle efficiency measures.	implemented by a project applicant or lead agency. The standards would be applicable to the vehicles that access the Project area.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can costeffectively reduce greenhouse gas emissions and provide other pollution reduction cobenefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.	Not applicable. Industrial sources are not proposed as part of this Project. However, future industrial development if proposed would comply with current GHG regulations and would comply with Air District regulations.
12. High Speed Rail. Support implementation of a high-speed rail system.	Not applicable. This is a statewide measure that cannot be implemented by a project applicant or lead agency.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The State is to increase the use of green building practices. Future developments would implement some green building strategies through existing regulation.
14. High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	Consistent. This measure is applicable to the high global warming potential gases that would be used by future developments (such as in air conditioning and refrigerators).
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The Project would not contain a landfill. The State is to help increase waste diversion. The future developments would reduce waste with implementation of state mandated recycling and reuse mandates.
16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	Not applicable. The Project site is in an agricultural and urban built up condition. No forested lands exist onsite.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. This is a measure for state and local agencies. Future developments will comply with the current California Green Building Standards Code and the California Water Efficient Landscape Ordinance.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	Not applicable. The Project area is currently in an urban and agricultural condition. However, the proposed Project is does not include grazing, dairy, feedlot, or other agricultural activities that would generate agricultural manure onsite.
Source for Reduction Measures: Air Resources Board, 200	08 Scoping Plan, Pages 27- 67.

Governor Brown issued the Executive Order B-30-15 to establish a California GHG reduction target of 40% below 1990 levels by 2030. This reduction target was then codified with the passing of SB 32 and added to the California Health and Safety Code becoming effective

January 1, 2017. ARB approved the 2017 Climate Change Scoping Plan Update, which addresses the new 2030 targets, on December 14, 2017. The 2017 Scoping Plan Update strategy requires a 33.2% reduction from BAU to achieve the 2030 target. The Air District has not yet adopted recommendations for establishing significance thresholds for the 2030 reduction targets. The County is currently reviewing the CAP and, if needed will adopt revisions to demonstrate consistency with the new reduction targets. As previously noted, the Project demonstrates continued progress towards the County achieving the 2017 Scoping Plan Update 2030 reduction requirements. In addition, the State anticipates increases in the number of zero emission vehicles operated in the State under the Advanced Clean Car Program. Compliance with SB 375 reduction targets for light duty vehicles will provide continued reductions in emissions from that source through SB 375's 2035 milestone year. Furthermore, the Project provides a GHG emission reduction benefit as the Project supplies residents with a local shopping and employment opportunities, thereby reducing vehicle miles traveled from travelling to larger communities/cities for similar opportunities.

Since the Project will provide local shopping and employment opportunities to the residents of Poplar-Cotton Center, and will continue to comply with existing and future regulations, and the General Plan and CAP will continue to be implemented through 2030, the Project would not result in significant greenhouse gas impacts. Therefore, *Less Than Significant Cumulative Impacts* related to this Checklist Item will occur.

Cumulative Impact Analysis: Less Than Significant Impact

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. As previously discussed, the Project is consistent with the applicable AB 32 Scoping Plan reductions measures and the Air District's CCAP. The Project will implement applicable Tulare County General Plan and Tulare County CAP policies. As such, the Project will not conflict with applicable state, regional, and local plans, policies or regulation adopted for the purpose of reducing the emissions of greenhouse gases. *Less Than Significant Cumulative Impacts* related to this Checklist Item will occur.

Mitigation Measures: None Required

Conclusion: Less Than Significant Impact

As the proposed Project is consistent with aforementioned plans, policies, and regulations, *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item would occur.

ATTACHMENT 1

Changes Made to CalEEMod Defaults Air District Residential Fleet Mix Summary Tables

	Changes to CalEEMod Default	s
CalEEMod Module	Project Applicability / Source for Change	Change Made
Project Characteristics: Land Use Setting	The Project is located within an Urban Development Boundary (UDB) but is not considered an urban setting	From Urban to Rural
Project Characteristics: CO ₂ , CH ₄ , and N ₂ O Intensity Factors	Electricity purchased for use at the project site is subject to the 33 percent by 2020 and 50% by 2030 RPS mandate CalEEMod adjusted energy intensity factors with SCE emission factors that show the company will exceed the 33% mandates required in 2020. 1	Year 2020 values: • CO ₂ – 592.736 • CH ₄ – 0.024 • N ₂ 0 – 0.005
Land Use: Population	The 2016 American Community Survey population and housing data indicate a population density of 3.71 persons per household (3,009 persons / 811 dwelling units)	Population densities were increases across the three residential land use types to add up to the total projected population growth of 161 dwellings and 596 residents.
Land Use: Lot Acreage	Non-residential growth projections are based on existing land uses within the proposed UDB planning area, assumes a floor to area ratio of 0.20, and a 1.3% growth rate.	Acres changed to reflect projection of what is reasonably forseeable for future development. Retail: convenience market, strip mall, and fast food Commercial: general office Industrial: general light industrial
Operation: Residential Vehicle Fleet	Air District accepted residential fleet mix. ²	Year 2020 values LDA - 54.02% LTD1 - 19.72% LTD2 - 16.68% MDV - 5.40% LHDT1 - 0.16% LHDT2 - 0.09% MHDT - 0.91 % HHDT - 2.06% OBUS -0.00% UBUS - 0.44% MCY - 0.26% SBUS - 0.11% MH - 0.15%

Based on default SCE 2012 rate and calculated back for 33% emission factor for 2020 & 50% emission factor for 2030, which based on current reports is still higher than the actual achieved. The 2017 Sustainability Report Scorecard states that in 2015 SCE obtained an RPS of 24.3% with a delivered emission rate of 517; in 2016 SCE obtained an RPS of 28.3% and an emission rate of 529 lbs/MWh; and, in 2017 SCE obtained an RPS of 31.6 % with an emission rate of 549 (see https://www.edison.com/content/dam/eix/documents/sustainability/eix-2017-sustainability-report.pdf). As such, these revised values represent a conservative (worst-case) estimate for CEQA purposes.

San Joaquin Valley Unified Air Pollution Control District. http://www.valleyair.org/ISR/Documents/Residential-Fleet-Mix.pdf. Accessed August 3, 2018

Changes to CalEEMod Defaults						
CalEEMod Module	Project Applicability / Source for Change	Change Made				
Operation: Hearths	Air District Rule 4901 requirements allows 1 wood burning fireplace or stove per home if density is ≤2 units per acre	It is assumed that new residential growth will be consistent with or exceeding the density of the existing community (greater than 2 du per acre).				
Mitigation: Construction	Compliance with Air District Regulation VIII requirements	Water Exposed Area: water twice daily				
Mitigation: Construction	Compliance with Air District Regulation VIII requirements	Unpaved Road Mitigation: limit vehicle speed to 15 mph				
Mitigation: Traffic	The project is located within 8 miles of the City of Porterville	Improve Destination Accessibility – Distance to Downtown/Job Center: 8 miles				
Mitigation: Traffic	The boundaries of the entire community is only approximately 1 mile going north-south and 1 mile going east-west.	Distance to Transit Accessibility: 1 mile.				
Mitigation: Traffic	County building code requires sidewalks in new developments within an UDB	Improve Pedestrian Network: Project Site				
Mitigation: Area	It is assumed that new residential growth will be consistent with or exceeding the density of the existing community (greater than 2 du per acre).	Only Natural Gas Hearth: Checked				
Mitigation: Area	Air District has accepted defaults for electric landscaping equipment of 3%	3% for electric mower, electric leafblower, and electric chainsaw				
Mitigation: Energy	California 2019 Title 24 is in effect until January 1, 20203	Exceed Title 24: 7%				
Mitigation: Water	Current (2016) California Building Code	Indoor Water Use: Low Flow Fixtures				
Mitigation: Water	The project landscaping will comply with the California Water Efficient Landscape Ordinance regulation.	Outdoor Water Use: Use Water- Efficient Irrigation Systems – 6.1% reduction ⁴				

³ California Energy Commission. 2019 Building Energy Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf. Accessed August 2, 2018.

California Department of Water Resources. California Water Efficient Landscape Ordinance.
 https://water.ca.gov/LegacyFiles/wateruseefficiency/docs/MWELO09-10-09.pdf. Accessed August 2, 2018.

District Accepted Fleet Mix for Residential Projects

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
2013	0.5322	0.1901	0.1671	0.0628	0.0020	0.0011	0.0097	0.0243	0.0000	0.0047	0.0032	0.0012	0.0016
2014	0.5352	0.1905	0.1673	0.0609	0.0019	0.0010	0.0095	0.0232	0.0000	0.0047	0.0030	0.0012	0.0016
2015	0.5376	0.1911	0.1676	0.0591	0.0018	0.0010	0.0096	0.0219	0.0000	0.0047	0.0029	0.0011	0.0016
2016	0.5398	0.1917	0.1674	0.0576	0.0018	0.0010	0.0094	0.0213	0.0000	0.0046	0.0028	0.0011	0.0015
2017	0.5410	0.1927	0.1671	0.0563	0.0017	0.0010	0.0093	0.0210	0.0000	0.0045	0.0028	0.0011	0.0015
2018	0.5412	0.1941	0.1669	0.0553	0.0017	0.0009	0.0092	0.0209	0.0000	0.0045	0.0027	0.0011	0.0015
2019	0.5411	0.1955	0.1669	0.0545	0.0016	0.0009	0.0091	0.0208	0.0000	0.0044	0.0026	0.0011	0.0015
2020	0.5402	0.1972	0.1668	0.0540	0.0016	0.0009	0.0091	0.0206	0.0000	0.0044	0.0026	0.0011	0.0015
2021	0.5373	0.2000	0.1671	0.0542	0.0014	0.0009	0.0090	0.0206	0.0000	0.0044	0.0026	0.0009	0.0016
2022	0.5343	0.2030	0.1673	0.0545	0.0013	0.0009	0.0086	0.0207	0.0000	0.0044	0.0025	0.0007	0.0018
2023	0.5305	0.2058	0.1673	0.0550	0.0011	0.0009	0.0085	0.0218	0.0000	0.0043	0.0025	0.0004	0.0019
2024	0.5277	0.2090	0.1675	0.0556	0.0009	0.0009	0.0080	0.0214	0.0000	0.0043	0.0025	0.0002	0.0020
2025	0.5244	0.2120	0.1677	0.0563	0.0008	0.0009	0.0076	0.0212	0.0000	0.0043	0.0025	0.0001	0.0022
2026	0.5215	0.2146	0.1681	0.0569	0.0008	0.0009	0.0075	0.0203	0.0000	0.0044	0.0025	0.0002	0.0023
2027	0.5185	0.2170	0.1684	0.0575	0.0008	0.0010	0.0074	0.0195	0.0000	0.0044	0.0025	0.0005	0.0025
2028	0.5159	0.2192	0.1686	0.0582	0.0008	0.0010	0.0074	0.0187	0.0000	0.0044	0.0025	0.0007	0.0026
2029	0.5134	0.2212	0.1688	0.0587	0.0008	0.0010	0.0074	0.0181	0.0000	0.0044	0.0025	0.0009	0.0028
2030	0.5110	0.2231	0.1690	0.0593	0.0008	0.0010	0.0074	0.0173	0.0000	0.0044	0.0025	0.0012	0.0030
2031	0.5076	0.2254	0.1693	0.0598	0.0008	0.0010	0.0074	0.0174	0.0000	0.0044	0.0026	0.0012	0.0031
2032	0.5044	0.2274	0.1696	0.0602	0.0008	0.0010	0.0075	0.0176	0.0000	0.0044	0.0026	0.0012	0.0033
2033	0.5014	0.2291	0.1700	0.0606	0.0008	0.0010	0.0075	0.0178	0.0000	0.0044	0.0027	0.0012	0.0035
2034	0.4987	0.2308	0.1703	0.0609	0.0008	0.0010	0.0076	0.0180	0.0000	0.0044	0.0027	0.0012	0.0036
2035	0.4960	0.2323	0.1707	0.0613	0.0008	0.0010	0.0076	0.0182	0.0000	0.0044	0.0027	0.0012	0.0038
2036	0.4933	0.2333	0.1709	0.0615	0.0008	0.0010	0.0077	0.0191	0.0000	0.0044	0.0029	0.0012	0.0039
2037	0.4907	0.2341	0.1710	0.0618	0.0009	0.0010	0.0078	0.0202	0.0000	0.0044	0.0030	0.0011	0.0040
2038	0.4883	0.2348	0.1712	0.0620	0.0009	0.0010	0.0078	0.0213	0.0000	0.0044	0.0031	0.0011	0.0041
2039	0.4857	0.2356	0.1714	0.0623	0.0009	0.0010	0.0079	0.0223	0.0000	0.0043	0.0032	0.0011	0.0043
2040	0.4834	0.2363	0.1716	0.0625	0.0009	0.0010	0.0079	0.0233	0.0000	0.0043	0.0033	0.0011	0.0044

Table 1. Utility Information for RPS Requirements - Southern California Edison

	CalEEMod						
	Default with RPS						
	(based on 2012	2012 RPS	2012 adjusted	2020 RPS	2020	2030 RPS	2030
Intensity	data)	Reductions*	without RPS	requirements	Adjusted	requirements	Adjusted
CO2	702.440	0.206	884.685	0.33	592.739	0.5	442.343
CH4	0.029	0.206	0.037	0.33	0.024	0.5	0.018
N20	0.00617	0.206	0.008	0.33	0.005	0.5	0.004

^{*} per CalEEMod Appendix D, Table 1.2 - based on SCE's 2012 Corporate Responsibility & Sustainability report

Table 2. RPS Actually Achieved - Southern California Edison

Year	RPS	Source of RPS Achieved
2013	21.6%	https://www.sce.com/wps/wcm/connect/c0fceef5-e04a-4287-8301-
2014	72.5%	8e66e3e5fbac/2014 Corporate+Responsibility+Report FINAL+single-page.pdf?MOD=AJPERES&ContentCache=NONE
2015	24.3%	8e66e5e5fbac/2014 Corporate+Responsibility+Report Final+Single-page.pdiFinOD=AJPERE5&ContentCache=NONE
2016	28.3%	https://www.edison.com/content/dam/eix/documents/investors/corporate_responsibility/2016-eix-corporate_
2017	31.6%	https://www.edison.com/content/dam/eix/documents/sustainability/eix-2017-sustainability-report.pdf

According to the SCE Scorecard for 2015, 2016, and 2017, SCE are on target to meet the RPS requirements

TABLE 3. Population Growth

Year	Population	Total Housing
2016	3,009	811
2017	3,048	822
2018	3,088	832
2019	3,128	843
2020	3,169	854
2021	3,210	865
2022	3,251	876
2023	3,294	888
2024	3,337	899
2025	3,380	911
2026	3,424	923
2027	3,468	935
2028	3,513	947
2029	3,559	959
2030	3,605	972

Growth based on 2016 ACS data and 1.3% annual growth rate.

TABLE 4. Projected Housing Needs

				Increase f	rom 2016
	% Total Units	Total Units	Population	Units	Population
Baseline Year 2016					
Single-family homes	72.6%	589	2,185		
Multi-family homes	13.4%	109	403		
Mobile homes	13.1%	106	394		
Other	0.9%	7	27		
Total Units	100.0%	811	3,009		
Operational Year 2020					
Single-family homes	72.6%	620	2,301	31	116
Multi-family homes	13.4%	114	425	6	21
Mobile homes	13.1%	112	415	6	21
Other	0.9%	8	29	0	1
Total Units	100.0%	854	3,169	43	160
Horizon Year 2030					
Single-family homes	72.6%	706	2,617	117	433
Multi-family homes	13.4%	130	483	22	80
Mobile homes	13.1%	127	472	21	78
Other	0.9%	9	32	1	5
Total Units	100.0%	972	3,605	161	596

Housing unit types and percentages based on 2016 ACS data; growth based on 1.3% annual growth rate.

Table 5. Construction GHG Emissions (MTCO₂e/year)

	Total Emissions ^a	Ammortized ^b			
Construction Year					
2019	730.70	24.36			
2020	1,312.94	43.76			
2021	1,286.95	42.90			
2022	1,259.63	41.99			
2023	1,230.24	41.01			
2024	237.85	7.93			
Total Construction Emissions	6,058.30	201.94			
See CalEEMod Report "Poplar-Cotton Center Community Plan Update", page 5					

Table 6. Operational GHG Emissions (MTCO₂e/year)

^b Project construction amortized over 30 years.

Source	Total Emissions ^a (Unmitigated)	Total Emissions ^b (Mitigated)	% Reduction
Area	262.4349	72.1462	72.51
Energy	1,223.4080	1,193.0120	2.48
Mobile	20,256.7941	18,345.5608	9.44
Waste	327.4140	327.4140	0.00
Water	126.6843	102.9570	18.73
Amortized Construction	6,058.8500	6,058.8500	0.00
Total	28,255.5853	26,099.9400	7.63

b see CalEEMod report "Poplar-Cotton Center Community Plan Update", page-8.

ATTACHMENT 2

CalEEMod Emissions Modeling

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	28.00	1000sqft	3.22	28,000.00	0
General Light Industry	63.00	1000sqft	7.27	63,000.00	0
Other Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0
Fast Food Restaurant with Drive Thru	24.00	1000sqft	2.75	24,000.00	0
Apartments Low Rise	22.00	Dwelling Unit	1.38	22,000.00	80
Mobile Home Park	22.00	Dwelling Unit	2.77	26,400.00	83
Single Family Housing	117.00	Dwelling Unit	37.99	210,600.00	433
Convenience Market (24 Hour)	23.00	1000sqft	2.75	23,000.00	0
Strip Mall	24.00	1000sqft	2.75	24,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	7			Operational Year	2020
Utility Company	Southern California Edisc	on			
CO2 Intensity (lb/MWhr)	592.74	CH4 Intensity (lb/MWhr)	0.024	N2O Intensity (lb/MWhr)	0.005

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - 2020 RPS mandates

Land Use - population based on 3.71 person/unit per 2016 ACS data; non-residential lot acres based on 1.3% annual growth of existing uses; other asphalt is road maintenance activities

Energy Use -

Construction Off-road Equipment Mitigation - Regulation VIII requirements

Mobile Land Use Mitigation - UDB near City of Porterville; County building requirements within UDB

Area Mitigation - residential expected to be constructed with density exceeding 2 du/acre; Air District allowance for electrical equipment

Energy Mitigation - 2019 Title 24 effective 1/1/20

Water Mitigation - 2016 CA Building Code; Tulare County ordinance

Fleet Mix - Air District approved residential fleet for year 2020

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.08	0.02
tblFleetMix	HHD	0.08	0.02
tblFleetMix	HHD	0.08	0.02
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD1	0.02	1.6000e-003

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tblFleetMix	LHD2	5.7980e-003	9.0000e-004
tblFleetMix	LHD2	5.7980e-003	9.0000e-004
tblFleetMix	LHD2	5.7980e-003	9.0000e-004
tblFleetMix	MCY	4.4020e-003	2.6000e-003
tblFleetMix	MCY	4.4020e-003	2.6000e-003
tblFleetMix	MCY	4.4020e-003	2.6000e-003
tblFleetMix	MDV	0.15	0.05
tblFleetMix	MDV	0.15	0.05
tblFleetMix	MDV	0.15	0.05
tblFleetMix	MH	8.1800e-004	1.5000e-003
tblFleetMix	MH	8.1800e-004	1.5000e-003
tblFleetMix	MH	8.1800e-004	1.5000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	MHD	0.02	9.1000e-003
tblFleetMix	OBUS	1.8190e-003	0.00
tblFleetMix	OBUS	1.8190e-003	0.00
tblFleetMix	OBUS	1.8190e-003	0.00
tblFleetMix	SBUS	1.1550e-003	1.1000e-003
tblFleetMix	SBUS	1.1550e-003	1.1000e-003
tblFleetMix	SBUS	1.1550e-003	1.1000e-003
tblFleetMix	UBUS	1.3710e-003	4.4000e-003
tblFleetMix	UBUS	1.3710e-003	4.4000e-003
tblFleetMix	UBUS	1.3710e-003	4.4000e-003
tblLandUse	LotAcreage	0.64	3.22
tblLandUse	LotAcreage	1.45	7.27
tblLandUse	LotAcreage	0.55	2.75

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tblLandUse	LotAcreage	0.53	2.75
tblLandUse	LotAcreage	0.55	2.75
tblLandUse	Population	63.00	80.00
tblLandUse	Population	63.00	83.00
tblLandUse	Population	335.00	433.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblWoodstoves	NumberCatalytic	0.00	1.38
tblWoodstoves	NumberCatalytic	0.00	2.77
tblWoodstoves	NumberCatalytic	0.00	37.99
tblWoodstoves	NumberNoncatalytic	0.00	1.38
tblWoodstoves	NumberNoncatalytic	0.00	2.77
tblWoodstoves	NumberNoncatalytic	0.00	37.99

2.0 Emissions Summary

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2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2019			i i		1 1 1	i i		 		1 1	0.0000	726.4035	726.4035	0.1717	0.0000	730.6962
2020			 		 			 			0.0000	1,310.102 2	1,310.102 2	0.1134	0.0000	1,312.935 8
2021		 			· · ·	 		· · ·			0.0000	1,284.224 4	1,284.224 4	0.1090	0.0000	1,286.950 3
2022			! !		 - 			! !			0.0000	1,256.982 6	1,256.982 6	0.1058	0.0000	1,259.627 1
2023			! !		 - 			! !			0.0000	1,227.782 3	1,227.782 3	0.0982	0.0000	1,230.238 2
2024			- - 					- - 				236.9747			0.0000	237.8548
Maximum											0.0000	1,310.102 2	1,310.102 2	0.1717	0.0000	1,312.935 8

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tor	ns/yr							M	T/yr		
2013									<u>.</u>		0.0000	726.4028	726.4028	0.1717	0.0000	730.69
2020	;;									÷	0.0000	1,310.101 8	1,310.101 8	0.1134	0.0000	1,312.9 5
2021	e;						,			 ! !	0.0000	1,284.224 1	1,284.224 1	0.1090	0.0000	1,286.9 9
2022	e, 	1	 				,			 ! !	0.0000	1,256.982 3	1,256.982 3	0.1058	0.0000	1,259.6 7
	e: ::	1					, , ,			 ! !	0.0000	1,227.781 9	1,227.781 9	0.0982	0.0000	1,230.2 9
	e: ::									 ! !	0.0000	236.9745	236.9745	0.0352	0.0000	237.85
Maximum											0.0000	1,310.101 8	1,310.101 8	0.1717	0.0000	1,312.9 5
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	St	art Date	End	I Date	Maxim	um Unmitig	ated ROG +	NOX (tons/	quarter)	Maxi	mum Mitigat	ted ROG + N	IOX (tons/qu	ıarter)		
			Hic	hest											1	

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2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area			 								170.3603	71.7023	242.0626	0.7997	1.2800e- 003	262.4349
Energy			 					 			0.0000	1,218.080 3	1,218.080 3	0.0402	0.0145	1,223.408 0
Mobile		 	 								0.0000	20,219.68 77	20,219.68 77	1.4843	0.0000	20,256.79 41
Waste			 					 			132.1573	0.0000	132.1573	7.8103	0.0000	327.4140
Water											12.9444	70.8971	83.8415	1.3324	0.0320	126.6843
Total											315.4620	21,580.36 74	21,895.82 94	11.4668	0.0478	22,196.73 52

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr									MT/yr					
Area											0.0000	71.6846	71.6846	3.2200e- 003	1.2800e- 003	72.1462
Energy		 	I I I					 			0.0000	1,187.838 5	1,187.838 5	0.0394	0.0141	1,193.012 2
Mobile		 	i i						 		0.0000	18,309.91 93	18,309.91 93	1.4257	0.0000	18,345.56 08
Waste		 	i i						 		132.1573	0.0000	132.1573	7.8103	0.0000	327.4140
Water											10.3555	58.3216	68.6771	1.0660	0.0256	102.9570
Total											142.5128	19,627.76 41	19,770.27 68	10.3445	0.0410	20,041.09 03

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.82	9.05	9.71	9.79	14.28	9.71

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	4/8/2019	5	70	
2	Site Preparation	Site Preparation	4/9/2019	6/3/2019	5	40	
3	Grading	Grading	6/4/2019	11/4/2019	5	110	
4	Building Construction	Building Construction	11/5/2019	2/5/2024	5	1110	
5	Paving	Paving	2/6/2024	5/20/2024	5	75	
6	Architectural Coating	Architectural Coating	5/21/2024	9/2/2024	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 14

Residential Indoor: 524,475; Residential Outdoor: 174,825; Non-Residential Indoor: 243,000; Non-Residential Outdoor: 81,000; Striped Parking Area: 36,590 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	390.00	144.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	78.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	1 1 1 1							 - -			0.0000	121.1922	121.1922	0.0337	0.0000	122.0350
Total											0.0000	121.1922	121.1922	0.0337	0.0000	122.0350

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3.2 Demolition - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.7046	5.7046	2.0000e- 004	0.0000	5.7095
Total											0.0000	5.7046	5.7046	2.0000e- 004	0.0000	5.7095

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	1 11 11										0.0000	121.1920	121.1920	0.0337	0.0000	122.0349
Total											0.0000	121.1920	121.1920	0.0337	0.0000	122.0349

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3.2 Demolition - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker										 	0.0000	5.7046	5.7046	2.0000e- 004	0.0000	5.7095
Total											0.0000	5.7046	5.7046	2.0000e- 004	0.0000	5.7095

3.3 Site Preparation - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	 			 	 	 		 	 	 	0.0000	68.3374	68.3374	0.0216	0.0000	68.8779
Total											0.0000	68.3374	68.3374	0.0216	0.0000	68.8779

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3.3 Site Preparation - 2019
Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	11 11 11		i i								0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7;									 	0.0000	3.9117	3.9117	1.3000e- 004	0.0000	3.9151
Total											0.0000	3.9117	3.9117	1.3000e- 004	0.0000	3.9151

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust								1 1			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	68.3373	68.3373	0.0216	0.0000	68.8778
Total											0.0000	68.3373	68.3373	0.0216	0.0000	68.8778

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3.3 Site Preparation - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor			1 1 1		 						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker]								0.0000	3.9117	3.9117	1.3000e- 004	0.0000	3.9151
Total											0.0000	3.9117	3.9117	1.3000e- 004	0.0000	3.9151

3.4 Grading - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust								i i i			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road								 			0.0000	306.3573	306.3573	0.0969	0.0000	308.7805
Total											0.0000	306.3573	306.3573	0.0969	0.0000	308.7805

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3.4 Grading - 2019
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	,,		1 1 1		 						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker			1 1 1								0.0000	11.9526	11.9526	4.1000e- 004	0.0000	11.9628
Total											0.0000	11.9526	11.9526	4.1000e- 004	0.0000	11.9628

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road			i i	 	i i	 		 			0.0000	306.3569	306.3569	0.0969	0.0000	308.7801
Total											0.0000	306.3569	306.3569	0.0969	0.0000	308.7801

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3.4 Grading - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	II II II II										0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	ri 11 11 11									 	0.0000	11.9526	11.9526	4.1000e- 004	0.0000	11.9628
Total											0.0000	11.9526	11.9526	4.1000e- 004	0.0000	11.9628

3.5 Building Construction - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
J. Trodu			1 1 1	 	 			 			0.0000	48.1964	48.1964	0.0117	0.0000	48.4899
Total											0.0000	48.1964	48.1964	0.0117	0.0000	48.4899

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3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	73.8781	73.8781	3.9800e- 003	0.0000	73.9775
Worker	11 11 11 11										0.0000	86.8733	86.8733	2.9800e- 003	0.0000	86.9480
Total											0.0000	160.7514	160.7514	6.9600e- 003	0.0000	160.9255

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
on rioda											0.0000	48.1963	48.1963	0.0117	0.0000	48.4898
Total											0.0000	48.1963	48.1963	0.0117	0.0000	48.4898

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3.5 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	73.8781	73.8781	3.9800e- 003	0.0000	73.9775
Worker	11 11 11 11										0.0000	86.8733	86.8733	2.9800e- 003	0.0000	86.9480
Total											0.0000	160.7514	160.7514	6.9600e- 003	0.0000	160.9255

3.5 Building Construction - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

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3.5 Building Construction - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	468.6601	468.6601	0.0231	0.0000	469.2374
Worker											0.0000	538.0330	538.0330	0.0162	0.0000	538.4388
Total											0.0000	1,006.693 1	1,006.693 1	0.0393	0.0000	1,007.676 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	1 11 11										0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

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3.5 Building Construction - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	468.6601	468.6601	0.0231	0.0000	469.2374
Worker											0.0000	538.0330	538.0330	0.0162	0.0000	538.4388
Total											0.0000	1,006.693 1	1,006.693 1	0.0393	0.0000	1,007.676 2

3.5 Building Construction - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

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3.5 Building Construction - 2021 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	462.7263	462.7263	0.0218	0.0000	463.2713
Worker										 	0.0000	519.2114	519.2114	0.0143	0.0000	519.5691
Total											0.0000	981.9378	981.9378	0.0361	0.0000	982.8404

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	1 1 1 1 1		1 1 1				 	 			0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

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3.5 Building Construction - 2021 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	462.7263	462.7263	0.0218	0.0000	463.2713
Worker											0.0000	519.2114	519.2114	0.0143	0.0000	519.5691
Total											0.0000	981.9378	981.9378	0.0361	0.0000	982.8404

3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr									MT/yr							
On Road	1 1 1 1 1		1 1 1	 			 	 			0.0000	301.2428	301.2428	0.0722	0.0000	303.0471	
Total											0.0000	301.2428	301.2428	0.0722	0.0000	303.0471	

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3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Vendor			1 1 1		 		 				0.0000	456.8730	456.8730	0.0209	0.0000	457.3964		
Worker					 						0.0000	498.8668	498.8668	0.0127	0.0000	499.1836		
Total											0.0000	955.7398	955.7398	0.0336	0.0000	956.5800		

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr									MT/yr							
On Road	1 1 1 1		1 1 1	 			 	 			0.0000	301.2425	301.2425	0.0722	0.0000	303.0467	
Total											0.0000	301.2425	301.2425	0.0722	0.0000	303.0467	

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3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Vendor					 						0.0000	456.8730	456.8730	0.0209	0.0000	457.3964		
Worker											0.0000	498.8668	498.8668	0.0127	0.0000	499.1836		
Total											0.0000	955.7398	955.7398	0.0336	0.0000	956.5800		

3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Off-Road	ii ii										0.0000	301.3462	301.3462	0.0717	0.0000	303.1383		
Total											0.0000	301.3462	301.3462	0.0717	0.0000	303.1383		

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3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	,,										0.0000	446.0683	446.0683	0.0153	0.0000	446.4515
Worker	,										0.0000	480.3678	480.3678	0.0112	0.0000	480.6484
Total											0.0000	926.4361	926.4361	0.0266	0.0000	927.0999

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
											0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total											0.0000	301.3458	301.3458	0.0717	0.0000	303.1380

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3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	446.0683	446.0683	0.0153	0.0000	446.4515
Worker											0.0000	480.3678	480.3678	0.0112	0.0000	480.6484
Total											0.0000	926.4361	926.4361	0.0266	0.0000	927.0999

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	1 11 11										0.0000	30.1404	30.1404	7.1300e- 003	0.0000	30.3186
Total											0.0000	30.1404	30.1404	7.1300e- 003	0.0000	30.3186

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3.5 Building Construction - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	11 11 11										0.0000	44.2932	44.2932	1.5600e- 003	0.0000	44.3321
Worker	11 11 11	 									0.0000	46.1332	46.1332	1.0000e- 003	0.0000	46.1583
Total											0.0000	90.4265	90.4265	2.5600e- 003	0.0000	90.4905

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
			1 1 1				 	 			0.0000	30.1404	30.1404	7.1300e- 003	0.0000	30.3185
Total											0.0000	30.1404	30.1404	7.1300e- 003	0.0000	30.3185

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3.5 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	44.2932	44.2932	1.5600e- 003	0.0000	44.3321
Worker					 						0.0000	46.1332	46.1332	1.0000e- 003	0.0000	46.1583
Total											0.0000	90.4265	90.4265	2.5600e- 003	0.0000	90.4905

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road											0.0000	75.0995	75.0995	0.0243	0.0000	75.7067
Paving			 		 				 		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	75.0995	75.0995	0.0243	0.0000	75.7067

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3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.1183	5.1183	1.1000e- 004	0.0000	5.1211
Total											0.0000	5.1183	5.1183	1.1000e- 004	0.0000	5.1211

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road											0.0000	75.0994	75.0994	0.0243	0.0000	75.7066
Paving	11 11 11	 			 			1 1 1	i i i		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	75.0994	75.0994	0.0243	0.0000	75.7066

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	61 61 61 61		i i					 			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker								 			0.0000	5.1183	5.1183	1.1000e- 004	0.0000	5.1211
Total											0.0000	5.1183	5.1183	1.1000e- 004	0.0000	5.1211

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	11 11 11				 						0.0000	9.5747	9.5747	5.4000e- 004	0.0000	9.5882
Total											0.0000	9.5747	9.5747	5.4000e- 004	0.0000	9.5882

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3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor			1 1 1		 						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker]		 			 			0.0000	26.6153	26.6153	5.8000e- 004	0.0000	26.6298
Total											0.0000	26.6153	26.6153	5.8000e- 004	0.0000	26.6298

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	11 11 11		 								0.0000	9.5747	9.5747	5.4000e- 004	0.0000	9.5882
Total											0.0000	9.5747	9.5747	5.4000e- 004	0.0000	9.5882

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3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	,,										0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	,										0.0000	26.6153	26.6153	5.8000e- 004	0.0000	26.6298
Total											0.0000	26.6153	26.6153	5.8000e- 004	0.0000	26.6298

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated											0.0000	18,309.91 93	18,309.91 93	1.4257	0.0000	18,345.56 08
Unmitigated								 			0.0000	20,219.68 77	20,219.68 77	1.4843	0.0000	20,256.79 41

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	144.98	157.52	133.54	522,325	451,909
Convenience Market (24 Hour)	16,973.77	19,851.30	17444.35	12,150,719	10,512,649
Fast Food Restaurant with Drive Thru	11,906.88	17,328.72	13025.28	11,085,014	9,590,615
General Light Industry	439.11	83.16	42.84	1,281,318	1,108,581
General Office Building	308.84	68.88	29.40	647,799	560,468
Mobile Home Park	109.78	110.00	95.92	388,068	335,751
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,113.84	1,159.47	1008.54	3,977,849	3,441,585
Strip Mall	1,063.68	1,008.96	490.32	1,554,401	1,344,848
Total	32,060.88	39,768.01	32,270.19	31,607,493	27,346,405

4.3 Trip Type Information

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		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	16.80	7.10	7.90	38.40	22.60	39.00	86	11	3
Convenience Market (24 Hour)	14.70	6.60	6.60	0.90	80.10	19.00	24	15	61
Fast Food Restaurant with Drive	14.70	6.60	6.60	2.20	78.80	19.00	29	21	50
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Mobile Home Park	16.80	7.10	7.90	38.40	22.60	39.00	86	11	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	38.40	22.60	39.00	86	11	3
Strip Mall	14.70	6.60	6.60	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Convenience Market (24 Hour)	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
Fast Food Restaurant with Drive Thru	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
General Light Industry	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
General Office Building	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
Mobile Home Park	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Other Asphalt Surfaces	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818
Single Family Housing	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500
Strip Mall	0.506900	0.034567	0.171206	0.149208	0.024362	0.005798	0.021031	0.077362	0.001819	0.001371	0.004402	0.001155	0.000818

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated											0.0000	780.0724	780.0724	0.0316	6.5800e- 003	782.8229
Electricity Unmitigated								 			0.0000	790.7190	790.7190	0.0320	6.6700e- 003	793.5071
NaturalGas Mitigated								 			0.0000	407.7661	407.7661	7.8200e- 003	7.4800e- 003	410.1893
NaturalGas Unmitigated			1					 			0.0000	427.3613	427.3613	8.1900e- 003	7.8300e- 003	429.9009

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5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
Apartments Low Rise	366964		: : :	i i i	: :		 	• • •	! !	: : :		0.0000	19.5826	19.5826	3.8000e- 004	3.6000e- 004	19.6990
Convenience Market (24 Hour)	131100	, : : :	,	,	 				,	, , , ,		0.0000	6.9960	6.9960	1.3000e- 004	1.3000e- 004	7.0376
Fast Food Restaurant with Drive Thru	2.37816e +006	 ! !		! !	r	r			! !	!	1	0.0000	126.9077	126.9077	2.4300e- 003	2.3300e- 003	127.6618
General Light Industry	1.0584e +006		 	! !					 	! !	* ! !	0.0000	56.4803	56.4803	1.0800e- 003		56.8159
General Office Building	481320	, : : :	1 						,	,	 : : :	0.0000	25.6851		4.9000e- 004	4.7000e- 004	25.8377
Mobile Home Park	444862	,	,	, , ,	 	 			,	,		0.0000	23.7395		4.6000e- 004	4.4000e- 004	23.8806
Other Asphalt Surfaces	0	,	,		 	 		 	,	,		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.01084e +006		,	,	, 	 			,	,		0.0000	160.6700	160.6700	3.0800e- 003	2.9500e- 003	161.6248
Strip Mall	136800	,	y	,	,				,		 ! ! !	0.0000	7.3002	7.3002	1.4000e- 004	1.3000e- 004	7.3436
Total												0.0000	427.3613	427.3613	8.1900e- 003	7.8500e- 003	429.9009

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5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Low Rise	348621		! !	1 1 1					i i i	i !		0.0000	18.6037	18.6037	3.6000e- 004	3.4000e- 004	18.7143
Convenience Market (24 Hour)			,	1	 				,	,		0.0000	6.5123	6.5123	1.2000e- 004	1.2000e- 004	6.5510
Fast Food Restaurant with Drive Thru	2.34846e +006		r		r	 			r	r		0.0000	125.3226	125.3226	2.4000e- 003	2.3000e- 003	126.0674
General Light Industry	984841			1					1		•	0.0000	52.5549	52.5549	1.0100e- 003	9.6000e- 004	52.8672
General Office Building	449744		1 	1					,	, ! ! !		0.0000	24.0001	24.0001	004	4.4000e- 004	24.1427
Mobile Home Park	421066		1 	1					1	, ! ! !		0.0000	22.4697	22.4697		4.1000e- 004	22.6032
Other Asphalt Surfaces	0		1 	1					1	, ! ! !		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.83914e +006		1 	1					1	, ! ! !		0.0000	151.5074	151.5074	2.9000e- 003	2.7800e- 003	152.4078
Strip Mall	127342		,	1					,	,		0.0000	6.7954	6.7954	1.3000e- 004	1.2000e- 004	6.8358
Total												0.0000	407.7661	407.7661	7.8100e- 003	7.4700e- 003	410.1893

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Low Rise	101994	27.4223	1.1100e- 003	2.3000e- 004	27.5190
Convenience Market (24 Hour)	234140	62.9514	2.5500e- 003	5.3000e- 004	63.1734
Fast Food Restaurant with Drive Thru	803760	216.1008	8.7500e- 003	1.8200e- 003	216.8628
General Light Industry	148680	39.9745	1.6200e- 003	3.4000e- 004	40.1154
General Office Building	279160	75.0556	3.0400e- 003	6.3000e- 004	75.3203
Mobile Home Park	123422	33.1835	1.3400e- 003	2.8000e- 004	33.3005
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.00551e +006	270.3424	0.0110	2.2800e- 003	271.2957
Strip Mall	244320	65.6885	2.6600e- 003	5.5000e- 004	65.9201
Total		790.7190	0.0320	6.6600e- 003	793.5071

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5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments Low Rise	100988	27.1520	1.1000e- 003	2.3000e- 004	27.2477
Convenience Market (24 Hour)	229052	61.5836	2.4900e- 003	5.2000e- 004	61.8007
Fast Food Restaurant with Drive Thru	790656	212.5776	8.6100e- 003	1.7900e- 003	213.3272
General Light Industry	146916	39.5002	1.6000e- 003	3.3000e- 004	39.6395
General Office Building	273496	73.5327	2.9800e- 003	6.2000e- 004	73.7919
Mobile Home Park	122549	32.9488	1.3300e- 003	2.8000e- 004	33.0650
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	998713	268.5164	0.0109	2.2700e- 003	269.4632
Strip Mall	239011	64.2611	2.6000e- 003	5.4000e- 004	64.4877
Total		780.0724	0.0316	6.5800e- 003	782.8229

6.0 Area Detail

6.1 Mitigation Measures Area

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Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated											0.0000	71.6846	71.6846	3.2200e- 003	1.2800e- 003	72.1462
Unmitigated	 										170.3603	71.7023	242.0626	0.7997	1.2800e- 003	262.4349

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6.2 Area by SubCategory Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	y tons/yr								MT	/yr						
Architectural Coating								i i i			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products			i								0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth			i								170.3603	69.7464	240.1067	0.7977	1.2800e- 003	260.4312
Landscaping						 	 	1 1 1 1	 		0.0000	1.9559	1.9559	1.9100e- 003	0.0000	2.0037
Total											170.3603	71.7023	242.0626	0.7997	1.2800e- 003	262.4349

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6.2 Area by SubCategory Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	7/yr		
Architectural Coating	 							i i			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	i i					 	 	i i			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	i i					 	 	i i	i i		0.0000	69.7464	69.7464	1.3400e- 003	1.2800e- 003	70.1609
Landscaping	1 1 1 1	 				 	 	i i	i i		0.0000	1.9383	1.9383	1.8900e- 003	0.0000	1.9854
Total											0.0000	71.6846	71.6846	3.2300e- 003	1.2800e- 003	72.1462

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category		MT	-/yr	
Willigated	68.6771	1.0660	0.0256	102.9570
Jgatou	83.8415	1.3324	0.0320	126.6843

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Apartments Low Rise	1.43339 / 0.903658	3.3904	0.0468	1.1300e- 003	4.8971
Convenience Market (24 Hour)	1.70367 / 1.04418	4.0016	0.0557	1.3400e- 003	5.7923
Fast Food Restaurant with Drive Thru	7.28481 / 0.464988		0.2378	5.7000e- 003	20.9903
General Light Industry	14.5688 / 0	25.8168	0.4756	0.0114	41.1000
General Office Building	4.97654 / 3.05014	11.6890	0.1626	3.9100e- 003	16.9197
Mobile Home Park	1.43339 / 0.903658		0.0468	1.1300e- 003	4.8971
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	7.62302 / 4.80582	18.0309	0.2490	6.0000e- 003	26.0437
Strip Mall	1.77774 / 1.08958	4.1756	0.0581	1.4000e- 003	6.0441
Total		83.8415	1.3324	0.0320	126.6843

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7.2 Water by Land Use Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Apartments Low Rise	1.14671 / 0.848535	2.8305	0.0375	9.0000e- 004	4.0363
Convenience Market (24 Hour)	1.36293 / 0.980488		0.0445	1.0700e- 003	4.7709
Fast Food Restaurant with Drive Thru	5.82785 / 0.436624	10.7382	0.1903	4.5600e- 003	16.8533
General Light Industry	11.655 / 0	20.6535	0.3805	9.1100e- 003	32.8800
General Office Building	3.98124 / 2.86408	9.7502	0.1301	3.1300e- 003	13.9361
Mobile Home Park	1.14671 / 0.848535		0.0375	9.0000e- 004	4.0363
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.09842 / 4.51266	15.0533	0.1993	4.8000e- 003	21.4658
Strip Mall	1.42219 / 1.02312	3.4830	0.0465	1.1200e- 003	4.9783
Total		68.6771	1.0660	0.0256	102.9570

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Poplar-Cotton Center Community Plan Update - Tulare County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	-/yr	
	132.1573	7.8103	0.0000	327.4140
	132.1573	7.8103	0.0000	327.4140

8.2 Waste by Land Use Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Apartments Low Rise	10.12	2.0543	0.1214	0.0000	5.0894
Convenience Market (24 Hour)	69.12	14.0307	0.8292	0.0000	34.7606
Fast Food Restaurant with Drive Thru	276.45	56.1169	3.3164	0.0000	139.0271
General Light Industry	78.12	15.8577	0.9372	0.0000	39.2867
General Office Building	26.04	5.2859	0.3124	0.0000	13.0956
Mobile Home Park	10.12	2.0543	0.1214	0.0000	5.0894
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	155.88	31.6422	1.8700	0.0000	78.3923
Strip Mall	25.2	5.1154	0.3023	0.0000	12.6731
Total		132.1573	7.8103	0.0000	327.4140

8.2 Waste by Land Use Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
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Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	155.88	31.6422	1.8700	0.0000	78.3923
Strip Mall	25.2	5.1154	0.3023	0.0000	12.6731
Total		132.1573	7.8103	0.0000	327.4140

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Attachment "E"

Keller Wegley Engineering Letter

DENNIS R. KELLER CONSULTING CIVIL ENGINEER, INC.

JAMES H. WEGLEY
CONSULTING CIVIL ENGINEER, INC.

JAMES A. BLAIR, R.C.E.
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October 3, 2018



Mr. Dave Bryant Chief Planner, Special Projects Resource Management Agency County of Tulare 5961 South Mooney Blvd Visalia, CA 93277

RE: POPLAR COMMUNITY SERVICE DISTRICT

Dear Dave:

On Thursday September 6, 2018, the Poplar Community Service District (District) Board of Directors authorized our office to provide to the County a status report as to water and wastewater capacity. In response to the instruction, we offer the following.

Water System

The District currently uses two (2) active groundwater wells to meet water system demand. The District's water system is regulated by the State Water Resources Control Board-Division of Drinking Water (SWRCB-DDW). The highest District water demand occurred in 2009 with a Maximum Day Demand (MDD) of approximately 1,253 gpm. Table A presents the District's computed Maximum Day Demand from 2008 to 2017.

Dave Bryant Resource Management Agency October 3, 2018

TABLE A WATER PRODUCTION MAXIMUM MONTH DAILY DEMAND POPLAR COMMUNITY SERVICE DISTRICT

Year Month (n		nth (mg)	Maximum Day	(mgd)
1 cai	July	August	gpm	gpm
2008	29.1		651	977
2009	37.3		835	1,253
2010	32.1		720	1,080
2011	29.7		665	998
2012	31.7		709	1,064
2013	33.2		743	1,114
2014	23.7		530	795
2015	16.8		377	565
2016		21.6	483	724
2017		24.1	540	810

Table B presents the current capacity of the two (2) active sources, in addition to a contribution to demand from storage over a six (6) hour period of time the total of these sources, is 1,440 gpm. The District has a total of 290,000 gallons of storage of which we are assuming only 200,000 gallons is available at a reasonable delivery pressure.

The District has received funding to replace a District Well that exceeds the State's Maximum Contaminant Level for Nitrates. Construction is scheduled to occur in 2019. The capacity of this well has yet to be determined, but would be additive to the existing amounts presented in Table B.

TABLE B
WELL CAPACITY
POPLAR COMMUNITY SERVICE DISTRICT

Source	Capacity (gpm)	Month Reading Observed
Well 02 (North)	521	August 2018
Well 05 (Middle)	364	July 2018
Storage	555	Computed
Total	1,440	

Dave Bryant Resource Management Agency October 3, 2018

Sewer System

The District is responsible for providing sanitary sewer service to residents within its service area. There are approximately 658 Single Family Residential Unit Equivalents (SFRUE) contributory to the District's sewer system. Raw sewage is collected and transported to a wastewater treatment and disposal facility (WWTF) located southwest of the community.

The District's WWTF is operated under the provisions of Waste Discharge Requirements Order No. 98-214 issued by the California Regional Water Quality Control Board (RWQCB). The District's WWTF is currently operating in full compliance with Order No. 98-214 issued by the RWQCB. Order No. 98-214 prescribes that monthly average discharge flow shall not exceed 0.31 million gallons per day (MGD). The highest maximum month flow recorded in the past 10 years occurred July, 2011. The flow at the WWTF in the month of July, 2011, was approximately 0.263 MGD. The District's WWTF is currently operating at approximately 85% of its rated capacity. At 100% of permitted flow, it is estimated that the District's WWTF could support a total of 774 SFRUE.

Capacity estimates are for wastewater treatment and do not consider collection system capacity constraints. Capacity availability and disposal elements in the collection system are evaluated on a case-by-case basis with deficiencies being addressed by developers that wish to connect to the District's system.

The Poplar CSD currently recycles its wastewater by irrigating 41 acres of alfalfa on land owned by the District. The land used for wastewater reclamation is anticipated to increase upon the District's receipt of financial assistance, currently applied for. The District purchased additional acreage in 2001 for this purpose. The District's wastewater reclamation activities promote water conservation and groundwater recharge and demonstrate the District's desire to conserve its available water resources.

We hope this addresses your question regarding water and sewer system capacity for District. If you have any questions please contact the undersigned.

Very truly yours,

Dennis R. Keller

Consulting Civil Engineer

Dave Bryant Resource Management Agency October 3, 2018

DK:dd

cc: Poplar Community Service District J. Patrick Sullivan

Attachment "F"

Mitigation Monitoring and Reporting Program

Attachment "F"

MITIGATION MONITORING AND REPORTING PROGRAM

This Draft Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with State law and based upon the findings of the Mitigated Negative Declaration (MND) for the proposed Project. The MMRP lists mitigation measures recommended in the MND for the proposed Project and identifies monitoring and reporting requirements.

The CEQA Public Resources Code Section 21081.6 requires the Lead Agency decision making body is going to approve a project and certify the MND that it also adopt a reporting or monitoring program for those measures recommended to mitigate or avoid significant/adverse effects of the environment identified in the MND. The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation. The MMRP is to contain the following elements:

- Action and Procedure. The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.
- Compliance and Verification. A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when and by whom and compliance will be monitored and reported and to whom it will be report. As necessary the reporting should indicate any follow-up actions that might be necessary if the reporting notes the impact has not been mitigated.
- **Flexibility.** The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon the recommendations by those responsible for the MMRP. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program

The MMRP Table presents the Mitigation Measures identified for the proposed Project in this MND. Each Mitigation Measure is identified by the impact number. For example, 4-1 would be the first Mitigation Measure identified in the Biological analysis of the draft EIR.

The first column of the MMRP Table identifies the Mitigation Measure. The second column, entitled "When Monitoring is to Occur," identifies the time the Mitigation Measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring that should take place to assure the mitigation is being or has been implemented to achieve the desired outcome or performance standard. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the Mitigation Measure is implemented. The last columns will be used by the County to ensure that individual Mitigation Measures have been complied with and monitored.

	1.22v-8-v-1011	Monitoring and Rep	B B					
Mitigation Measure	Monitoring Timing /	Action Indicating	Monitoring Agency	Person Conducting	Verification of Compliance			
	Frequency	Compliance		Monitoring / Reporting	Initials	Date	Remarks	
BIOLOGICAL RESOURCES								
SAN JOAQUIN KIT FOX								
4-1. (Pre-construction Surveys). Pre-construction surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance, construction activities, and/or any project activity likely to impact the San Joaquin kit fox. These surveys will be conducted in accordance with the USFWS Standard Recommendations. The primary objective is to identify kit fox habitat features (e.g. potential dens and refugia) on the project site and evaluate their use by kit foxes through use of remote monitoring techniques such as motion-triggered cameras and tracking medium. If an active kit fox den is detected within or immediately adjacent to the area of work, the USFWS and CDFW shall be contacted immediately to determine the best course of action.	Prior to construction-related activities.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning Department	Qualified biologist.				
4-2. (Avoidance). Should a kit fox be found using any of the sites during preconstruction surveys, the project will avoid the habitat occupied by the kit fox and the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified.	Prior to construction-related activities.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning Department	Qualified biologist.				
4-3. (Minimization). Construction activities shall be carried out in a manner that minimizes disturbance to kit foxes. Minimization measures include, but are not limited to: restriction of project-related vehicle traffic to established roads, construction areas, and other designated areas; inspection and covering of structures (e.g., pipes), as well as installation of escape structures, to prevent the inadvertent entrapment of kit foxes;	During construction-related activities.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning Department	Qualified biologist.				

	Mitigation I	Monitoring and Rep	orting Program					
Mitigation Measure	Monitoring Timing /	Action Indicating	Monitoring Agency	Person Conducting	Verification of Compliance			
	Frequency	Compliance		Monitoring / Reporting	Initials	Date	Remarks	
restriction of rodenticide and herbicide use; and proper disposal of food items and trash.								
4-4. (Employee Education Program). Prior to the start of construction the applicant will retain a qualified biologist to conduct a tailgate meeting to train all construction staff that will be involved with the project on the San Joaquin kit fox. This training will include a description of the kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of the measures being taken to reduce impacts to the species during project construction and implementation.	Prior to construction-related activities.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning Department	Qualified biologist.				
4-5. (Mortality Reporting). The Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified in writing within three working days in case of the accidental death or injury of a San Joaquin kit fox during project-related activities. Notification must include the date, time, location of the incident or of the finding of a dead or injured animal, and any other pertinent information.	Prior to construction-related activities.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning Department	Qualified biologist.				
AMERICAN BADGER								
4-6. (Pre-construction Surveys). A preconstruction survey for American badgers will be conducted by a qualified biologist within 30 days of the onset of construction. The survey area will encompass all suitable habitats within and immediately adjacent to the Cottonwood Creek (both options), sand pit expansion, and retired sand pit reclamation sites.	Prior to construction-related activities.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning Department	Qualified biologist.				
4-7. (Avoidance). Should an active den be identified during the preconstruction surveys, a disturbance-free buffer will be established around the den and maintained until a qualified biologist has	Prior to construction-related activities.	Retention of professional biologist/ongoing monitoring/	County of Tulare Planning Department	Qualified biologist.				

Mitigation Monitoring and Reporting Program									
Mitigation Measure	Monitoring Action Timing / Indicating		Monitoring Agency	Person Conducting	Verification of Compliance				
	Frequency	Compliance		Monitoring / Reporting	Initials	Date	Remarks		
determined that the cubs have dispersed, if it is a natal den, or the den has been abandoned. If it is not a natal den, and the badger does not leave of its own accord, then the badger can be passively relocated with methods developed by a qualified biologist.		submittal of Report of Findings, if applicable							
4-8. (Consultation). Prior to the start of ground disturbance activities, the applicant shall consult with the California Department of Fish and Wildlife (CDFW) and/or the U.S. Department of Fish and Wildlife Service (USFWS) to determine if a Wetland Delineation and a Lake or Streambed Alteration Agreement will be required.	Prior to construction-related activities.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings, if applicable	County of Tulare Planning Department	Qualified biologist.					
CULTURAL RESOURCES									
5-1. If, in the course of construction or operation within the Project area, any archaeological, historical, or paleontological resources are uncovered, discovered, or otherwise detected or observed, activities within fifty (50) feet of the find shall be ceased. A qualified archaeologist/paleontologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Tulare County Resources Management Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the proposed Project. Where feasible, mitigation achieving preservation in place will be implemented. Preservation in place may be accomplished by, but is not limited to: planning construction to avoid archaeological/paleontological sites with a layer of chemically stable soil prior to building on the site. If significant resources are encountered, the feasibility of various methods of achieving preservation in place shall be considered, and an appropriate method	Prior to and during construction-related activities.	Daily or as needed throughout the construction period if suspicious resources are discovered	Tulare County Planning Department	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.					

	Mitigation I	Monitoring and Rep	orting Program				
Mitigation Measure	Monitoring Action Timing / Indicating	Monitoring Agency	Person Conducting	Verification of Compliance			
	Frequency	Compliance		Monitoring / Reporting	Initials	Date	Remarks
of achieving preservation in place shall be selected and implemented, if feasible. If preservation in place is not feasible, other mitigation shall be implemented to minimize impacts to the site, such as data recovery efforts that will adequately recover scientifically consequential information from and about the site. Mitigation shall be consistent with CEQA Guidelines section 15126.4(b)(3).							
resources are encountered during project-specific construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural resources. If such resources are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.	Prior to and during construction-related activities.	Daily or as needed throughout the construction period if suspicious resources are discovered	Tulare County Planning Department	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			
TRIBAL CULTURAL RESOURCES See Mitigation Measures 5-1 and 5-2				1			
17-1. Consistent with Section 7050.5 of the	During	Daily or as needed	Tulare County	A qualified			
California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during Project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native	Construction	throughout the construction period if suspicious resources are discovered	Planning Department	archaeologist shall document the results of field evaluation and shall recommend			

	Mitigation Monitoring and Reporting Program									
Mitigation Measure		Monitoring Agency	g Person Conducting	Verification of Compliance						
	Frequency	Compliance		Monitoring / Reporting	Initials	Date	Remarks			
American Heritage Commission (Public Resources Code Sec. 5097). In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken: 1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: a. The Tulare County Coroner/Sheriff must be contacted to determine that no investigation of the cause of death is required; and b. If the coroner determines the remains to be Native American: i. The coroner shall contact the Native American Heritage Commission within 24 hours. ii. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American. iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or 2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity				further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.						

Mitigation Monitoring and Reporting Program								
Mitigation Measure	Timing / Indic	Action Indicating		Person Conducting	Verification of Compliance			
		0		Monitoring / Reporting	Initials	Date	Remarks	
on the property in a location not subject to further								
subsurface disturbance.								
a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a								
recommendation within 24 hours after being notified by the commission.								
b. The descendant fails to make a recommendation; or								
c. The landowner or his authorized								
representative rejects the recommendation of the descendent.								