Department of Development Services

Paula Daneluk, Director
Curtis Johnson, Assistant Director

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Oroville, California 95965

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buttecounty.net/dds

BUTTE COUNTY
NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
TENTATIVE SUBDIVISION MAP TSM21-0006

NOTICE IS HEREBY GIVEN that Butte County has prepared an Initial Study in accordance with the California Environmental Quality Act (CEQA) and is considering the adoption of a Mitigated Negative Declaration for the project described below. The Mitigated Negative Declaration establishes that although the proposed project could have a significant effect on the environment, there will not be a significant effect because required mitigation measures will address potential project effects. The County has prepared this Notice of Intent to Adopt a Mitigated Negative Declaration to provide an opportunity for input from public agencies, organizations, and interested parties on the environmental analysis addressing the potential effects of the proposed project. The IS/MND is available for review on the County's website at http://www.buttecounty.net/dds/Planning/CEQA.aspx.

Project Information

Project: Douglas Arnold Tentative Subdivision Map (TSM21-0006)

Location: The project site encompasses 17.6 acres located at the southeast corner of Midway and Speedway Avenue and north of Entler Avenue, Chico, CA.; APN: 040-040-001, 040-040-014, and 040-040-010.

Project Description: Proposed Tentative Subdivision Map to subdivide 17.6-acres into fifteen (15) lots for future single-family residential development, consistent with the Very Low Density Residential (VLDR) zone. The 15 residential lots will range in size from 1.08 to 1.33 acres and average 1.17 acres. New lots will access directly off a new road connection between Speedway Avenue and Entler Avenue. Individual, onsite septic systems will provide wastewater disposal for each lot. A public water system (California Water Service) will provide potable water to each of the lots.

The Initial Study/Mitigated Negative Declaration (IS/MND) is on file for public review and comment starting **June 6, 2022,** to **July 5, 2022**. All comments for the IS/MND must be submitted in writing and received no later than **5:00 pm Tuesday, July 5, 2022**. Written comments may be submitted to the project planner Rowland Hickel, Senior Planner, Butte County Development Services Department, Planning Division, 7 County Center Drive, Oroville, CA 95965. Phone: (530) 552-3684 Email: rhickel@buttecounty.net. The Butte County Planning Commission will consider the proposed project at a public hearing on a future date to be determined.

PAULA DANELUK, DIRECTOR OF DEVELOPMENT SERVICES

INITIAL STUDY AND ENVIRONMENTAL REVIEW CHECKLIST

California Environmental Quality Act (CEQA)

PROJECT INFORMATION

1. Project Title: Douglas Arnold Tentative Subdivision Map (TSM21-0006)

2. Lead Agency Name and Address: Butte County – Department of Development Services
   Planning Division
   7 County Center Drive
   Oroville, CA 95965

3. Contact Person and Phone Number: Rowland Hickel, Senior Planner
   530.552-3684; rhickel@buttecounty.net

4. Project Location: The subject property is comprised of three parcels totaling approximately 17.6 acres (APN 040-040-001, -014, and -010). It is located at the southeast corner of Midway and Speedway Avenue and north of Entler Avenue, Chico, CA., Section 6, Township 21 North, Range 2 East; MDB&M. Lat. 39°42'05.71"N/Long. 121^{0}80'34.63"W.

5. Project Sponsor's Name and Address: Doug Arnold
   342 Entler Avenue
   Chico, CA 95928

6. General Plan Designation: Very Low Density Residential (VLDR)

7. Zoning: Very Low Density Residential (VLDR)

8. 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 project would approve a 15-lot tentative subdivision map (TSM21-0006) for construction of a 17.6-acre site zoned Very Low Density Residential (VLDR). The site is located on the east side of Midway, south of Speedway Avenue and north of Entler Avenue. The 15 residential lots will range in size from 1.08 to 1.33 acres and average 1.17 acres. New lots will access directly off a new road connection between Speedway Avenue and Entler Avenue. Individual, onsite septic systems will provide wastewater disposal for each lot. A public water system (California Water Service) will provide potable water to each of the lots. The site is currently vacant and was used as a commercial orchard. The orchard was removed in summer 2021. No structures are located on the site.

9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings)

   The project site area is characterized as undeveloped open space/agricultural lands with orchards to the west, single-family residential to the east and south and open space directly north of the site. Glen Oaks Memorial Park is located to the northwest and the Smucker Natural Foods plant is located to the northeast.

Direction	General Plan Designation	Zoning	Existing Land Use(s)
North	Industrial	General Industrial	Open space and the Smucker Natural Foods plant
South	Very Low Density Residential	VLDR	Residential
East	Very Low Density Residential	VLDR	Residential
West	Agriculture	AG-40	Orchard

The project site is located within unincorporated Butte County, adjacent to and south of the City of Chico municipal boundary and located within the City's sphere of influence. The parcels are zoned VLDR. The purpose of the VLDR designation as defined in the Butte County General Plan is to allow single-family dwellings at densities up to 1 dwelling unit per acre (0.2 to 1 unit per acre). The project is allowed outright per the current General Plan and zoning designation.

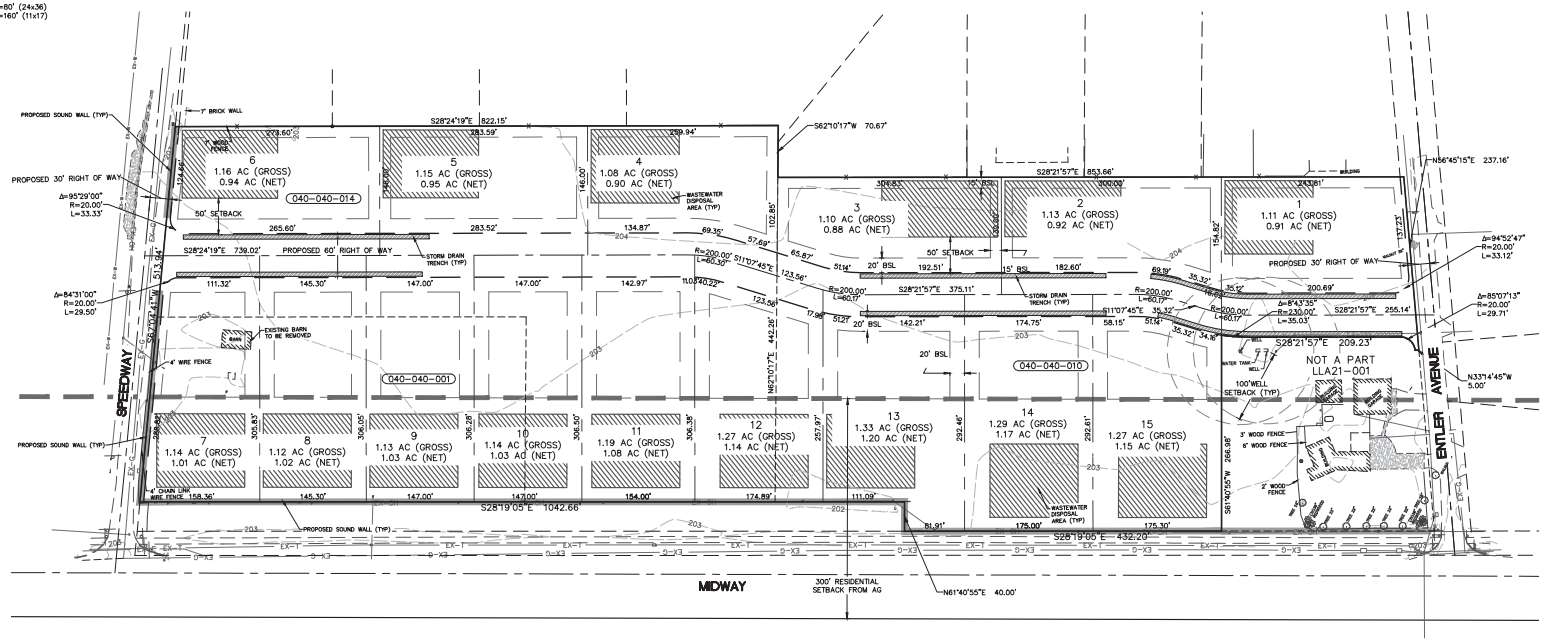
The topography in the project site area is gentle and flat, with an elevation of 213 feet above sea level. Vegetation on the project site is primarily cultivated agricultural/orchard land and ornamental plants and shrubs. The site is bordered by single-family residential to the east and south, industrial to the north and agricultural/orchard to the west.

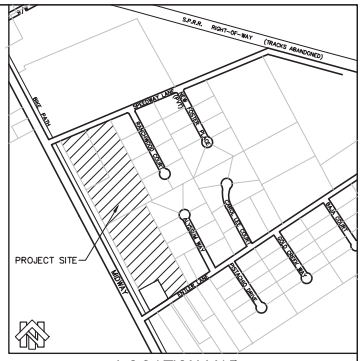
10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)

- Butte County Department of Environmental Health (septic installation);
- California Water Company (water meter installation); and
- Butte County Development Services: Subdivision approval and Building Permits.

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

See Discussion 1.18





LOCATION MAP NTS

LEGEND

- FOUND MONUMENT AS DESCRIBED
- EXISTING WATER METER
- EXISTING POWER POLE WITH ANCHOR
- EXISTING STORM DRAIN INLET
- EXISTING STORM DRAIN MANHOLE
- EXISTING WATER VALVE
- EXISTING SIGN
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING FENCE LINE
- EXISTING FLOW LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING EASEMENT
- EXISTING PROPERTY LINE FOR SURROUNDING PARCELS
- XX" EXISTING REDWOOD TREE (xx" IN SIZE)
- XX" EXISTING TREE (xx" IN SIZE)
- XX" EXISTING TREE TO BE REMOVED
- PROPOSED FIRE HYDRANT
- PROPERTY BOUNDARY
- PARCEL LINE PRIOR TO LLA21-0001
- PROPOSED PROPERTY LINE
- PROPOSED EASEMENT
- EXISTING WELL
- PROPOSED SOUND WALL

NOTES

1. ZONING: VERY LOW DENSITY RESIDENTIAL (VLDR)
2. GENERAL PLAN: VERY LOW DENSITY RESIDENTIAL (VLDR)
3. LAND USE: EXISTING – ORCHARD
   PROPOSED – RESIDENTIAL
4. SEWAGE: INDIVIDUAL SEPTIC
5. STORM DRAINAGE: ON-SITE QUALITY MITIGATION
6. WATER: CAL WATER
7. POWER: PG&E
8. TELEPHONE: AT&T
9. CABLE TV: COMCAST
10. EXISTING WELLS AND SEPTIC SYSTEMS TO REMAIN
11. FEMA FLOOD ZONE: X
12. STANDARD EROSION CONTROL MEASURES (BMP's) WILL BE USED IN COMPLIANCE WITH THE WATER QUALITY CONTROL BOARD
13. OWNER: CHAMBERS FAMILY TRUST AND DOUGLAS AND TERESA ARNOLD
    322 ENTLER AVENUE CHICO, CA 95928
14. DEVELOPER: CHAMBERS FAMILY TRUST AND DOUGLAS AND TERESA ARNOLD
    322 ENTLER AVENUE CHICO, CA 95928
15. PROJECT SURVEYOR: MICHAEL MAYS PLS6967
16. THIS TENTATIVE MAP WAS PREPARED UNDER THE DIRECTION OF A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR.

AREAS

TOTAL AREA = 17.6 ACRES
NUMBER OF PROPOSED LOTS = 15 RESIDENTIAL
RANGE OF RESIDENTIAL LOT AREAS = 1.08 AC TO 1.33 AC
AVERAGE RESIDENTIAL LOT SIZE = 1.17 ACRES +/-
PROPOSED DENSITY = 0.85 LOTS/ACRE

April 22, 2022
NORTHSTAR,
MARY N. LEDFORD CE 65939

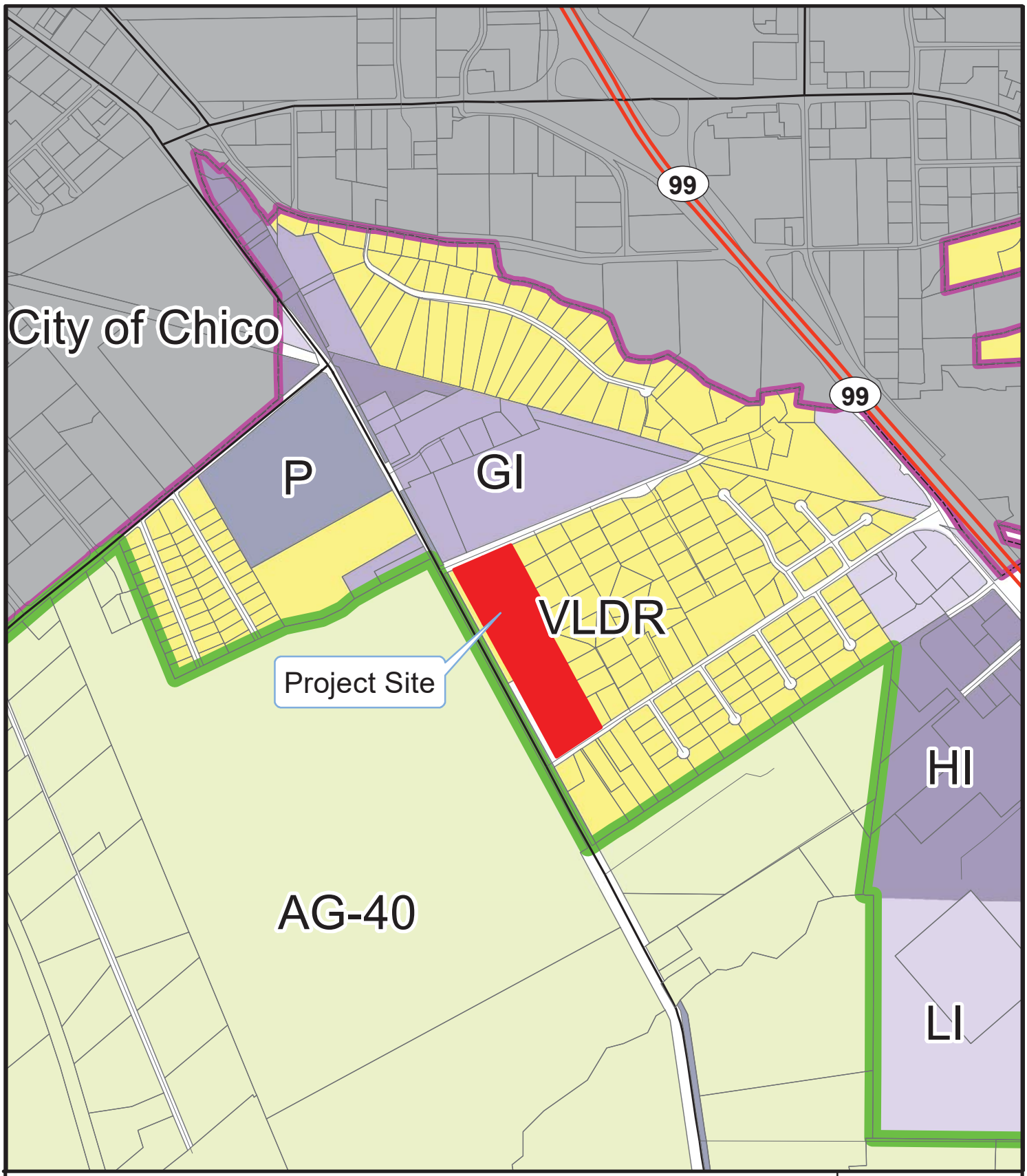
REGISTERED PROFESSIONAL ENGINEER
MARY N. LEDFORD
No. 65939
06/30/2022
CIVIL
STATE OF CALIFORNIA

TENTATIVE SUBDIVISION MAP
ENTLER SUBDIVISION
A PUBLIC STREET SUBDIVISION
FOR
ARNOLD AND CHAMBERS
LOT 11 AND A PORTION OF LOT 1 AND 2
AS SHOWN ON
REVISED MAP OF THE SECOND SUBDIVISION
OF THE J.F. ENTLER RANCH

TOWNSHIP 21 NORTH, RANGE 2 EAST

CITY OF CHICO
COUNTY OF BUTTE STATE OF CALIFORNIA

NORTHSTAR
... Designing Solutions
111 MISSION RANCH BLVD. SUITE 100, CHICO, CA 95926
PHONE: (530) 895-1600 www.northstareng.com



Butte County Zone Districts

0 625 1,250 2,500 3,750 5,000 6,250 Feet

Supervisorial District #4

Applicant: Doug Arnold	**Zoning:** VLDR (Very Low Density Residential)
Request: Tentative Subdivision Map	**Assessor Parcel No:** 040-040-001; -010; -014

File: TSM21-0006

Butte County
CALIFORNIA

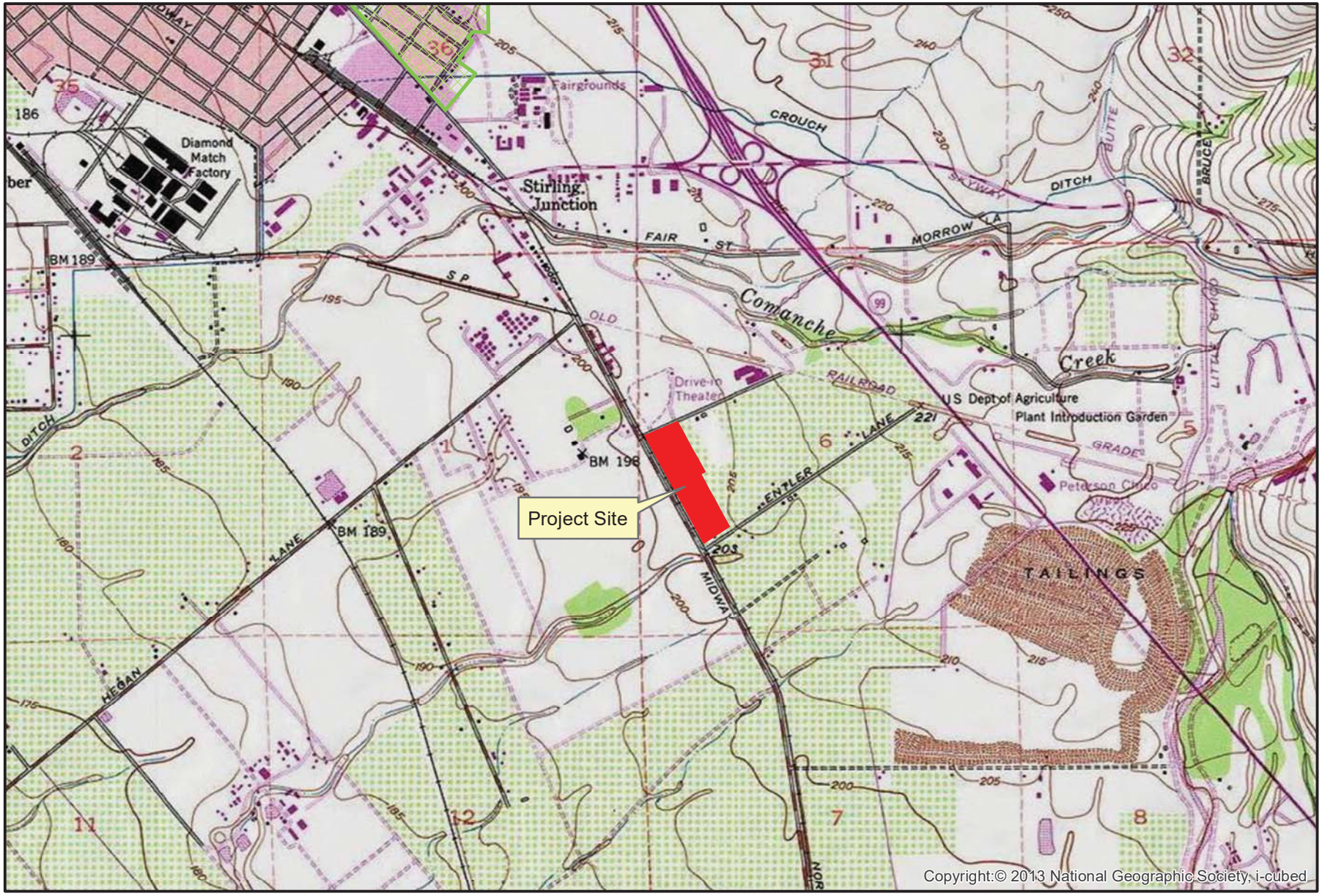
Doug Arnold Tentative Subdivision Map

TSM21-0006

Map created by:
Butte County
Development Services Department
7 County Center Drive, Oroville, Ca. 95965

0 215 430 860 1,290 1,720
Feet

N



USGS 7.5' Quadrangle Map 1:24,000

TSM21-0006 (Doug Arnold Tentative Subdivision Map)

Map created by:
Butte County
Development Services Department
7 County Center Drive, Oroville, Ca. 95965

0 625 1,250 2,500 3,750 5,000 Feet

N

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where checked below, the topic with a potentially significant impact will be addressed in an environmental impact report.

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

Rowland Hickel — 06.01.2022

Rowland Hickel, Senior Planner — Date

Dan Breedon — June 1, 2022

Dan Breedon, Planning Manager — Date

EVALUATION OF ENVIRONMENTAL IMPACTS

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

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

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

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

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

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

9. The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

1.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics.				
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Setting

The project site is vacant and previously used for agricultural purpose. The parcels are currently vacant and designated for VLDR uses. The topography in the project site area is gentle and flat, with an elevation at 213 feet above sea level. Vegetation in the project site area is cultivated agricultural/orchard land and ornamental plants and shrubs. The orchard that was previously located on the site has been removed. Surrounding uses are single-family residential to the east and south, agricultural/orchard to the west and industrial to the north.

The Butte County General Plan depicts identified scenic resources in Butte County, including land-based and water-based scenic resources (Figure COS-7), County scenic highways (Figure COS-8), and Scenic Highway Zones (Figure COS-9). Based on the information provided in the General Plan, the project site is not located within, or in the vicinity of, identified scenic resources, or along a scenic highway or Scenic Highway Zone.

Discussion

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. The proposed project would subdivide 17.6 acres into 15 residential lots. Views to and from the site would change with construction of 15 new residences; however, the views are not considered scenic. No impact would occur under this threshold.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No impact. The project site and surrounding area is not identified as a scenic resource nor is Midway, Speedway Avenue or Entler Avenue a designated State or County scenic highway. No impact would occur under this threshold.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. The project parcels are located in a VLDR area south of the City of Chico. The subject parcels were previously used for agricultural/orchard production; however orchards were removed in 2021 and the site is currently vacant. The project would change the views into the site; however, the development would be consistent with the residential development to the south and east. Further, the project would be required to meet design standards contained in the Butte County Code. The project would have a less than significant effect on the visual character of the area. A less than significant impact would occur under this threshold.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact with mitigation incorporated. Outdoor lighting will be used on the project site with construction of the new residences. Any new outdoor lighting would be subject to standards in Chapter 24, Article III, General Regulations, Division 4 – Outdoor Lighting, as specified in the Butte County Zoning Code. To provide further protection for adjacent residential uses from on-site lighting, implementation of **Mitigation Measure AES-1** is recommended. With implementation of applicable outdoor lighting regulations provided in Article III and **Mitigation Measure AES-1**, the proposed project would not create new sources of substantial lighting or glare that would generate a significant impact. Impacts would be less than significant under this threshold.

Mitigation Measure AES-1:
All lighting, exterior and interior, shall be designed and located so as to confine direct lighting to the premises. A light source shall not shine upon or illuminate directly on any surface other than the area required to be lighted. No lighting shall be of the type or in a location such that it constitutes a hazard to vehicular traffic, either on private property or the abutting highway or street.

Plan Requirements: The mitigation shall be placed on an additional map sheet recorded concurrently with the Final Map. This mitigation shall be placed on all building permit and site development plans.

Timing: The provisions of this mitigation measure shall be complied with at all times.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Building inspectors shall spot check and shall ensure compliance on-site. The Development Services Department shall investigate and respond to any complaints of excess glare or light originating from the project site.

1.2 AGRICULTURE AND FOREST RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forest Resources.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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 agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Setting

The subject parcel is zoned VLDR and designated for this use in the Butte County General Plan. As stated, the project parcel has been used for agricultural purposes; however, it is not designated for this use. The land west of the site is zoned AG-40 and is used for agricultural purposes.

Regulatory Setting

Williamson Act/Land Conservation Act (LCA) Contracts

The California Land Conservation Act of 1965, commonly known as the Williamson Act, was established based on numerous State legislative findings regarding the importance of agricultural lands in an urbanizing society. Policies emanating from those findings include those that discourage premature and unnecessary conversion of agricultural

land to urban uses and discourage discontinuous urban development patterns, which unnecessarily increase the costs of community services to community residents. The Williamson Act authorizes each County to establish an agricultural preserve. Land that is within the agricultural preserve is eligible to be placed under a contract between the property owner and County that would restrict the use of the land to agriculture in exchange for a tax assessment that is based on the yearly production yield. The contracts have a 9-year term that is automatically renewed each year, unless the property owner or county requests a non-renewal or the contract is cancelled.

Farmland Mapping and Monitoring Program

To characterize the environmental baseline for agricultural resources, Important Farmland Maps produced by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) were reviewed. Important Farmland maps show categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance (if adopted by the county), Grazing Land, Urban and Built-up Land, Other Land, and Water. Prime Farmland and Farmland of Statewide Importance map categories are based on qualifying soil types, as determined by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), as well as current land use. These map categories are defined by the Department of Conservation's FMMP as follows:

Prime Farmland: Land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods.

Farmland of Statewide Importance: Land that is similar to *Prime Farmland* but with minor shortcomings, such as greater slopes or less ability to hold and store moisture.

Unique Farmland: Land of lesser quality soils used for the production of specific high economic value crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. It is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Examples of crops include oranges, olives, avocados, rice, grapes, and cut flowers.

Farmland of Local Importance: Land of importance to the local agricultural economy, as determined by each county's board of supervisors and local advisory committees. Examples include dairies, dryland farming, aquaculture, and uncultivated areas with soils qualifying for *Prime Farmland* and *Farmland of Statewide Importance*. Butte County has not adopted a definition of Farmland of Local Importance.

Grazing Land: Land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock.

Urban and Built-up Land: Land used for residential, industrial, commercial, construction, institutional, public administrative purpose, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are also included in this category.

Other Land: Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

Water: Water areas with an extent of at least 40 acres.

The project site is identified by the Department of Conservation as containing lands classified as Prime Farmland.

California Public Resources Code Section 4526

"Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used

to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

California Public Resources Code Section 12220(g)

"Forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

Butte County Right to Farm Ordinance

Butte County has adopted a Right to Farm Ordinance (Butte County Code Chapter 35, Protection of Agricultural Land). This ordinance protects properly conducted agricultural operations in the unincorporated County against nuisance lawsuits and requires annual disclosure to all property owners within the County of the right to farm. In addition, the ordinance requires disclosure to buyers of real property and as part of development approvals. While the County Right-to-Farm Ordinance specifically applies to commercial agricultural operations within the unincorporated area, all commercial agricultural operations that comply with agricultural standards currently are protected from nuisance claims under State law (Section 3482.5 of the California Civil Code), whether located within cities or unincorporated areas.

Discussion

The subject property is undeveloped; however, it was formerly used as an orchard. Surrounding uses include single-family residential to the east and south, agricultural land to the west and vacant land and industrial uses to the north. The project parcels are not under a Williamson Act contract. Surrounding parcels are designated VLDR and General Industrial and AG-40.

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?

No impact. The California Farmland Mapping and Monitoring Program designates the project site area as Prime Farmland. The site was zoned VLDR in 2012 and the General Plan 2030 Environmental Impact Report adopted a Statement of Overriding Considerations to address the conversion of farmland to non-agricultural uses. The site is consistent with the General Plan land use designation; and thus, the conversion has been evaluated per CEQA. No impact would occur under this threshold.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No impact. The proposed project site is zoned VLDR. It is not zoned for agricultural use nor is it restricted by a Williamson Act contract. No impact would occur under this threshold.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No impact. The project site is not located in a timber resource zone. The project site is also not classified as forest land, pursuant to California Public Resources Code Section 12220(g). Therefore, the proposed project would not conflict with, or cause the rezoning of, a timber resource zoning designation. No impact would occur under this threshold.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. The project site is not considered forest land; and therefore, the proposed project would not result in loss or conversion of forest land to a non-forest use.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No impact. The site is not designated for agricultural or forest use. There are no known changes to the existing environment that would result in the conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use. No impact would occur under this threshold.

1.3 AIR QUALITY

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

Environmental Setting

Butte County is located within the Sacramento Valley Air Basin (SVAB), comprising the northern half of California's 400-mile long Great Central Valley. The SVAB encompasses approximately 14,994 square miles with a largely flat valley floor (excepting the Sutter Buttes) about 200 miles long and up to 150 miles wide, bordered on its east, north and west by the Sierra Nevada, Cascade and Coast mountain ranges, respectively.

The SVAB, containing 11 counties and some two million people, is divided into two air quality planning areas based on the amount of pollutant transport from one area to the other and the level of emissions within each. Butte County is within the Northern Sacramento Valley Air Basin (NSVAB), which is composed of Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba Counties.

Emissions from the urbanized portion of the basin (Sacramento, Yolo, Solano, and Placer Counties) dominate the emission inventory for the Sacramento Valley Air Basin, and on-road motor vehicles are the primary source of emissions in the Sacramento metropolitan area. While pollutant concentrations have generally declined over the years, additional emission reductions will be needed to attain the State and national ambient air quality standards in the SVAB.

Seasonal weather patterns have a significant effect upon regional and local air quality. The Sacramento Valley and Butte County have a Mediterranean climate, characterized by hot, dry summers and cool, wet winters. Winter weather is governed by cyclonic storms from the North Pacific, while summer weather is typically subject to a high-pressure cell that deflects storms from the region.

In Butte County, winters are generally mild with daytime average temperatures in the low 50s°F and nighttime temperatures in the upper 30s°F. Temperatures range from an average January low of approximately 36°F to an average July high of approximately 96°F, although periodic lower and higher temperatures are common. Rainfall between

October and May averages about 26 inches but varies considerably year to year. Heavy snowfall often occurs in the northeastern mountainous portion of the County. Periodic rainstorms contrast with occasional stagnant weather and thick ground or "tule" fog in the moister, flatter parts of the valley. Winter winds generally come from the south, although north winds also occur.

Diminished air quality within Butte County largely results from local air pollution sources, transport of pollutants into the area from the south, the NSVAB topography, prevailing wind patterns, and certain inversion conditions that differ with the season. During the summer, sinking air forms a "lid" over the region, confining pollution within a shallow layer near the ground that leads to photochemical smog and visibility problems. During winter nights, air near the ground cools while the air above remains relatively warm, resulting in little air movement and localized pollution "hot spots" near emission sources. Carbon monoxide, nitrogen oxides, particulate matters and lead particulate concentrations tend to elevate during winter inversion conditions when little air movement may persist for weeks.

As a result, high levels of particulate matter (primarily fine particulates or PM2.5) and ground-level ozone are the pollutants of most concern to the NSVAB Districts. Ground-level ozone, the principal component of smog, forms when reactive organic gases (ROG) and nitrogen oxides (NOx) – together known as ozone precursor pollutants – react in strong sunlight. Ozone levels tend to be highest in Butte County during late spring through early fall, when sunlight is strong and constant, and emissions of the precursor pollutants are highest (Butte County CEQA Air Quality Handbook 2014).

Air Quality Attainment Status

Local monitoring data from the BCAQMD is used to designate areas a nonattainment, maintenance, attainment, or unclassified for the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The four designations are further defined as follows:

Nonattainment – assigned to areas where monitored pollutant concentrations consistently violate the standard in question.

Maintenance – assigned to areas where monitored pollutant concentrations exceeded the standard in question in the past but are no longer in violation of that standard.

Attainment – assigned to areas where pollutant concentrations meet the standard in question over a designated period of time.

Unclassified – assigned to areas were data are insufficient to determine whether a pollutant is violating the standard in question.

Table 1.3-1. Federal and State Attainment Status of Butte County

POLLUTANT	STATE DESIGNATION	FEDERAL DESIGNATION
1-hour ozone	Nonattainment	-
8-hour ozone	Nonattainment	Nonattainment
Carbon monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
24-Hour PM10	Nonattainment	Attainment
24-Hour PM2.5	No Standard	Attainment
Annual PM10	Attainment	No Standard
Annual PM2.5	Nonattainment	Attainment

Source: Butte County AQMD, 2018

Sensitive Receptors

Sensitive receptors are frequently occupied locations where people who might be especially sensitive to air pollution are expected to live, work, or recreate. These types of receptors include residences, schools, churches, health care facilities, convalescent homes, and daycare centers. The project site is located in an urban area with scattered residential uses associated with VLDR, AG-40 and General Industrial zoning surrounding the property. Table 1.3-2 lists sensitive receptors that were identified in the project vicinity and the distances from the center of the project site.

Table 1.3-2. Sensitive Receptors in the Project Vicinity

SENSITIVE RECEPTORS	DISTANCE FROM PROJECT SITE TO RECEPTOR
Residence (NE corner of Midway/Entler Ave.	Adjacent to and south
Residence (1 Alyssum Way)	100 feet to the east
Residence (48 Ranchwood Court)	100 feet to the east
Residence (4 Ranchwood Court)	75 feet to the east

Source: Google Earth imagery

Butte County Air Quality Management District

The Butte County Air Quality Management District (BCAQMD) is the local agency with primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. They do this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues.

Activities of the BCAQMD include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

According to the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make significance determinations for potential impacts on environmental resources. BCAQMD is responsible for ensuring that state and federal ambient air quality standards are not violated within Butte County. Analysis requirements for construction and operation-related pollutant emissions are contained in BCAQMD's *CEQA Air Quality Handbook: Guidelines for Assessing Air Quality and Greenhouse Gas Impacts for Projects Subject to CEQA Review*. Established with these guidelines are screening criteria to determine whether or not additional modeling for criteria air pollutants is necessary for a project. The CEQA Air Quality Handbook also contains thresholds of significance for construction-related and operation-related emissions: ROG, NOx and PM10. The screening criteria listed in Table 1.3-3 were created using CalEEMod version 2013.2.2 for the given land use types. To determine if a proposed project meets the screening criteria, the size and metric for the land use type (units or square footage) should be compared with that of the proposed project. If a project is less than the applicable screening criteria, then further quantification of criteria air pollutants is not necessary, and it may be assumed that the project would have a less than significant impact for criteria air pollutants. If a project exceeds the size provided by the screening criteria for a given land use type then additional modeling and quantification of criteria air pollutants should be performed (Butte County Air Quality Management District 2014).

Table 1.3-3. Screening Criteria for Criteria Air Pollutants

LAND USE TYPE	MAXIMUM SCREENING LEVELS FOR PROJECTS
Single-Family Residential	30 Units
Multi-Family (Low Rise) Residential	75 Units
Commercial	15,000 square feet
Educational	24,000 square feet
Industrial	59,000 square feet
Recreational	5,500 square feet

Retail	11,000 square feet

Source: Butte County AQMD, CEQA Air Quality Handbook, 2014

Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

No impact. The applicable air quality plan for the project area is the *Northern Sacramento Valley Planning Area 2015 Triennial Air Quality Attainment Plan*. In adopting this plan, BCAQMD assumes that growth within its jurisdiction will be in accordance with city and county general plans, for which air quality effects associated with build-out have been analyzed.

A project is deemed inconsistent with an air quality plan if it would result in population or employment growth that exceeds the growth estimates in the applicable air quality plan (i.e., generating emissions not accounted for in the applicable air quality plan emissions budget). The proposed project would be developed consistent with the VLDR zoning designation; and thus, would not result in population growth in the County greater than that anticipated in the General Plan. Further, the project would not result in an increase in criteria air pollutants that would cause significant impacts to regional air quality.

Table 4-1 (Screening Criteria for Critical Pollutants) lists the established thresholds based on land use, including residential. The threshold for residential uses is 30 units. The proposed project would construct up to 15 new residences which would not exceed the screening criteria referenced above. Thus, the project would not conflict with or obstruct the air quality plan. No impact would occur under this threshold.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than significant impact with mitigation. Approval of the project would not impact air quality. Future development occurring as a result of the approval has the potential to impact air quality primarily in two ways: (1) the project would generate mobile source emissions (i.e., added vehicle trips, energy use) associated with future development and (2) construction activities associated with the development of the parcels would generate fugitive dust (PM10) from grading activities, construction exhaust emissions (PM10, NOx), and evaporative emissions of reactive organic gases (ROG or VOC) from paving activities and architectural coatings.

Mobile source emissions are produced from motor vehicles and include tailpipe and evaporative emissions. Energy use associated with future development would also generate emission from heating and cooling systems, lighting, paint application, water use and wastewater. As referenced, a future development application would be evaluated per the screening criteria shown in Table 1.3-3. Per the zoning designation, the allowable number of units would not exceed those specified in the screening table. A less than significant impact operational would occur under.

Construction-related emissions are generally created throughout the course of project implementation and would originate from construction equipment exhaust, worker vehicle exhaust, dust from grading disturbance, exposed soil eroded by wind, and ROGs generated from architectural coating and asphalt paving. Construction-related emissions would vary depending on the level of activity, length of the construction period, specific construction operations occurring, types of equipment operating on the site, number of personnel, wind and precipitation conditions, and soil moisture content. Despite this variability in the project and project site conditions, there are a number of feasible control measures that can be reasonably implemented to reduce construction-related emissions to a less than significant level. These measures as well as other common air pollution control measures are recommended in *Appendix C of BCAQMD's CEQA Handbook (2014)* and are to be implemented as **Mitigation Measure AIR-1**, listed below.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact with mitigation incorporated. Sensitive receptors in the project area and their distances from the project site area shown in Table 1.3-2. Based on the information provided in section b.), above, approval of the TSM would not generate emissions. Subsequent development would not generate emissions that would exceed BCAQMD significance criterion. Implementation of **Mitigation Measure AIR-1** would be implemented to reduce potential cumulative fugitive dust emission impacts to less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact. Future permitted uses on the site are not expected to create objectionable odors. Butte County DDS staff would review future development applications to ensure compliance with applicable BCAQMD emission control standards related to odor causing uses. If such a use were proposed, it would require project-specific environmental review to identify appropriate conditions that would avoid odor impacts to neighboring residences. Thus, significant odor impacts would be avoided. Future construction activities could include objectionable odors from tailpipe diesel emissions and from solvents in adhesives, paints, caulking materials and new asphalt. Since odor impacts would be temporary and limited to the area adjacent to the construction operations, odors would not impact a substantial number of people for an extended period of time. A less than significant impact would occur under this threshold.

Mitigation Measures

Mitigation Measure AIR-1

The following best practice measures to reduce impacts to air quality shall be incorporated by the project applicant, subject property owners, or third-party contractors during construction activities on the project site. These measures are intended to reduce criteria air pollutants that may originate from the site during the course of land clearing and other construction operations.

Diesel PM Exhaust from Construction Equipment and Commercial On-Road Vehicles Greater than 10,000 Pounds

- All on- and off-road equipment shall not idle for more than five minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the five-minute idling limit.
- Idling, staging and queuing of diesel equipment within 1,000 feet of sensitive receptors is prohibited.
- All construction equipment shall be maintained in proper tune according to the manufacturer's specifications. Equipment must be checked by a certified mechanic and determined to be running in proper condition before the start of work.
- Install diesel particulate filters or implement other CARB-verified diesel emission control strategies.
- Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5 minutes at any location when within 100 feet of a restricted areas.
- To the extent feasible, truck trips shall be scheduled during non-peak hours to reduce perk hour emissions.

Operational TAC Emissions

- All mobile and stationary Toxic Air Contaminants (TACs) sources shall comply with applicable Airborne Toxic Control Measures (ATCMs) promulgated by the CARB throughout the life of the project (see http:www.arb.ca.gov/toxics/atcm/atcm.htm).
- Stationary sources shall comply with applicable District rules and regulations.

Fugitive Dust

Construction activities can generate fugitive dust that can be a nuisance to local residents and businesses near a construction site. Dust complaints could result in a violation of the District's "Nuisance" and "Fugitive Dust" Rules 200 and 205, respectively. The following is a list of measures that may be required throughout the duration of the construction activities:

- Reduce the amount of the disturbed area where possible.
- Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. An adequate water supply source must be identified. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.
- All dirt stockpile areas should be sprayed daily as needed, covered, or a District approved alternative method will be used.
- Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
- Exposed ground areas that will be reworked at dates greater than one month after initial grading should be sown with a fast-germinating non-invasive grass seed and watered until vegetation is established.
- All disturbed soil areas not subject to re-vegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the Butte County Air Quality Management District.
- All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with local regulations.
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site.
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.
- Post a sign in prominent location visible to the public with the telephone numbers of the contractor and the Butte County Air Quality Management District - (530) 332-9400 for any questions or concerns about dust from the project.

All fugitive dust mitigation measures required should be shown on grading and building plans. In addition, the contractor or builder should designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend period when work may not be in progress. The name and telephone number of such persons shall be provided to the District prior to land use clearance for map recordation and finished grading of the area.

Please note that violations of District Regulations are enforceable under the provisions of California Health and Safety Code Section 42400, which provides for civil or criminal penalties of up to $25,000 per violation.

Plan Requirements: The note shall be placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. This note shall also be placed on all building and site development plans.

Timing: Requirements of the condition shall be adhered to throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional

map sheet. Building inspectors shall spot check and shall ensure compliance on-site. Butte County Air Pollution Control District inspectors shall respond to nuisance complaints.

1.4 BIOLOGICAL RESOURCES

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

Environmental Setting

The project site is situated in the Butte Valley area within a primarily residential area south of the City of Chico. There is an agricultural parcel to the west and general industrial parcel to the north. The land use designation in this area is VLDR. While not currently designated for agricultural use, the project site was formerly used for orchard production.

Agriculture

The agricultural natural community is comprised of several land cover types including orchards and vineyards, rice, irrigated cropland, irrigated pasture, and non-native woodland. Agriculture occurs where the soils and topography are most suitable for production, which are generally the flat and well-drained areas located in the valley region of the County. Conversion of lands to an agricultural use has resulted in the removal of most of the historical native habitat.

Agriculture natural community areas generally do not support the wildlife compared with most native habitats; however, these areas continue to support abundant wildlife and provide essential breeding, foraging and roosting habitat for many resident and migrant wildlife species.

Jurisdictional Waters of the United States, including Wetlands

Waters of the United States (U.S.), including wetlands, are broadly defined to include navigable waterways, and tributaries of navigable waterways, and adjacent wetlands. Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface water or groundwater, supporting vegetation adapted to life in saturated soil. Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the U.S. Army Corps of Engineers (USACE). The USACE holds sole authority to determine the jurisdictional status of waters of the U.S., including wetlands. Jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetland and waters of the U.S. provide critical habitat components, such as nest sites and reliable source of water for a wide variety of wildlife species.

Special-Status Species

Many species of plants and animals within the State of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. A sizable number of native species and animals have been formally designated as threatened or endangered under State and Federal endangered species legislation. Others have been designated as "Candidates" for such listing and the California Department of Fish and Wildlife (CDFW) have designated others as "Species of Special Concern". The California Native Plant Society (CNPS) has developed its own lists of native plants considered rare, threatened or endangered. Collectively, these plants and animals are referred to as "special status species."

Various direct and indirect impacts to biological resources may result from the small amount of development enabled by the project, including the loss and/or alteration of existing undeveloped open space that may serve as habitat. Increased vehicle trips to and from the project site can result in wildlife mortality and disruption of movement patterns within and through the project vicinity. Disturbances such as predation by pets (e.g., cats and dogs) and human residents may also occur at the human/open space interface, while conversion of land from lower to higher density residential use can lead to a predominance of various urban-adapted wildlife species (e.g., coyotes, raccoons, ravens and blackbirds) that have been observed to displace more sensitive species.

California Environmental Quality Act Guidelines Section 15065 requires a mandatory finding of significance for projects that have the potential to substantially degrade or reduce the habitat of a threatened or endangered species, and to fully disclose and mitigate impacts to special status resources. For the purposes of this Initial Study, the California Environmental Quality Act (Sections 21083 and 21087, Public Resources Code) defines mitigation as measure(s) that:

- Avoids the impact altogether by not taking a certain action or parts of an action.
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment.
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project.
- Compensates for the impact by replacing or providing substitute resources or environments.

The California Natural Diversity Database (CNDDB) was reviewed to determine if any special-status species have the potential to occur on the project site or in the vicinity. Table 4.4-1 lists the regulatory status and habitat requirements for each special-status species identified within a two-mile radius of the project site.

Table 4.4-1. Special-Status Species in the vicinity of the project site

Scientific Name	Common Name	Federal Status	State Status	CNPS/DFG List	Habitat
PLANTS					
Great Valley Mixed Riparian Forest	Great Valley Mixed Riparian Forest	None	None		Great Valley Mixed Riparian Forest is a community of medium to tall (to 100 ft), broad-leaved winter deciduous trees.
Limnanthes floccosa ssp. californica	Butte County meadowfoam	Endangered	Endangered	1B.1	Plants are sometimes found at the edges of vernal pools, but they are primarily found in the deepest parts of vernal swales that connect vernal pools.
Balsamorhiza macrolepis	Big-scale balsamroot	None	None	1B.2	Dry, open habitat, mostly in mountainous areas, mostly in the western foothills of the Sierra Nevada Mountains
BIRDS					
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	None	Riparian areas along rivers/streams.
Buteo swainsoni	Swainson's hawk	None	Threatened	None	Prairie and dry grasslands
MAMMALS					
Antrozous pallidus	pallid bat	None	None		Arid, semi-arid, rocky mountain areas near water.
Lasiurus cinereus	hoary bat	None	None		Woodland coniferous forest
Lasionycteris noctivagans	Silver-haired bat	None	None		Arid habitats at low elevations
Erethizon dorsatum	North American porcupine	None	None		Native to the coniferous and mixed-forest habitats of the northeastern and western regions of the United States and northern Mexico.
AMPHIBIANS					
Emys marmorata	western pond turtle	None	None		Streams, ponds, lakes, and permanent and ephemeral wetlands

INSECT				
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None	Native to the riparian forests of the Central Valley of California
CRUSTACEANS				
Lepidurus packardi	vernal pool tadpole shrimp	Endangered	None	Vernal pool type of habitat, and other freshwater aquatic habitats including ponds, reservoirs, ditches, road ruts, and other natural and artificial temporary water bodies.
FISH				
Oncorhynchus mykiss irideus pop. 11	Steelhead - Central Valley DPS	Threatened	None	The CV steelhead Distinct Population Segment (DPS) includes all naturally spawned CV steelhead populations in the Sacramento and San Joaquin rivers and their tributaries.

Source: California Natural Diversity Database, Version 5, February 2021

Vegetation on the project site area is primarily comprised of ruderal species. As stated, the orchard has been removed from the site. Ornamental species are located on adjacent properties.

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 Wildlife or the U.S. Fish and Wildlife Service?

No impact. The project parcel is disturbed and was historically used for orchard cultivation. The orchard was removed and the site is currently vacant. Thus, the proposed project would not degrade or reduce sensitive habitat values on the project site that would cause significant impacts to sensitive species. No impact would occur under this threshold.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

No impact. The project site is not identified as containing a Sensitive Natural Community (SNC). There is no riparian habitat on the project site. No impact would occur under this threshold.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No impact. The project site based on the existing topography, does not have any wetlands that would be impacted by existing and any future development. No impact would occur under this threshold.

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?

No impact. Wildlife movement corridors are routes frequently utilized by wildlife that provide shelter and sufficient food supplies to support wildlife species during migration. Movement corridors generally consist of riparian, woodlands, or forested habitats that span contiguous acres of undisturbed habitat. Wildlife movement corridors are an important element of resident species home ranges, including deer and coyote.

The project site is not located within Butte County migratory deer corridors. No major migratory routes or corridors have been designated through the project site, and the existing developed components of the project area (i.e., roads, agriculture, industrial and residential uses; fenced parcels) preclude use of the area as a migratory wildlife corridor for large mammals. The project site is vacant and supports periodic agriculture cultivation. No impact would occur under this threshold.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. The project would result in 15 new residential lots; however, because the site is vacant and disturbed, it would not conflict with any local policies or ordinances protecting biological resources and is consistent with goals and policies identified in Butte County General Plan 2030. No impact would occur under this threshold.

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?

No impact. The Butte Regional Conservation Plan (BRCP) is a joint Habitat Conservation Plan (HCP)/National Community Conservation Plan (NCCP) for the western half of the Butte County. The project site is located within the proposed plan area of the BRCP. However, as the plan has not been adopted, the proposed project will not conflict, nor interfere with, the attainment of the goals of the proposed plan. Thus, no impact to sensitive biological resources that would require mitigation under the future habitat conservation plan would occur. No impact would occur under this threshold.

1.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Environmental Setting

Butte County contains a rich diversity of archaeological, prehistoric and historical resources. The General Plan 2030 EIR observes that the "archaeological sensitivity of Butte County is generally considered high, particularly in areas near water sources or on terraces along water courses" (Butte County General Plan EIR, 2010, p. 4.5-7).

A substantial adverse change upon a historically significant resource would be one wherein the resource is demolished or materially altered so that it no longer conveys its historic or cultural significance in such a way that justifies its inclusion in the California Register of Historical Resources or such a local register (CEQA Guidelines Section 15064.5, subd. (b)(2)). Cultural resources include prehistoric and historic period archaeological sites; historical features, such as rock walls, water ditches and flumes, and cemeteries; and architectural features. Cultural resources consist of any human-made site, object (i.e., artifact), or feature that defines and illuminates our past. Often such sites are found in foothill areas, areas with high bluffs, rock outcroppings, areas overlooking deer migratory corridors, or near bodies of water.

Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No impact. Historic use of the project site for agricultural purposes has resulted in ground-disturbing activities, including installation and removal of the orchard. This has likely destroyed any cultural resources that may have been located on the surface. The project site does not contain known historic resources. No impact would occur under this threshold

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant impact with mitigation incorporated. While no prehistoric or historic resources are known to be located on the project site, prehistoric, protohistoric, and historic cultural resources may occur within the general area. Native Americans used the region for seasonal and/or permanent settlement, as well as for the gathering of plants, roots, seeds, and seasonal game. Historically, Euro-Americans also utilized the region for mining farming, and cattle ranching. With past use of the project area by prehistoric and historic populations, unanticipated archaeological discoveries may be encountered during ground-disturbing activities, resulting in

potentially significant impacts. To avoid potential impacts to undiscovered prehistoric resources, historic resources, and human remains that may be uncovered during development activities on the project site, implementation of **Mitigation Measure CUL-1**, below, is recommended to reduce potential impacts to cultural resources to less than significant.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact with mitigation incorporated. Indications are that humans have occupied Butte County for over 10,000 years and it is not always possible to predict where human remains may occur outside of formal cemeteries. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials.

Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Additionally, *Public Resources Code section 5097.98* has specific stop-work and notification procedures to follow in the event that human remains are inadvertently discovered during project implementation.

The Butte County Conservation Element has established two policies that address the inadvertent discovery of human remains. COS-P16.3 requires human remains discovered during construction to be treated with dignity and respect and to fully comply with the federal Native American Graves Protection and Repatriation Act and other appropriate laws. COS-P16.4 requires work to stop if human remains are found during construction until the County Coroner has been contacted, and, if the human remains are determined to be of Native American origin, the North American Heritage Commission and most likely descendant have been consulted.

Implementation of the **Mitigation Measure CUL-1** would ensure that all construction activities associated with the proposed development that inadvertently discover human remains, implement state required consultation methods to determine the disposition and historical significance of any discovered human remains. **Mitigation Measure CUL-1** would reduce this impact to less than significant.

Mitigation Measures

Mitigation Measure CUL-1

If grading activities reveal the presence of prehistoric or historic cultural resources (i.e., artifact concentrations, including arrowheads and other stone tools or chipping debris, cans glass, etc.; structural remains; or human skeletal remains) work within 50 feet of the find shall immediately cease until a qualified professional archaeologist can be consulted to evaluate the find and implement appropriate mitigation procedures. If human skeletal remains are encountered, State law requires immediate notification of the County Coroner (530.538.7404). If the County Coroner determines that the remains are in an archaeological context, the Native American Heritage Commission in Sacramento shall be notified immediately, pursuant to State Law, to arrange for Native American participation in determining the disposition of such remains. The provisions of this mitigation shall be followed during construction of all improvements, including land clearing, road construction, utility installation, and building site development.

Plan Requirements: This note shall be placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet and shall be shown on all site development and building plans.

Timing: This measure shall be implemented during all site preparation and construction activities.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Should cultural resources be discovered, the landowner shall notify the Planning Division and a professional archaeologist. The Planning Division shall coordinate with the developer and appropriate authorities to avoid damage to cultural resources and determine appropriate action. State law requires the reporting of any human remains.

1.6 Energy

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

Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant impact. Development of the proposed project would consume energy primarily in two ways: (1) construction activities would consume energy through the operation of heavy off-road equipment, trucks, and worker traffic, and (2) use of the residence would cause long-term energy consumption from electricity and propane gas consumption, energy used for water conveyance, and vehicle operations to and from the project site.

Construction energy consumption would largely result from fuel consumption by heavy equipment during grading activities associated with road and building site clearance; trucks transporting construction materials to the site during parcel development, and worker trips to and from the job site. Energy consumption during construction related activities would vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment and the number of personnel. Despite this variability in the construction activities, the overall scope of the construction that could be accommodated on the site is not expected to require a substantial amount of fuel to complete. Additionally, increasingly stringent state and federal regulations on engine efficiency combined with local, state and federal regulations limiting engine idling times and recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. Considering these factors, the proposed project would not result in the wasteful and inefficient use of energy resources during construction and impacts would be less than significant.

Long-term energy consumption would occur after build-out of the project. Residences and outbuildings would consume electricity for lighting, heating and well operation. Propane would likely also be used an energy source. The project would generate additional vehicle trips by residents commuting to and from home which would result in the consumption of transportation fuel.

State and federal regulatory requirements addressing fuel efficiency are expected to increase fuel efficiency over time as older, less fuel-efficient vehicles are retired. This would reduce vehicle fuel energy consumption rates over time. Therefore, energy impacts related to fuel consumption/efficiency during project operations would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

Less than significant impact. Many of the state and federal regulations regarding energy efficiency are focused on increasing building efficiency and renewable energy generation, as well as reducing water consumption and Vehicles Miles Traveled. Project design would be required to include energy conservation measures intended to meet and exceed regulatory requirements, including reducing idling time of heavy equipment during construction activities (see Mitigation Measure AIR-1). Additionally, future development would be in compliance with the most recent Title 24 and CalGreen building code standards at the time of project construction. Therefore, the proposed project would implement energy reduction design features and comply with the most recent energy building standards. The project would not result in wasteful or inefficient use of nonrenewable energy sources. Impacts would be less than significant under this threshold.

1.7 Geology and Soils

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils.				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Discussion

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

No impact. There are no known active faults underlying, or adjacent to, the project site. The Cleveland Hill fault is the only active fault zone in Butte County identified in the most recent Alquist-Priolo Earthquake Fault Zoning Map. The only known active fault in Butte County is the Cleveland Hill fault zone, located approximately 24 miles southeast of the project site. The project would not result in any new development. Further, because the nearest active fault is located a considerable distance from the project site, the likelihood of a surface rupture at the project site is low. No impact would occur under this threshold.

ii) Strong seismic ground shaking?

No impact. Like most of north central California, the site will likely be subjected to strong seismic ground shaking. All buildings and other improvements are designed and constructed in accordance with seismic standards in the Uniform Building Code. No impacts would occur under this threshold.

iii) Seismic-related ground failure, including liquefaction?

No impact. According to Butte County General Plan 2030, areas that are at risk for liquefaction can be found on the valley floor, especially near the Sacramento and Feather Rivers, and their tributaries, which have a higher potential to contain sandy and silty soils. Liquefaction is a phenomenon where loose, saturated, granular soils lose their inherent shear strength due to excess water pressure that builds up during repeated movement from seismic activity. Factors that contribute to the potential for liquefaction include a low relative density of granular materials, a shallow groundwater table, and a long duration and high acceleration of seismic shaking. Liquefaction usually results in horizontal and vertical movements from lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials. Liquefaction potential is greatest where the groundwater level is shallow, and submerged loose, fine sands occur within a depth of approximately 50 feet or less. According to the Butte County General Plan Health and Safety Element, much of the western and southwestern portion of Butte County is subject to liquefaction. As stated, the project would result in the construction of up to 15 single-family residences. Development would be evaluated for liquefaction potential and if needed, design measures would be implemented to address this issue. No impact would occur under this threshold.

iv) Landslides?

No impact. The project area is primarily level with 0-2% slopes. As a result, the landslide potential for the project site and surrounding area is low to none. The Subsidence and Landslide Potential Map of the Health and Safety Element of the Butte County General Plan (Figure HS-4 of the General Plan) indicates that there is a low to no potential for landslides in this area. No impact would occur under this threshold.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant impact. Construction activities associated with the project would be subject to the National Pollutant Discharge Elimination System (NPDES) General Construction Activities Storm Water permit program if one acre or more is disturbed. Construction activities that result in a land disturbance of less than one acre, but which are part of a larger common plan of development, also require a permit. This program requires implementation of erosion control measures during and immediately after construction that are designed to avoid significant erosion during the construction period. In addition, the project operation would be subject to State Water Resources Control Board requirements for the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) to control pollution in stormwater runoff from the project site, including excessive erosion and sedimentation. The SWPPP, if required, must be obtained prior to any soil disturbance activities. Implementation of standard erosion control BMPs during future construction-related activities, together with adherence to State requirements regarding grading activities, would ensure that potential erosion impacts are less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

No impact. The project is not located on an unstable geologic unit or soil and will not cause instability that would result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. No structures would be built as a result of project approval. No impact would occur under this threshold.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

No impact. Figure HS-8 of the General Plan Health and Safety Element indicates that the project site has a low to very low expansive soil potential. The Butte County Building Division may require soil tests prior to issuance of a building permit to determine if the soils on the site have an expansive potential. No impacts associated with expansive soil would occur.

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

Less than Significant impact. As stated, a septic system would be installed on each lot for wastewater disposal. The wastewater system must be constructed in conformance with Butte County Code, Chapter 19, as well as the Butte County Onsite Wastewater Manual. An On-Site Wastewater System Construction Permit must be approved by the Butte County Environmental Health Division, under a ministerial permit application. Application for a Construction Permit will include detailed plans of the proposed wastewater system, prepared by a Certified Installer or Certified Designer, which will demonstrate compliance with County regulations and the County's On-Site Wastewater Manual, and to ensure a safe, sanitary, and environmentally sound wastewater system. Compliance with Environmental Health Division conditions would reduce potential impacts to less than significant.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant impact. No previously recorded fossil sites have been identified on the project site or within the surrounding area. Butte County General Plan 2030 and the accompanying Environmental Impact Report do not indicate the project area is sensitive for paleontological resources. Therefore, it is not likely that unique paleontological resources would be found in the project area during future development of the project. . However, the discovery of fossils, and the subsequent opportunity for data collection and study, is a rare event that could occur from construction grading activities associated with development. While the probability

of encountering fossils on the project site is low; implementation of **Mitigation Measure CUL-1** would reduce potential impacts associated with the unanticipated discovery of subsurface resources including cultural and paleontological resources, to less than significant.

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1.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions.				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Setting

Discussion

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

Less than significant impact. The project would generate greenhouse gas (GHG) emissions during the construction and operation of residences, when developed. Construction-related emissions during development may be generated from construction equipment exhaust, construction employee vehicle trips to and from the worksite, application of architectural coatings, and asphalt paving. The project's construction GHG emissions would occur over a short duration and consist primarily of equipment exhaust emissions. The long-term regional emissions associated with the project would mainly arise from the creation of new vehicular trips and indirect sources emissions, such as electricity consumption, water use, and solid waste disposal.

The Butte County Climate Action Plan (CAP) was adopted in February 2014 and updated in December 2021. The Butte County CAP includes strategies and associated actions related to public education and outreach efforts regarding reducing GHG emissions, administrative actions to monitor progress, and encouraging participation in programs. The strategies either apply to existing buildings that have already completed the environmental analysis, address operational characteristics of the county, or encourage options for actions that would reduce GHG emissions.

The proposed project's construction activities and operations are consistent with the Butte County General Plan. GHG emissions associated with the build-out of the project site have been analyzed and mitigated with the adoption of the Butte County CAP and the continued implementation of its strategies. Electricity consumed during construction and operations is provided primarily by the area service provider regulated by state renewable energy plans. Vehicles used during construction, and generated by the project's operations, would conform to state regulations and plans regarding fuel efficiency. Therefore, the project would not generate substantial GHG emissions, either directly or indirectly, significantly impacting the environment. Impacts are less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact. The project's consistency with the Butte County General Plan would ensure compliance with the GHG emission reduction strategies in the Butte County CAP, which in turn, support

County-wide efforts to meet statewide GHG emission reduction goals. Therefore, impacts are less than significant.

1.9 HAZARDS AND HAZARDOUS MATERIALS

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

Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. Limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, etc. would be used to maintain vehicles and motorized equipment during construction-related activities during development of the project. Accidental spill of any of these substances could impact water and/or groundwater quality. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to construction workers, the public, as well as the environment. Construction personal who are experienced in containing accidental releases

of hazardous materials will be present to contain and treat affected areas in the event a spill occurs. If a larger spill were to occur, construction personal would generally be on-hand to contact the appropriate agencies.

It is not anticipated that large quantities of hazardous materials would be permanently stored or used within the project site. Chemicals would be comprised of household cleaners, petroleum-based products for vehicle maintenance and equipment operation, paints, solvents and other common items. These materials would not be present in sufficient strength or quantity to create a substantial risk of fire or explosion, or otherwise pose a substantial risk to human or environmental health. A less than significant impact would occur under this threshold.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. It is not anticipated that construction or operation of residential development would create a significant hazard to the environment or to the public due to the accidental release of hazardous materials into the environment. Accidental release of hazardous materials routinely used during construction activities or those associated with materials stored on-site are addressed in section a.), above. A less than significant impact would occur under this threshold.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No impact. No existing or proposed schools have been identified within one-quarter mile of the project site. The nearest school is Chapman Elementary School located at 1071 16th Street, Chico, CA, approximately 1.5 miles north of the site. No impact would occur under this threshold.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No impact. A review of regulatory agency databases (i.e., Geotracker website- https://geotracker.waterboards.ca.gov/) , which includes lists of hazardous materials sites compiled pursuant to California Government Code Section 65962.5, did not identify any sites at or adjacent to the project site that have used, stored, disposed of, or released hazardous materials. However, based on recent groundwater testing, the site may overlie a plume containing trichloroethylene (TCE) and tetrachloroethylene (PCE). These constituents are groundwater contaminants. The project will not use groundwater or otherwise cause or contribute to hazardous materials conditions on or in proximity to the site. Thus, no impact would occur under this threshold.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No impact. The project site is located approximately 6.3 miles southeast of the Chico Municipal Airport. Per the Butte County Airport Land Use Compatibility Plan, the project site is located outside the Chico Municipal Airport Influence Area. Thus, while aircraft overflights may be audible, future development of the residences would not result in a safety hazard or excessive noise exposure for people residing on the subject property. No impact would occur under this threshold.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact. The proposed project would design, construct, and maintain driveways in accordance with applicable standards associated with vehicular access allowing for adequate emergency access and evacuation. Development of the project per the VLDR zoning designation, would not include any actions that physically interfere with emergency response or emergency evacuation plans. Development of the project would add trips to adjacent roadway; however, as discussed in the Focused Transportation Analysis (W-Trans, April 2022), the project would not adversely affect traffic operation at the intersections evaluated. No impact would occur under this threshold.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Less than significant impact. The project is not located in a moderate or very high fire hazard severity zone as shown in Figure HS-9 in the Butte County General Plan Health and Safety Element and designated by the California Department of Forestry and Fire Protection. The project site is within a Local Responsibility Area (LRA), which means that the City of Chico and Butte County has fiscal responsibility for preventing and suppressing fires. The nearest staffed fire station is the Butte County Fire Station #44, located at 2334 Fair Street in Chico, California, approximately one mile northwest of the site. Oversight by Butte County Fire/Cal Fire would ensure the proposed project would not expose people or structures to a significant risk or loss, injury or death involving wildland fires. A less than significant impact would occur under this threshold.

1.10 HYDROLOGY AND WATER QUALITY

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

Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

No impact. The proposed project would not generate wastewater requiring treatment in a municipal system. All wastewater would be treated using individual septic systems. As stated, the wastewater system must be constructed in conformance with Butte County Code, Chapter 19, as well as the Butte County Onsite Wastewater Manual to avoid violations of water quality standards. No impact would occur under this threshold.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than significant impact. The Sacramento Valley Groundwater Basin supplies a portion of the municipal and agricultural water demands for the City of Chico and surrounding unincorporated areas. The project site is located over the Sacramento Valley Groundwater Basin which underlies the majority of eastern Butte County. The project site is located within the service area of the California Water Service Company. The project would be served by the California Water Service Company as stated in a September 2021, will serve letter. According to the California Water Service Company, Chico-Hamilton District Urban Water Management Plan (June 2021), all water supplies are derived from groundwater.

According to the Butte County Groundwater Management Plan (2005), groundwater supplies approximately 31% of potable water demand county-wide. Water demand for the unincorporated areas of the county was projected to grow from 8,322.3 million gallons in 2000 to 9,736.4 million gallons in 2030, an increase of 17 percent. Development of permanent structures would have a net increase in impervious surfaces relative to existing conditions. However, stormwater runoff would be directed to pervious areas during precipitation events. The additional impervious area associated with the single-family residences would be negligible and would not cause a measurable reduction in surface infiltration or a decrease in deep percolation to the underlying aquifers. The project site is not located in a groundwater recharge area for the Sacramento Valley Groundwater Basin. Impacts to groundwater supplies and recharge would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial on- or offsite erosion or siltation;

Less than significant impact. Future development would alter existing site drainage with the construction of impervious surfaces. During construction-related activities, specific erosion control and surface water protection methods for each construction activity would be implemented on the project site by construction personnel. The type and number of measures implemented would be based upon location-specific attributes (i.e., slope, soil type, weather conditions). These control and protection measures, or BMPs, are standard in the construction industry and are commonly used to minimize soil erosion and water quality degradation. Application of BMPs administrated through the construction process would minimize the potential increase of surface runoff from erosion. See response to 1.10 (a) above. The project would not alter the course of a stream or river. Impacts would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less than significant impact. The increase in impervious surface area from the construction of permanent buildings would alter drainage patterns on-site. Storm flows would be retained and treated on-site. A preliminary drainage plan detailing the storm water's onsite retention has been reviewed and approved by the Butte County Public Works Department. Future stormwater improvements associated with the proposed plan and any future residential development would be reviewed by the Public Works Department to ensure no net increase in stormwater runoff leaves the project site. The project would not result in on- or off-site flooding. Impacts would be less than significant.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than Significant Impact. The single-family residences would increase runoff from impervious surfaces which would be conveyed to an on-site retention area where it would likely percolate into the soil. The increase in runoff quantity would not exceed the capacity of the existing stormwater drainage systems or substantially increase polluted runoff. Impacts would be less than significant.

iv) Impede or redirect flood flows?

Less than Significant Impact. The floodplain mapping of the project area identifies the project site being located within flood zones X (FEMA Map 06007C0510E, January 6, 2011). Areas designated Flood Zone X are not subject to inundation by 100-year flood events. No impact would occur under this threshold.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No impact. As stated, the project is located within Flood Zone X. The proposed action would not result in a risk of pollutant release during a flood hazard, tsunami or seiche event. No impact would occur under this threshold.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No impact. The project site is located within the Butte County Groundwater Management Plan area and West Butte Subbasin. Approval of the proposed project would not affect water quality, groundwater demand or recharge. No impact would occur under this threshold.

1.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Setting

Butte County General Plan

The General Plan represents the basic community values, ideals and aspirations with respect to land use, development, transportation, public services, and conservation policy that will govern Butte County through 2030. The Land Use Element of the General Plan designates the land use of areas within the county and includes a description of the characteristics and intensity of each land use category. The land use designation for the project parcel is *Very Low Density Residential*.

Butte County Zoning Ordinance

The Zoning Ordinance implements the goals and policies of the Butte County General Plan by regulating the uses of the land and structures within the County. The zoning designations of the project site and their intended use are as follows:

Very Low Density Residential

The purpose of the VLDR zone is to allow for single-family homes and related uses in residential neighborhoods within the county. Standards for the VLDR zone are intended to preserve and protect the character of existing neighborhoods and to ensure that new residential neighborhoods provide an appropriate transition from rural to more developed areas. Permitted residential uses in the VLDR zones include single-family homes, small residential care homes, second units and accessory dwelling units, animal grazing, on-site agricultural product sales, and private stables. The VLDR zone also conditionally permits non-residential uses compatible with a residential setting, including public and quasi-public uses, golf courses, park and recreational facilities, personal services, animal-keeping, large residential care homes, and medical offices and clinics. The minimum permitted parcel size in the VLDR zone is 1 acre. The VLDR zone implements the Very Low Density Residential land use designation in the General Plan.

a) Physically divide an established community?

No impact. The project site is located in a developed area of Butte County proximal to and south of the City of Chico municipal boundary. Surrounding uses are comprised of single-family residential to the south and east, agricultural land to the west and industrial land to the north. The project parcels are vacant and used for agricultural cultivation. The proposed land use action would not physically divide an established community. No impact would occur under this threshold.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No impact. The project would be allowed outright per the existing General Plan land use designation and zoning designation. Further, the project would not be in conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating environmental effect. No impact would occur under this threshold.

1.12 MINERAL RESOURCES

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

Discussion

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?

No impact. There are no known economically viable sources of rock materials in the immediate vicinity of the project site. No mining operations have occurred on the project site or surrounding area and the project would not preclude future extraction of available mineral resources. Mineral resource extraction is not proposed with this project. However, future development on the resultant parcels would use mineral resources in the construction of structures and access roads. The amount of resources used for the anticipated development on the resultant parcels is minor and would not result in the loss of its availability. No impact would occur under this threshold.

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?

No impact. The project site is not within or near any designated locally important mineral resource recovery site. No impact would occur under this threshold.

1.13 NOISE

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

Environmental Setting

According to the Butte County General Plan 2030, noise is a concern throughout Butte County, but especially in rural areas and in the vicinity of noise-sensitive uses such as residences, schools, and churches. Noise is discussed in the Health and Safety Chapter of the Butte County General Plan 2030. Tables HS-2 and HS-3 in the County General Plan (included as Tables 1.13-1 and 1.13-2 below) outline the maximum allowable noise levels at sensitive receptor land uses.

Table 1.13-1. Maximum Allowable Noise Exposure Transportation Noise Sources

	Exterior Noise Level Standard for Outdoor Activity Areas[a]		Interior Noise Level Standard	
LAND USE	L_{dn}/CNEL, dB	L_{eq}, dBA[b]	L_{dn}/CNEL, dB	L_{eq}, dBA[b]
Residential	60[c]	-	45	-
Transient Lodging	60[c]	-	45	-
Hospitals, nursing homes	60[c]	-	45	-
Theaters, auditoriums, music halls	-	-	-	35
Churches, meeting halls	60[c]	-	-	40
Office Buildings	-	-	-	45
Schools, libraries, museums	-	70	-	45
Playgrounds, neighborhood parks	-	70	-	-

Source: Table HS-2, Butte County General Plan 2030

[a] Where the location of outdoor activity areas is unknown, the exterior noise-level standard shall be applied to the property line of the receiving land use.

[b] As determined for a typical worst-case hour during periods of use.

[c] Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed, provided that available exterior noise-level reduction measures have been implemented and interior noise levels are in compliance with this table.

Table 1.13-2. Maximum Allowable Noise Exposure Non-Transportation Noise Sources

	Daytime 7 am - 7 pm		Evening 7 pm - 10 pm		Night 10 pm - 7 am	
NOISE LEVEL DESCRIPTION	Urban	Non-Urban	Urban	Non-Urban	Urban	Non-Urban
Hourly Leq (dB)	55	50	50	45	45	40
Maximum Level (dB)	70	60	60	55	55	50

Source: Table HS-3, Butte County General Plan 2030

Notes:

1. "Non-Urban designations" are Agriculture, Timber Mountain, Resource Conservation, Foothill Residential and Rural Residential. All other designations are considered "urban designations" for the purposes of regulating noise exposure.

2. Each of the noise levels specified above shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g. caretaker dwellings).

3. The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

4. In urban areas, the exterior noise level standard shall be applied to the property line of the receiving property. In rural areas, the exterior noise level standard shall be applied at a point 100 feet away from the residence. The above standards shall be measured only on property containing a noise sensitive land use. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all affected property owners and approved by the County.

Table 1.13.1, above, identifies the maximum allowable noise exposure to a variety of land uses from transportation sources, including from roadways, rail and airports. Table 1.13-2 identifies the maximum allowable noise exposure from non-transportation sources. In the case of transportation noise sources, exterior noise level standards for residential outdoor activity areas are 60 dB (Ldn/CNEL). However, where it is not possible to reduce noise in an outdoor activity area to 60 dB Ldn /CNEL or less using a practical application of the best-available noise-reduction measures, an exterior noise level of up to 65 dB may be allowed, provided that available exterior noise-level reduction measures have been implemented and interior noise levels are in compliance with applicable standards.

Butte County Noise Ordinance

Chapter 41A, Noise Control, of the Butte County Code of Ordinance applies to the regulation of noise. The purpose of the noise ordinance is to protect the public welfare by limiting unnecessary, excessive, and unreasonable noise. Section 41A-7 specifies the exterior noise limits that apply to land use zones within the County, which are provided in Table 1.13-2.

The Butte County Noise Ordinance provides the County with a means of assessing complaints of alleged noise violations and to address noise level violations from stationary sources. The ordinance includes a list of activities that are exempt from the provisions of the ordinance.

Discussion

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less than significant impact with mitigation. Based on the findings presented in the Environmental Noise Assessment prepared for the project (Bollard Acoustical Consultants, Inc. January 2022), the existing ambient noise environment at the project site is caused primarily by traffic on Speedway Avenue and Midway. The proposed construction of a 6-foot tall barrier wall along the western property boundary and implementation of rear yard setbacks as design features would reduce exterior noise levels to within the Butte County exterior and interior noise standards at residences adjacent to Midway.

With respect to noise generated by traffic on Speedway Avenue, the predicted future traffic noise levels at the nearest outdoor activity areas (i.e., backyards) of Lots 6 and 7 are predicted to be approximately 60 dB DNL. The sound level would result from traffic operating both on Midway and Speedway Avenue. The sounds levels would just exceed the Butte County General Plan exterior noise standard of 60 dBA DNL for residential uses. Without mitigation, exterior noise levels at Lots 6 and 7 could exceed exterior noise standards. To ensure the standard is met, it is recommended that the 6-foot tall barrier wall constructed along the western property boundary be wrapped around the northern property lines of both Lots 6 and 7. With construction of the barrier, future exterior traffic noise levels are predicted to be approximately 56 dB DNL at the first-floor facades on Lots 6 and 7. Implementation of **Mitigation Measure NOI-1** would reduce exterior noise levels at Lots 6 and 7 to less than significant.

Noise levels at the upper-floor facades of those residences are predicted to be approximately 63 dBA DNL. Standard residential construction (stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dBA with windows closed and approximately 15 dBA with windows open. The noise reduction would be adequate to reduce Speedway Avenue traffic noise levels within all residences to 45 dBA DNL or less. This assumes that mechanical ventilation (heating and air conditioning) is provided to allow occupants to close doors and windows as desired for additional acoustical isolation. This is included herein as **Mitigation Measure NOI-2.** Because of heavy truck traffic on Speedway Avenue, it is recommended that the second-floor bedroom windows of the residences constructed on Lots 6 & 7, from which Speedway Avenue can be observed, be upgraded to STC 32 to provide an additional factor of safety against sleep disturbance. This is included herein as **Mitigation Measure NOI-3.**

The nearest noise sensitive properties to the project site are single-family residences located adjacent to and south and east. Based on hourly traffic volumes presented in the *Focused Transportation Analysis for the Entler Subdivision* (W-Trans, April 2022), existing peak hour volumes on Midway proximal to the Speedway Avenue intersection are approximately 698 vehicles. Peak hour volumes along Midway at the Entler Avenue intersection are approximately 636 vehicles. Speedway Avenue carries approximately 41 peak hour vehicles and Entler Avenue carries approximately 87 peak hour vehicles under existing conditions. The addition of 15 new residences would generate approximately 141 daily trips or 15 peak hour trips (one per residence). An audible change in noise levels (+/- 3 A-weighted decibels) requires a doubling or halving of sound energy. Thus, for traffic noise to increase as a result of the project, volumes would have to double. The addition of 15 peak hour trips to existing volumes on Entler Avenue, Speedway Avenue and Midway will not double existing volumes; thus, baseline noise levels will not noticeably change. The project would have a less than significant impact to existing residences.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No impact. No development is proposed as part of the project. If development occurs, it is anticipated construction activities may generate short-term vibration; however, this would be temporary and unlikely to affect adjacent residences. No impact would occur under this threshold.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact. No public use airports have been identified to be located within two miles of the project site. The closest airport is Chico Municipal Airport, which is located approximately 6.3 miles to the northwest. The proposed project is located outside the airport compatibility zone; and therefore, airport operation would not result in noise impacts to people residing on the project site. No impact would occur under this threshold.

Mitigation Measures

Mitigation Measure NOI-1

The 6-foot-tall traffic masonry noise barrier shall be constructed parallel to Midway and parallel the northern property boundary along Speedway Avenue to attenuate noise at Lots 6 and 7.

Plan Requirements: The map shall be revised to show the extended 6-foot tall wall along the northern property boundary of Lots 6 and 7.

Timing: This measure shall be implemented prior to County approval of the Final Map.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the final design of the sound barrier are included on the subdivision's improvement plans and constructed or financed prior to Final Map recording.

Mitigation Measure NOI-2

Air conditioning shall be provided for all residences within this development so that windows can be kept closed at the occupant's discretion to control interior noise.

Plan Requirements: The architectural plans shall include a note requiring air conditioning be provided as part of the mechanical systems in all residences.

Timing: This measure shall be implemented during construction.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure that construction occurs consistent with the approved architectural plans.

Mitigation Measure NOI-3

The second-floor bedroom windows of the residences constructed on Lots 6 and 7, and oriented towards Speedway Avenue, shall be STC 32 or greater.

Plan Requirements: This note shall be placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. The architectural plans shall include a note requiring second-floor windows on Lots 6 and 7 be rated at STC 32 or greater.

Timing: This measure shall be implemented during construction activities.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map

sheet. The Department of Development Services shall ensure that architectural plans include the note is included and that construction occurs consistent with the approved architectural plans.

1.14 POPULATION AND HOUSING

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

Discussion

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No impact. The proposed project would be allowed outright per the General Plan and zoning designation. While the project result in the construction of 15 new residences, it is allowed by right; and thus, would not induce population growth within the area. No impact would occur under this threshold.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No impact. No housing is located on the subject parcels. Thus, the project would not displace existing individuals or housing. No impact would occur under this threshold.

1.15 PUBLIC SERVICES

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

Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

No impact. Fire protection services are provided by CalFire/Butte County Fire Department. Approval of the proposed land use action will not require additional fire protection services. Approval of the project would require the payment of fire protection impact fees to help offset the impacts of that development. Such fees would be used to fund capital costs associated with acquiring land for new fire stations, constructing new fire stations, purchasing fire equipment, and providing for additional staff as needed. Fire protection impact fees would be paid at the time of building permit issuance. No impact would occur under this threshold.

Police protection?

No impact. The Butte County Sheriff's Office provides law enforcement service to the site. The proposed action is unlikely to increase service calls. However, increased development in the County impacts the ability of the Sheriff's Department to adequately provide services to outlying areas. If the single-family residences are constructed, it is expected that the action would not require any new law enforcement facilities or the alteration of existing facilities to maintain acceptable performance objectives. Future development would be partially offset through project-related impact fees. No impact would occur under this threshold.

Schools?

Less than significant impact. The project site is located within the Chico Unified School District. The proposed action would result in the construction of 15 new residences which could impact demand for school services within the Chico Unified School District. Based on the Chico Unified School District 2020 School Fee Justification Study, approximately 0.298 students are generated per single-family residence. Thus, a total of 5 new students could be generated by the project. The addition of 5 new students is not anticipated to significantly impact demand for school services within the Chico Unified School District. A less than significant impact would occur under this threshold.

Parks?

No Impact. Increase in the demand for recreational facilities is typically associated with increases in population. As discussed in Section 1.14 - *Population and Housing,* the proposed project will not generate growth in the local population in excess of what was anticipated in the General Plan. Approval of the project would require payment of development fees to off-set any increase in demand for park services. Thus, impacts would be less than significant under this threshold.

Other public facilities?

No impact. No other public facilities would be impacted by the proposed project. No impact would occur under this threshold.

1.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation.				
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a) 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?

Less than significant impact. Development of the proposed project may increase demand for recreational facilities. As discussed in Section 1.14 - *Population and Housing*, the proposed project would generate growth in the local population; however, not the extent unanticipated in the General Plan. The project may increase use of existing parks and recreational facilities in the surrounding area; however, payment of impact fees would help off-set any increase in demand for these services. Impacts would be less than significant under this threshold.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No impact. The proposed project does not include plans for additional recreational facilities nor would it require expansion of existing recreational facilities. Therefore, the proposed project would not result in any adverse physical effects on the environment from construction or expansion of recreational facilities. No impact would occur under this threshold.

1.17 TRANSPORTATION

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

Setting

Roadway Network

Regional and local access to the project site is provided by Midway, Speedway Avenue and Entler Avenue. Speedway Avenue border the site to the north and Entler Avenue borders the site to the south. A new street would be constructed to access the 15-lot subdivision. This street would connect Speedway Avenue to Entler Avenue and would serve as primary ingress/egress to the project site.

Bicycle and Pedestrian Transportation

Bicycle facilities include bike paths (Class I), bike lanes (Class II), and bike routes (Class III).

Class I Bike paths provide a completely separated facility designed for the exclusive use of bicycles and pedestrians within minimal cross flows by motorists. Caltrans standards call for Class I two-way bike paths to have 8 feet of pavement width with 2 foot wide graded shoulders on either side, for a total right-of-way width of 12 feet. Designated one-way bike paths are allowed 5 feet of minimum pavement width. Class I bike paths must also be at least 5 feet from the edge of a paved roadway, 8 feet from an obstruction, and meet specified minimum horizontal and vertical curve requirements for the speeds anticipated. The Chico-Durham Bicycle Path is a Class I facility located parallel to along the east side of Midway and west of the project site.

Class II Bike lanes provides restricted on-street right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted. Caltrans standards generally require a minimum 4-foot bike lane with 6-inch white strip separating the roadway from the bike lane. Where raised curbs without permitted parking or designated marked parking exists, a minimum 5-foot bike lane adjacent to the traffic lane is required. Where parking is permitted, but unmarked, the 6-inch white stripe separating the traffic lane from the bike lane must be a minimum of 12 feet from the raised curb.

Class III Bike routes provides a preferred shared route with motorists on the street, or to a more restricted extent, with pedestrians on sidewalks where designated by signs or permanent markings. The main purpose of designated bike routes is to provide continuity to the bikeway network by connecting discontinuous segments of Class I and II bikeways and may also be used to direct bicyclists to a route of higher degree of service or use. Roadways designated as Class

III bike routes should have sufficient width to accommodate motorists, bicyclists, and pedestrians. Other than a street sign, there are no special markings required for a Class III bike route.

Pedestrian facilities include sidewalks, crosswalks, pedestrian signals, and paved shoulders adjacent to rural roads. The County of Butte's Development Standards typically require proposed residential developments located in the County's urban areas to construct curb, gutter, and sidewalk improvements within the County roadways fronting development.

Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than significant impact. The project site is located in a primarily residential area. The proposed action would generate approximately 141 daily trips. The project would not adversely impact the intersections studied. As stated, the Chico-Durham Bicycle Path is a Class I facility located parallel to along the east side of Midway and west of the project site. The project will have no effect on this facility, paved roadway shoulders or the paved surfaces that could be used by pedestrians and cyclists. A less than significant impact would occur under this threshold.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less than significant impact. Consistent with CEQA Guidelines Section 15064.3, subdivision (b), a Vehicle Miles Traveled (VMT) analysis was performed for the proposed project to demonstrate compliance with SB 743. To assist in SB 743 implementation, the Office of Planning and Research (OPR) released a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) in December 2018. This includes technical recommendations regarding the assessment of VMT, thresholds of significance, VMT mitigation measures and screening thresholds for certain land use projects. Lead agencies may consider and use these recommendations at their discretion. Specific to residential projects and considering the land use context for Butte County and the project area, the Technical Advisory contains recommendations related to assessing VMT impacts. Those projects that meet specific screening criteria have been determined to generate too few trips to warrant evaluation. With respect to the "small project" criteria, projects consistent with a Sustainable Community Strategy, the local general plan and that generate or attract fewer than 110 vehicle trips per day may be presumed to have a less than significant VMT impact. The proposed project would generate 141 daily trips; and thus, would not meet that screening criteria.

The VMT impact analysis for the Entler Subdivision project was prepared using modified version 1.1–3.17.21 of the BCAG RTP/SCS travel demand model. For purposes of this VMT impact analysis, baseline conditions are represented by 2020 forecasts from the modified BCAG RTP/SCS travel demand model. The specific VMT metric used in this study to evaluate VMT impacts is home-based VMT per resident. This is a residential specific VMT metric and includes trips made by residents of the home using passenger vehicles. The proposed project is presumed to have a less than significant VMT impact if it generates home-based VMT per resident at or less than 16.7 miles, which is 15 percent below the BCAG region average home-based VMT per resident in 2020.

The project site is located with a Traffic Analysis Zone (TAZ) that generates homebased VMT per resident below the threshold. The low VMT generation for the project area is largely the result of proximity to the commercial services in the City of Chico. These commercial areas are within 2-3 miles of the site and California State University, Chico, a regional destination, is less than four miles from the site. Because VMT within the TAZ is less than the BCAG regional average, the project would meet this screening criterion. Further, the total home-based VMT of the project is less than 630 per weekday. The VMT growth budget estimated for Butte County is about 326,350 per weekday in 2050. Therefore, the proposed project would be within the growth budget and would not jeopardize state plans for long-term VMT reduction.

The project will generate VMT; however, the VMT would be less than the BCAG regional average and within the Butte County growth budget. Thus, it would be consistent with CEQA Guidelines Section 15064.3, subdivision (b). A less than significant impact would occur under this threshold.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No impact. The proposed project would add a new access street; however, it would not change the configuration (alignment) of area roadways and would not introduce types of vehicles that are not already traveling on area roads. No impact would occur under this threshold.

d) Result in inadequate emergency access?

No impact. Emergency vehicles access the area using Midway, Speedway Avenue and Entler Avenue. The project would have no effect on these streets. A new access street would connect to Speedway Avenue to the north and Entler Avenue to the south. The street and intersections would be designed consistent with Butte County standards and would provide sufficient emergency access. No impact would occur under this threshold.

1.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?	☒ Yes		☐ No	
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☐	☒

Environmental Setting

Tribal Cultural Resources are defined as a site feature, place, cultural landscape, sacred place or object, which is of cultural value to a Tribe and is either on or eligible for the California Historic Register, a local register, or a resource that the lead agency, at its discretion, chooses to treat as such (Public Resources Code Section 21074 (a)(1)).

Butte County contains a rich diversity of archaeological, prehistoric and historical resources. The General Plan 2030 EIR observes that the "archaeological sensitivity of Butte County is generally considered high, particularly in areas near water sources or on terraces along water courses" (Butte County General Plan EIR, 2010, p. 4.5-7).

A substantial adverse change upon a historically significant resource would be one wherein the resource is demolished or materially altered so that it no longer conveys its historic or cultural significance in such a way that justifies its inclusion in the California Register of Historical Resources or such a local register (CEQA Guidelines Section 15064.5, sub. (b)(2)). Cultural resources include prehistoric and historic period archaeological sites; historical features, such as rock walls, water ditches and flumes, and cemeteries; and architectural features. Cultural resources consist of any human-made site, object (i.e., artifact), or feature that defines and illuminates our past. Often such sites are found in foothill areas, areas with high bluffs, rock outcroppings, areas overlooking deer migratory corridors, or near bodies of water.

A letter was sent to the Mechoopda Indian Tribe on August 20, 2021, as required per AB 52. No response was received.

Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

No impact. Per Assembly Bill AB 52 (Statutes of 2014) Notification Request, Public Resources Code Section 21080.3(b), the County sent one letter to the Mechoopda Indian Tribe on August 20, 2021. As stated, no response was received. The project site is vacant; thus, no impact to historic resources would occur under this threshold.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

No impact. See discussion 4.17(a) – *Tribal Cultural Resources*. No impact would occur under this threshold.

1.19 UTILITIES AND SERVICE SYSTEMS

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

Discussion

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

No impact. The project site is vacant. Wastewater would be disposed of in private, on-site septic systems. Water would be provided by the California Water Service Company, Chico District (Cal Water).

No existing on-site storm water drainage facilities are located on the project site. All precipitation percolates into the ground. Future development would require the installation of a stormwater management system.

The project site is currently served by electric power (PG&E), natural gas (PG&E), public water (Cal Water), and wireless phone service. The project would not result in the relocation or construction of new or expanded infrastructure including water services, wastewater treatment, stormwater drainage, natural gas, or telecommunication facilities. No impact would occur under this threshold.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than significant impact. Domestic water services could be provided by the Cal Water as evidenced in their will serve letter dated September 8, 2021. A less than significant impact would occur under this threshold.

c) Result in a determination by the wastewater treatment provider that 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?

No impact. Wastewater disposal for the proposed project site is provided by private, on-site septic systems. Therefore, the project would not have an impact on any wastewater treatment facilities because septic systems would be utilized. No impact would occur under this threshold.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No impact. Construction and operation of the project would result in a minor increase of solid waste that would require disposal at the Neal Road Recycling and Waste Facility. The Neal Road Facility has a maximum permitted throughput of 1,500 tons per day, and an estimated current daily average throughput of 466 tons per day. Solid waste generation was estimated using the California Emission Estimator Model (CalEEMod) version 2020.4.0. Assuming a 75% recycling rate as mandated by AB341, 15 single-family residences would generate approximately four tons annually or 22 pounds per day. The Neal Road Facility has a maximum permitted throughput of 1,500 tons per day, and an estimated current daily average throughout of 466 tons per day. Therefore, the facility would have adequate capacity to accommodate solid waste generated by the project. A less than significant impact would occur under this threshold.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No impact. The proposed project would comply with statues and regulations related to solid waste. Waste generated by the proposed project would consist only of domestic refuse, which would be collected in approved trash bins and removed from the project site by a waste hauler or by the residents. No impact would occur under this threshold.

1.20 WILDFIRE

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

Environmental Setting

The project site is located in a Local Responsibility Area for fire protection. The project site is located outside the fire hazard severity zones as identified by the State Department of Forestry and Fire Protection.

Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No impact. The project site would be accessed via a new road between Speedway Avenue and Entler Avenue, both county-maintained roads. There would be no lane closures or other actions that would impact emergency access or interfere with an emergency evacuation plan. No impact would occur under this threshold.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No impact. The project site is not located in an area that is susceptible to wildland fires. No conditions or factors have been identified in the project area that would exacerbate wildfire risks.

c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No impact. The project site is located outside of a fire hazard severity zone. However, due to the heightened risk of wildfire and increased potential for damage or loss, development must meet Butte County Code requirements which establish standards for access, signage, maintenance of defensible space and vegetation management. These standards will be included as conditions of approval and implemented at the time of development if it occurs. The project is not subject any infrastructure improvements that would exacerbate fire risks or generate temporary impacts to the project site or surrounding area. No impact would occur under this threshold.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No impact. The project site area is located within a developed area and the topography is flat. The project area does not exhibit flooding potential (see discussion Section 1.10.d – Hydrology and Water Quality) or landslide potential (see discussion Section 1.7.a – Geology Soils). Therefore, no impacts from post-fire instability or drainage changes would occur. No impact would occur under this threshold.

1.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened 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 that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact with mitigation incorporated. Potential impacts to biological resources and cultural resources associated with future development of the proposed project were analyzed in this Initial Study. With implementation of **Mitigation Measure CUL-1**, all direct, indirect, and cumulative impacts to cultural resources could be mitigated to less than significant. No special status species or their habitat was identified on the site. Development of the subject parcel would not cause fish or wildlife populations to drop below self-sustaining levels or restrict the movement/distribution of a rare or endangered species.

Development of the proposed project would not affect significant historic resources or known archaeological or paleontological resources. **Mitigation Measure CUL-1** has been identified to address the potential discovery of unknown resources during excavation or other soil disturbance associated with development. Additionally, the project applicant is required to comply with *California Code of Regulations (CCR) Section 15064.5(e)*, *California Health and Safety Code Section 7050.5*, and *Public Resources Code (PRC) Section 5097.98* as a matter of policy in the event human remains are encountered at any time. Implementation of **Mitigation Measure**

CUL-1, as well as regulations governing human remains, would reduce potential impacts to cultural and paleontological resources to less than significant.

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.)

Less than significant impact with mitigation incorporated. Development of the proposed project would have no impact, a less than significant impact or a less than significant impact with mitigation incorporated with respect to all environmental issues pursuant to CEQA. Due to the limited scope of direct physical impacts to the environment associated with the project, potential impacts are project-specific.

The proposed project site is located within an area has been designated by the County for VLDR development. Short-term construction-related air quality impacts that would result from construction of the site improvements and build-out of residences will be reduced to less than significant with implementation of **Mitigation Measure AIR-1**. Potential impacts associated with lighting would be addressed with implementation of **Mitigation Measure AES-1** if needed. Potential noise impacts would be reduced to less than significant with implementation of **Mitigation Measures NOI-1, NOI-2 and NOI-3**.

The cumulative effects resulting from build out of the Butte County General Plan 2030 were previously identified in the General Plan EIR. The type, scale, and location of the type of development that is proposed for the site is consistent with County's General Plan and zoning designation and is compatible with the pattern of development on adjacent properties. Because of this consistency, the potential cumulative environmental effects of the proposed project would fall within the impacts identified in the County's General Plan EIR. Build-out of the project would be subject to required "fair share" development impact fees, which will be paid at the time of development.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than significant impact with mitigation incorporated. There have been no impacts discovered through the review of this application demonstrating that approval of the TSM or future development of the parcels would cause substantial adverse effects to human beings either directly or indirectly. However, development of the residences has the potential to cause both temporary and future impacts related to aesthetics, air quality, noise and cultural resources. With implementation of mitigation measures included in this Initial Study, these impacts would be mitigated to less than significant.

Authority for the Environmental Checklist: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.
Public Resources Code Sections 21080, 21083.5, 21095; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

Environmental Reference Materials

1. Butte County. *Butte County Climate Action Plan*. December 14, 2021. Available at https://www.buttecounty.net/dds/bccapupdate2020

2. Butte County. *Butte County General Plan 2030 Final Environmental Impact Report*. April 8, 2010. Available at http://www.buttegeneralplan.net/products/2010-08-30_FEIR/default.asp.

3. Butte County. *Butte County General Plan 2030*. October 26, 2010. Available at http://www.buttecounty.net/dds/Planning/GeneralPlan/Chapters.aspx

4. Butte County. *Butte County General Plan 2030 and Zoning Ordinance Amendments – Draft Supplemental Environmental Impact Report*. June 17, 2015. Available at http://www.buttegeneralplan.net/products/2012-05-31_GPA_ZO_SEIR/default.asp

5. Butte County. *Butte County General Plan 2030 Setting and Trends Report Public Draft*. August 2, 2007. Available at http://www.buttegeneralplan.net/products/SettingandTrends/default.asp.

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7. Butte County. *Butte County Department of Development Services GIS Data*. April 2022.

8. Butte County Air Quality Management District. *CEQA Air Quality Handbook – Guidelines for Assessing Air Quality and Greenhouse Gas Impacts for Projects Subject to CEQA Review*. October 23, 2014. Available at https://bcaqmd.org/planning/air-quality-planning-ceqa-and-climate-change/

9. Butte County Public Works Department, Division of Waste Management. Joint Technical Document-Neal Road Recycling and Waste Facility, Butte County, California. November 2017.

10. California Department of Conservation. *Fault-Rupture Hazard Zones in California. Altquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zone Maps*. Special Publication 42. Interim Revision. 2007.

11. California Department of Conservation, Division of Land Resource Protection. *A Guide to the Farmland Mapping and Monitoring Program*. 2014.

12. California Department of Toxic Substance Control. 2009. *Envirostor Database*. Accessed on April 2022. http://www.envirostor.dtsc.ca.gov/public.

13. California Department of Water Resources, Northern Region Office. Geology of the Northern Sacramento Valley, California. September 2014.

14. Kopple & Gruber, Public Finance, Inc., *Chico Unified School District 2020 School Fee Justification Study*, March 2020.http://www.chicousd.org/documents/Business%20Services/Developer%20Fee%20Studies/CUSD_FeeJustificationStudy_2020_FINAL.pdf

15. Entler Subdivision VMT Impact Analysis, March 2022

16. W-Trans, Inc., *Focused Transportation Analysis for the Entler Subdivision,* April 2022

17. Bollard Acoustical Consultants, Inc., Environmental Noise Assessment, Entler Subdivision, January 2022

Mitigation Measure AES-1:

All lighting, exterior and interior, shall be designed and located so as to confine direct lighting to the premises. A light source shall not shine upon or illuminate directly on any surface other than the area required to be lighted. No lighting shall be of the type or in a location such that it constitutes a hazard to vehicular traffic, either on private property or the abutting highway or street.

Plan Requirements: The mitigation shall be placed on an additional map sheet recorded concurrently with the Final Map. This mitigation shall be placed on all building permit and site development plans.

Timing: The provisions of this mitigation measure shall be complied with at all times.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Building inspectors shall spot check and shall ensure compliance on-site. The Development Services Department shall investigate and respond to any complaints of excess glare or light originating from the project site.

Mitigation Measure AIR-1

The following best practice measures to reduce impacts to air quality shall be incorporated by the project applicant, subject property owners, or third-party contractors during construction activities on the project site. These measures are intended to reduce criteria air pollutants that may originate from the site during the course of land clearing and other construction operations.

Diesel PM Exhaust from Construction Equipment and Commercial On-Road Vehicles Greater than 10,000 Pounds

- All on- and off-road equipment shall not idle for more than five minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the five-minute idling limit.
- Idling, staging and queuing of diesel equipment within 1,000 feet of sensitive receptors is prohibited.
- All construction equipment shall be maintained in proper tune according to the manufacturer's specifications. Equipment must be checked by a certified mechanic and determined to be running in proper condition before the start of work.
- Install diesel particulate filters or implement other CARB-verified diesel emission control strategies.
- Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5 minutes at any location when within 100 feet of a restricted areas.
- To the extent feasible, truck trips shall be scheduled during non-peak hours to reduce perk hour emissions.

Operational TAC Emissions

- All mobile and stationary Toxic Air Contaminants (TACs) sources shall comply with applicable Airborne Toxic Control Measures (ATCMs) promulgated by the CARB throughout the life of the project (see http:www.arb.ca.gov/toxics/atcm/atcm.htm).

- Stationary sources shall comply with applicable District rules and regulations.

Fugitive Dust

Construction activities can generate fugitive dust that can be a nuisance to local residents and businesses near a construction site. Dust complaints could result in a violation of the District's "Nuisance" and "Fugitive Dust" Rules 200 and 205, respectively. The following is a list of measures that may be required throughout the duration of the construction activities:

- Reduce the amount of the disturbed area where possible.
- Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. An adequate water supply source must be identified. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.
- All dirt stockpile areas should be sprayed daily as needed, covered, or a District approved alternative method will be used.
- Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
- Exposed ground areas that will be reworked at dates greater than one month after initial grading should be sown with a fast-germinating non-invasive grass seed and watered until vegetation is established.
- All disturbed soil areas not subject to re-vegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the Butte County Air Quality Management District.
- All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with local regulations.
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site.
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.
- Post a sign in prominent location visible to the public with the telephone numbers of the contractor and the Butte County Air Quality Management District - (530) 332-9400 for any questions or concerns about dust from the project.

All fugitive dust mitigation measures required should be shown on grading and building plans. In addition, the contractor or builder should designate a person or persons to monitor the dust control program and to order

increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend period when work may not be in progress. The name and telephone number of such persons shall be provided to the District prior to land use clearance for map recordation and finished grading of the area.

Please note that violations of District Regulations are enforceable under the provisions of California Health and Safety Code Section 42400, which provides for civil or criminal penalties of up to $25,000 per violation.

Plan Requirements: The note shall be placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. This note shall also be placed on all building and site development plans.

Timing: Requirements of the condition shall be adhered to throughout all grading and construction periods.

Monitoring: The Butte County Department of Development Services and the Public Works Department shall ensure that the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Building inspectors shall spot check and shall ensure compliance on-site. Butte County Air Pollution Control District inspectors shall respond to nuisance complaints.

Mitigation Measure CUL-1

If grading activities reveal the presence of prehistoric or historic cultural resources (i.e., artifact concentrations, including arrowheads and other stone tools or chipping debris, cans glass, etc.; structural remains; or human skeletal remains) work within 50 feet of the find shall immediately cease until a qualified professional archaeologist can be consulted to evaluate the find and implement appropriate mitigation procedures. If human skeletal remains are encountered, State law requires immediate notification of the County Coroner (530.538.7404). If the County Coroner determines that the remains are in an archaeological context, the Native American Heritage Commission in Sacramento shall be notified immediately, pursuant to State Law, to arrange for Native American participation in determining the disposition of such remains. The provisions of this mitigation shall be followed during construction of all improvements, including land clearing, road construction, utility installation, and building site development.

Plan Requirements: This note shall be placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet and shall be shown on all site development and building plans.

Timing: This measure shall be implemented during all site preparation and construction activities.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. Should cultural resources be discovered, the landowner shall notify the Planning Division and a professional archaeologist. The Planning Division shall coordinate with the developer and appropriate authorities to avoid damage to cultural resources and determine appropriate action. State law requires the reporting of any human remains.

Mitigation Measure NOI-1

The 6-foot-tall traffic masonry noise barrier shall be constructed parallel to Midway and parallel the northern property boundary along Speedway Avenue to attenuate noise at Lots 6 and 7.

Plan Requirements: The map shall be revised to show the extended 6-foot tall wall along the northern property boundary of Lots 6 and 7.

Timing: This measure shall be implemented prior to County approval of the Final Map.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the final design of the sound barrier are included on the subdivision's improvement plans and constructed or financed prior to Final Map recording.

Mitigation Measure NOI-2

Air conditioning shall be provided for all residences within this development so that windows can be kept closed at the occupant's discretion to control interior noise.

Plan Requirements: The architectural plans shall include a note requiring air conditioning be provided as part of the mechanical systems in all residences.

Timing: This measure shall be implemented during construction.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure that construction occurs consistent with the approved architectural plans.

Mitigation Measure NOI-3

The second-floor bedroom windows of the residences constructed on Lots 6 and 7, and oriented towards Speedway Avenue, shall be STC 32 or greater.

Plan Requirements: This note shall be placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. The architectural plans shall include a note requiring second-floor windows on Lots 6 and 7 be rated at STC 32 or greater.

Timing: This measure shall be implemented during construction activities.

Monitoring: The Department of Development Services and/or Public Works Department shall ensure the note is placed on a separate document which is to be recorded concurrently with the map or on an additional map sheet. The Department of Development Services shall ensure that architectural plans include the note is included and that construction occurs consistent with the approved architectural plans.

Project Sponsor(s) Incorporation of Mitigation into Proposed Project

I/We have reviewed the Initial Study for the Douglas Arnold Tentative Subdivision Map (TSM21-0006) application and particularly the mitigation measures identified herein. I/We hereby modify the applications on file with the Butte County Planning Department to include and incorporate all mitigations set forth in this Initial Study.

Project Sponsor/Project Agent — Date: 5-25-22

Project Sponsor/Project Agent — Date: 5/25/22

APPENDIX - A

Entler Subdivision VMT Impact Analysis
January 2022

VMT Impact Analysis

This document describes the vehicle miles travelled (VMT) impact analysis for the Entler Subdivision project located at 322 Entler Avenue in unincorporated Butte County near Chico, CA. The analysis and documentation have been prepared consistent with Public Resources Code (PRC) 15064.3 and contains the following components.

- Regulatory Setting
- Environment Setting
- Impact Analysis

Regulatory Setting

Regulations, laws, policies, and plans applicable to and/or considered for the VMT impact analysis for the proposed project are described below.

Federal

No federal plans, policies, regulations, or laws related to transportation and circulation apply to the project.

State

The State of California has enacted several pieces of legislation that outline the state's commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and contribute to reductions in greenhouse gas (GHG) emissions in line with state climate goals. Legislation that is potentially applicable to VMT impact analysis for the proposed project is listed below.

- Assembly Bill (AB) 32 (2006)
- Senate Bill (SB) 375 (2008)
- SB 743 (2013)

Assembly Bill 32

AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that "(a) the statewide GHG emissions limit shall remain in effect unless otherwise amended or repealed; (b) it is the intent of the Legislature that the statewide GHG emissions limit continues in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020; (c) the California Air Resources Board (ARB) shall make recommendations to the Governor and the Legislature on how to continue reductions of GHG emissions beyond 2020." AB 32 goals are the foundation for the GHG and VMT reductions expected through subsequent legislation including SB 375 and SB 743.

Senate Bill 375

SB 375 requires metropolitan planning organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) as part of their regional transportation plans (RTPs). The SCS demonstrates how the region will meet its GHG reduction targets through integrated land use, housing and transportation planning. Specifically, the SCS must identify a transportation network that is integrated with the forecasted development pattern for the plan area and will reduce GHG emissions from automobiles and light trucks in accordance with targets set by the ARB.

In 2017, the State Legislature passed SB 150, which requires ARB to prepare a report beginning in 2018 and every four years thereafter analyzing the progress made by each MPO in meeting regional GHG emission reduction targets.

Senate Bill 743

SB 743 created or encouraged several statewide changes to the evaluation of transportation and traffic impacts under CEQA. First, it directed the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to establish new metrics for determining the significance of transportation impacts of projects within transit priority areas (TPAs) and allowed OPR to extend use of the new metrics beyond TPAs. In the amended CEQA Guidelines, OPR selected VMT as the preferred transportation impact metric and applied their discretion to recommend its use statewide. The California Natural Resources Agency certified and adopted the amended CEQA Guidelines in December 2018.

The amended CEQA Guidelines contain the following relevant expectations for VMT impact analysis.

- "Generally, vehicle miles traveled is the most appropriate measure of transportation impacts."
- "…vehicle miles traveled refers to the amount and distance of automobile travel attributable to a project."
- "Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact."
- "Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact."

Second, SB 743 establishes that aesthetic and parking impacts of a residential, mixed-use residential, or employment center projects on an infill site within a TPA shall not be considered significant impacts on the environment.

Third, SB 743 added Section 21099 to the Public Resources Code, which states that automobile delay, as described by level of service (LOS) or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment upon certification of the CEQA Guidelines by the California Natural Resources Agency. Since the amended CEQA Guidelines were certified in December 2018, LOS or similar measures of vehicular capacity or traffic congestion are not considered a significant impact on the environment.

Lastly, SB 743 establishes a new CEQA exemption for a residential, mixed-use, and employment center project a) within a TPA, b) consistent with a specific plan for which an EIR has been certified,

and c) consistent with an SCS. This exemption requires further review if the project or circumstances changes significantly.

To aid in SB 743 implementation, OPR released a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) in December 2018. The Technical Advisory provides advice and recommendations to lead agencies on how to implement SB 743 changes. This includes technical recommendations regarding the assessment of VMT, thresholds of significance, VMT mitigation measures, and screening thresholds for certain land use projects. Lead agencies may consider and use these recommendations at their discretion.

Specific to residential projects and considering the land use context for Butte County and project area, the Technical Advisory contains the following recommendations related to assessing VMT impacts.

- Small projects—projects consistent with a SCS and local general plan that generate or attract fewer than 110 vehicle trips per day may be presumed to have a less than significant impact.
- Projects in low-VMT areas—residential projects that incorporate similar features (i.e., density, mix of uses, transit accessibility) as existing development in areas with low VMT (i.e., already below the VMT impact significance threshold) will tend to exhibit similarly low VMT and may be presumed to have a less than significant impact.

The Technical Advisory also identifies recommended numeric VMT thresholds for residential projects in unincorporated areas, as described below.

- A proposed project generating residential VMT per capita higher than 15 percent below the existing regional average may indicate a significant transportation impact.

Other relevant threshold information in the Technical Advisory are references to the *2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals*, California Air Resources Board, January 2019. This ARB analysis identifies the need to reduce average statewide per capita VMT but also provides evidence that some VMT growth can occur without disrupting the state's climate goals. ARB modeled a Cleaner Technologies and Fuels (CTF) scenario that evaluated what level of additional deployment of cleaner vehicle technologies and fuels combined with slower growth in VMT would be necessary to achieve a 40 percent reduction in GHG emissions from 1990 levels by 2030 and 80 percent by 2050. This is the same scenario that was used to support the OPR Technical Advisory threshold recommendation for a 15 percent reduction in baseline VMT per capita. The scenario modeling showed that California has a VMT growth capacity of 6.5 percent by 2050 above a 2015-2018 baseline average. In other words, if VMT growth is limited to 6.5 percent by 2050, the state can meet its climate goals. For Butte County, this equates to about 326,350 daily VMT in 2050.

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining the State Highway System (SHS). With respect to VMT impact analysis, Caltrans has published the *Vehicle Miles Traveled-Focused Transportation Impact Study Guide (VMT-TISG)*, May 20, 2020. This guide outlines how Caltrans will review land use projects with a focus on supporting state land use goals, state planning priorities, and GHG emission reduction goals. The VMT-TISG emphasizes that VMT analysis is Caltrans' primary review focus, and

references OPR's Technical Advisory as a basis for the guidance in the TISG. Notably, the VMT-TISG endorses the recommended thresholds in the Technical Advisory for land use projects. Since Caltrans routinely comments on local land use projects and is also the owner and operator of the state highway system, their endorsement of the OPR VMT thresholds creates a potential 'state' VMT threshold especially when they function as a responsible agency in local development review and have direct authority over a part of project approval such as an encroachment permit for access to the state highway system.

Regional and Local

BCAG RTP/SCS

The Butte County Association of Governments (BCAG) serves as the MPO for Butte County. As the MPO, the most relevant responsibility of the agency related to VMT impact analysis for local land use projects is through the development of the RTP/SCS. The RTP/SCS reflects the population and employment growth anticipated by local governments and includes a financially constrained list of transportation improvement projects. As noted above under the SB 375 discussion, the SCS has specific GHG reduction targets set by CARB. The RTP also must demonstrate compliance with federal air quality conformity. Therefore, RTP/SCS performance is influenced by VMT growth so new land use projects that are not consistent with the RTP/SCS may jeopardize the air quality conformity for the county or the ability to achieve GHG reduction goals.

The most recent RTP/SCS was adopted on December 10, 2020 and complies with federal and state performance requirements. The specific SCS performance is reported below.

RTP/SCS per Capita CO_2 Emission Reductions for Passenger Vehicles from 2005

Target Year	ARB Target (2018)	BCAG RTP/SCS
2020	6% reduction	15% reduction
2035	7% reduction	10% reduction

Source: Page 4-2, *Butte County 2020 Regional Transportation Plan/Sustainable Communities Strategy (2020-2040)*, BCAG, December 10, 2020

The RTP/SCS does not contain a specific VMT reduction goal but VMT per capita reductions did contribute to the SCS performance. As documented in Table 4.9-1 of the 2020 RTP/SCS SEIR, total VMT generated in the county was projected to increase from 4,705,417 under 2018 baseline conditions to 5,332,327 under 2040 conditions with the proposed plan. This represents a 13.3 percent increase although total VMT per capita was projected to decline about 3.4 percent from 20.7 to 20.0 between 2018 baseline and 2040.[1]

Butte County General Plan 2030, October 26, 2010 (Amended November 6, 2012)

The general plan does not contain quantitative VMT reduction goals. However, multiple policies are supportive of achieving VMT reduction through increasing vehicle occupancies, sharing rides, promoting transit and active transportation, and supporting work-at-home programs.

[1] The VMT forecasts exclude trip lengths external to the county and total VMT includes commercial vehicles.

- *CIR-P2.1 Carpooling shall be encouraged by providing additional carpool pickup and park-and-ride locations near transit centers and at freeway interchanges.*
- *CIR-P2.2 Trip reduction among County employees shall be encouraged. Specific measures to encourage trip reduction could include providing subsidies, bicycle facilities, alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking for carpools/vanpools.*
- *CIR-P2.3 Home occupations shall be encouraged through streamlined application processes that are appropriate to the intensity and proposed uses of the home business.*
- *CIR-P2.4 Employers shall be encouraged to provide transit subsidies, bicycle facilities, alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking for carpools/vanpools.*

Despite the policy support, the daily VMT was projected to increase from 4,126,991 to 6,397,512 between 2006 and 2030 with the proposed plan. A 2012 general plan amendment increased the 2030 daily VMT by 1,511.

Butte County Climate Action Plan (CAP), Butte County, February 25, 2014

The Butte County CAP sets community GHG reduction targets for 2020 and 2040 compared to baseline 2006 levels but does not establish a specific VMT reduction goal. Under 2020 conditions, the CAP expected only about 0.2 percent of GHG emissions reduction to come from transportation measures. Annual VMT was largely expected to continue increasing from 464,302,660 in 2006 to 567,121,185 in 2020, and 677,283,969 in 2030 representing a total increase of 46 percent between 2006 and 2030.

Environmental Setting

This section discusses the environmental setting relevant to VMT impact analysis for the Entler Subdivision project. The project is located in an unincorporated area of Butte County close to the City of Chico and proposes to construct 15 single-family residential units. To evaluate potential VMT impacts of the proposed project, baseline VMT conditions were estimated based on a modified version of the BCAG RTP/SCS travel demand model.

BCAG RTP/SCS Model

The VMT impact analysis for the Entler Subdivision project was prepared using modified version 1.1–3.17.21 of the BCAG RTP/SCS travel demand model. The model was recently updated as part of the 2020 BCAG RTP/SCS and continues to be refined through various on-going studies and project applications. The BCAG model was developed for regional planning and analysis purposes associated with the RTP/SCS. The model has a 2018 base year and forecast years of 2020 and 2040. The 2018 base year model represents pre-Camp Fire conditions while the 2020 version represents post-Camp Fire conditions.

While the primary purpose of the model is to support the RTP/SCS analysis, the model was designed with sufficient detail for local and project scale applications including VMT impact analysis. Prior to application for this project, the model was reviewed and modified to improve its sensitivity for project-scale VMT analysis. This included a review of the model's VMT forecasts by traffic analysis zone (TAZ) and adjustments to account for travel outside the model boundary.

More details about the model's development and a user's guide are available at the following BCAG website.

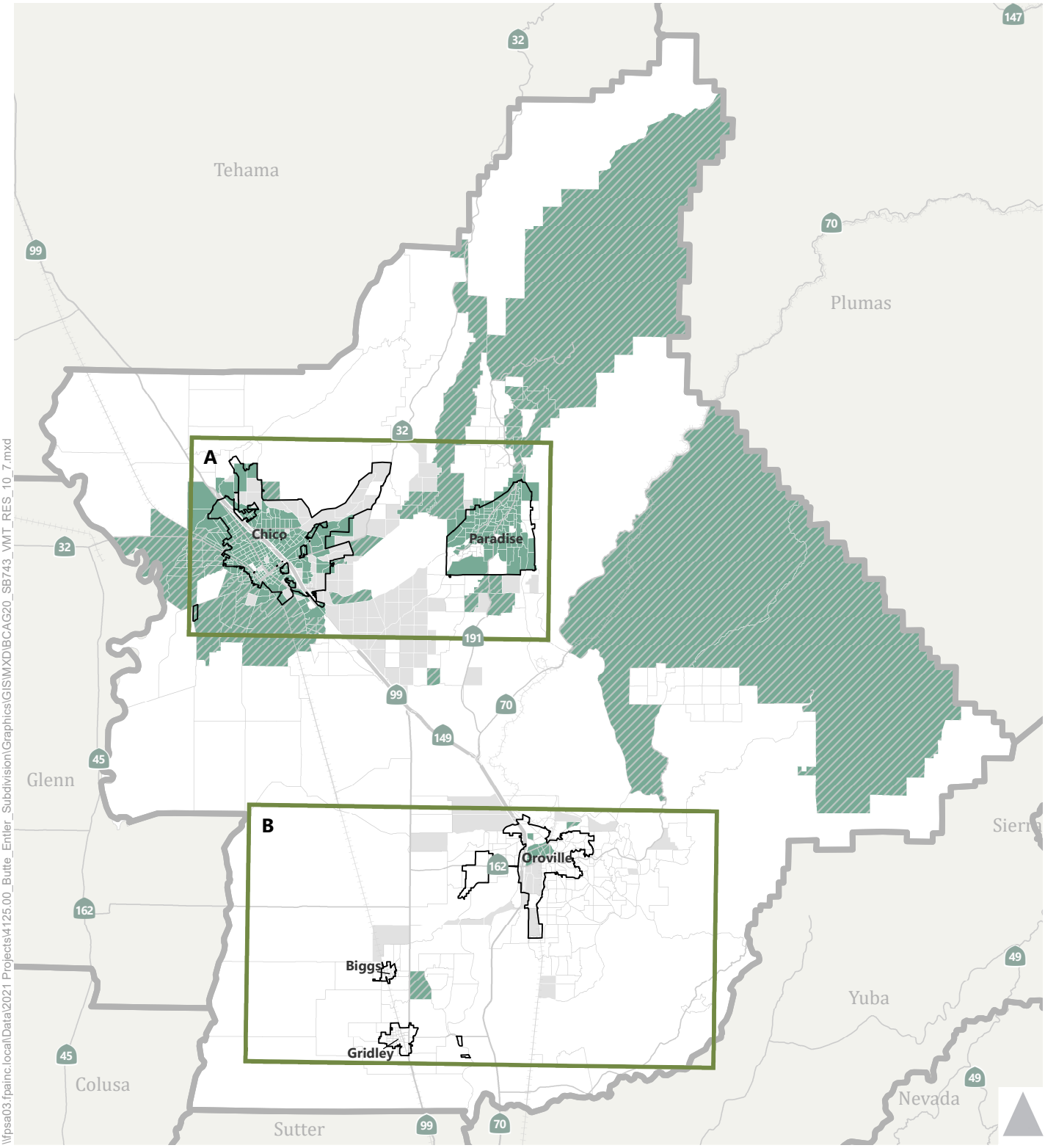
- http://www.bcag.org/Planning/Transportation-Forecasting/index.html

Baseline VMT

For purposes of this VMT impact analysis, baseline conditions are represented by 2020 forecasts from the modified BCAG RTP/SCS travel demand model. Baseline is normally defined as the analysis year when the notice of preparation (NOP) is released or when environmental impact analysis is commenced. Therefore, the year 2020 version of the model was the most reasonable choice for this study. It reflects conditions after the Camp Fire and prior to COVID-19. As such, it represents, the best available data for estimating baseline VMT.

Figures 1 and 1A show the mapping of residential VMT generation for each TAZ in the County. Areas of concentrated development such as those within incorporated cities and nearby, generate VMT at a lower rate than the BCAG region average. This pattern can also be seen in more aggregate jurisdictional estimates of VMT shown in Figure 2 below. In general, as separation between land uses increase so does VMT because distances are longer between trip origins and destinations.

The green TAZs shown in Figures 1 and 1A generate residential VMT at rates below the OPR Technical Advisory recommended threshold of 15 percent below the regional average. As such, these TAZs qualify as low VMT areas under the OPR Technical Advisory. Per the Advisory discussion above, residential projects in these zones may be presumed to have a less than significant VMT impact if they are expected to exhibit similarly low VMT levels.



No Value

> -15% below BCAG Average

< -15% below BCAG Average

Additional Investigation Required*

City Boundaries

County Boundaries

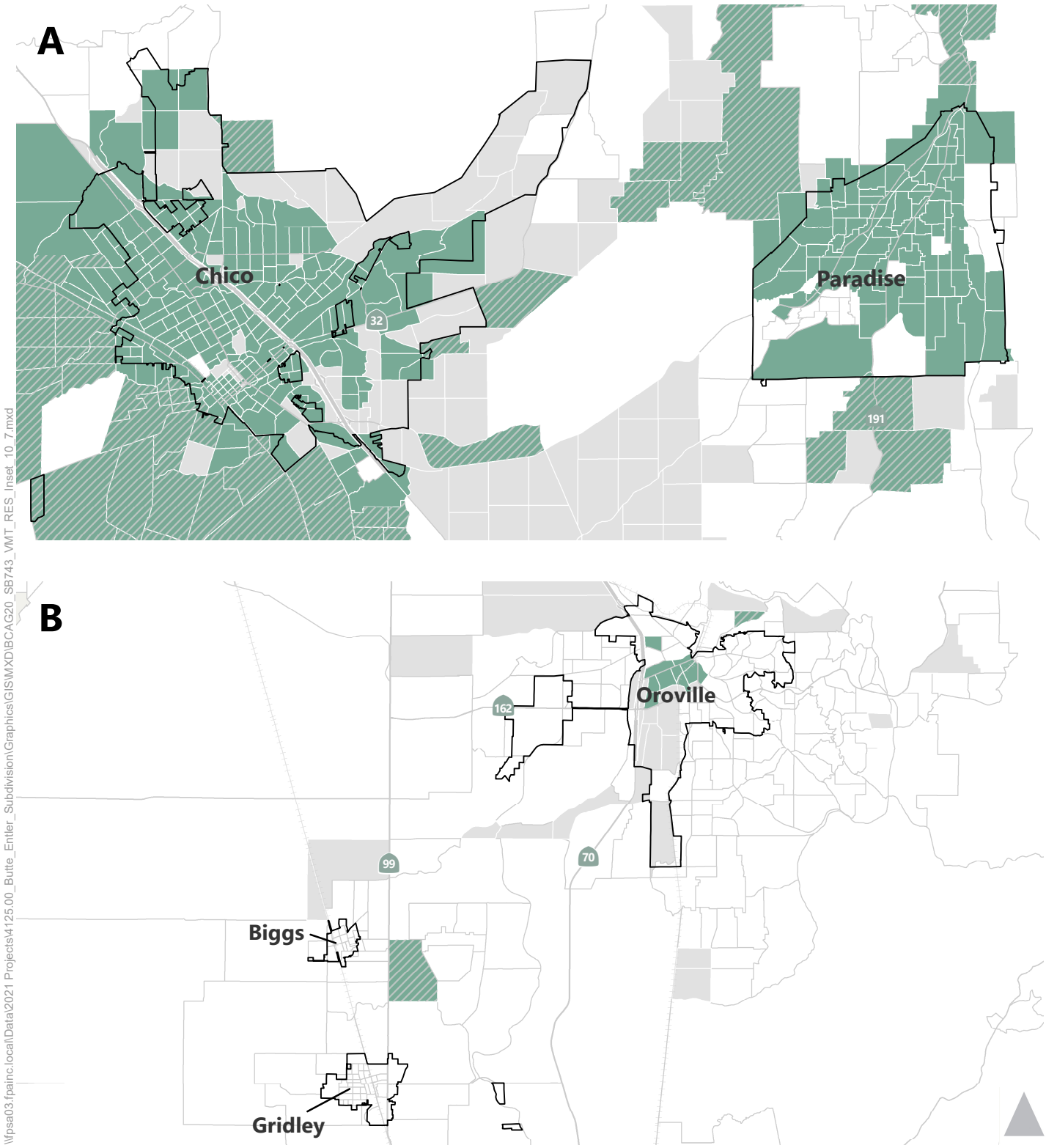
* Area may not qualify for screening due to land use context.

A,B: Inset maps can be found in Figure 1-A

Figure 1

Daily Home-Based VMT per Resident Comparison to Regional Average

Source: Modified Version 1.1-3.17.21 of the BCAG RTP/SCS Model



* Area may not qualify for screening due to land use context.

Figure 1-A

Daily Home-Based VMT per Resident Comparison to Regional Average

Source: Modified Version 1.1-3.17.21 of the BCAG RTP/SCS Model

FIGURE 2
Home-based VMT per Resident by Jurisdiction

	BCAG Region	Biggs	Chico	Gridley	Oroville	Paradise	Uninc.
2018	21.6	21.5	12.9	22.2	19.6	20.4	31.9
2020	19.6	22.6	11.5	23.1	17.6	15.9	29.9
2040	19.2	25.6	13.0	26.0	19.6	17.5	25.4

Source: Modified version 1.1-3.17.21 of the BCAG RTP/SCS model.

As shown in Figures 1 and 2, the specific VMT metric used in this study to evaluate VMT impacts is home-based VMT per resident. This is a residential specific VMT metric and includes trips made by residents of the home using passenger vehicles. The metric complies with methodology and metric recommendations contained in the CEQA Guidelines and OPR Technical Advisory. This metric does not include commercial vehicle trips that may be generated by the project's residential units (i.e., internet shopping deliveries) and passenger vehicle trips made by non-residents of the home (i.e., food deliveries). A visualization of the home-based VMT per resident metric is provided below in Figure 3.

FIGURE 3
VMT Metric Definition and Visualization

Metric	Definition	Visualization
Home-based VMT per resident	All automobile (i.e., passenger cars and light-duty trucks) vehicle-trips that start or end at the home are traced, but non-home-based trips made by residents elsewhere on the network are excluded.	

Butte County has not selected VMT impact significance thresholds for residential projects. The county participated in an SB 743 implementation study sponsored by BCAG to assess VMT impact analysis methodology, thresholds, and mitigation options. The county intends to make final threshold decisions in the next few months. Until that time, the CEQA Guidelines and OPR Technical Advisory recommendations below are used to assess VMT impact significance for this project. According to the OPR Technical Advisory, projects that meet either criterion below may be presumed to have a less than significant VMT impact.

- The proposed project would be presumed to have a less than significant VMT impact if generates less than 110 vehicle trips per day.
- The proposed project would be presumed to have a less than significant VMT impact if it generates home-based VMT per resident at or less than 16.7, which is 15 percent below the BCAG region average home-based VMT per resident in 2020.

Impact Analysis

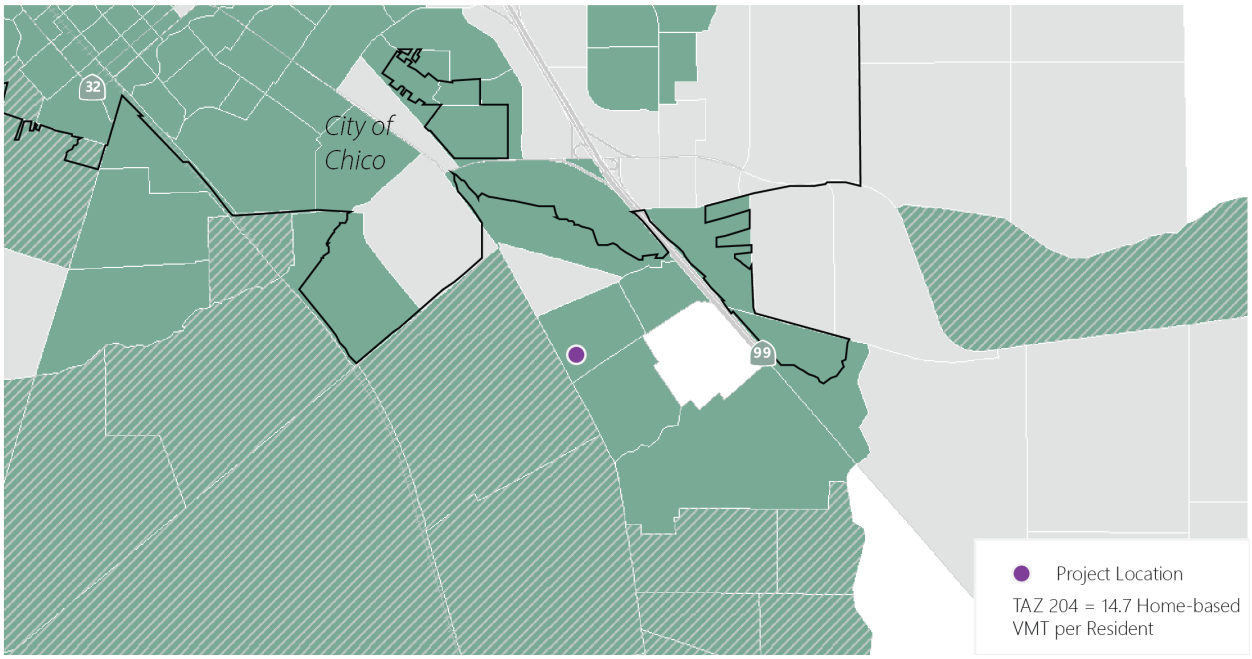
The VMT impact analysis consisted of applying the screening thresholds above to the proposed project. The first threshold required an estimate of the project's total daily vehicle trips. Estimating vehicle trip generation for the project depends on the specific trip generation methodology and rates. Two sources were consulted for this evaluation including the *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers, 2021 and the BCAG RTP/SCS travel demand model. The ITE rates reflect data collected from around the U.S. and are not calibrated and validated to Butte County. The BCAG RTP/SCS model relies on California household travel survey (CHTS) data to estimate person trip rates that are converted to vehicle trips through the modeling process. The data and model are calibrated and validated to local Butte County conditions.

The average ITE vehicle trip rate for single-family detached homes is 9.43 vehicle trips per unit while the BCAG RTP/SCS model estimate for new single-family households in the specific project area is not projected to exceed about 9.2 vehicle trips per unit. The BCAG RTP/SCS model estimate

considers the local land use context, mode choices available, distances to destinations along with household size (e.g., number of persons per household) and income level.

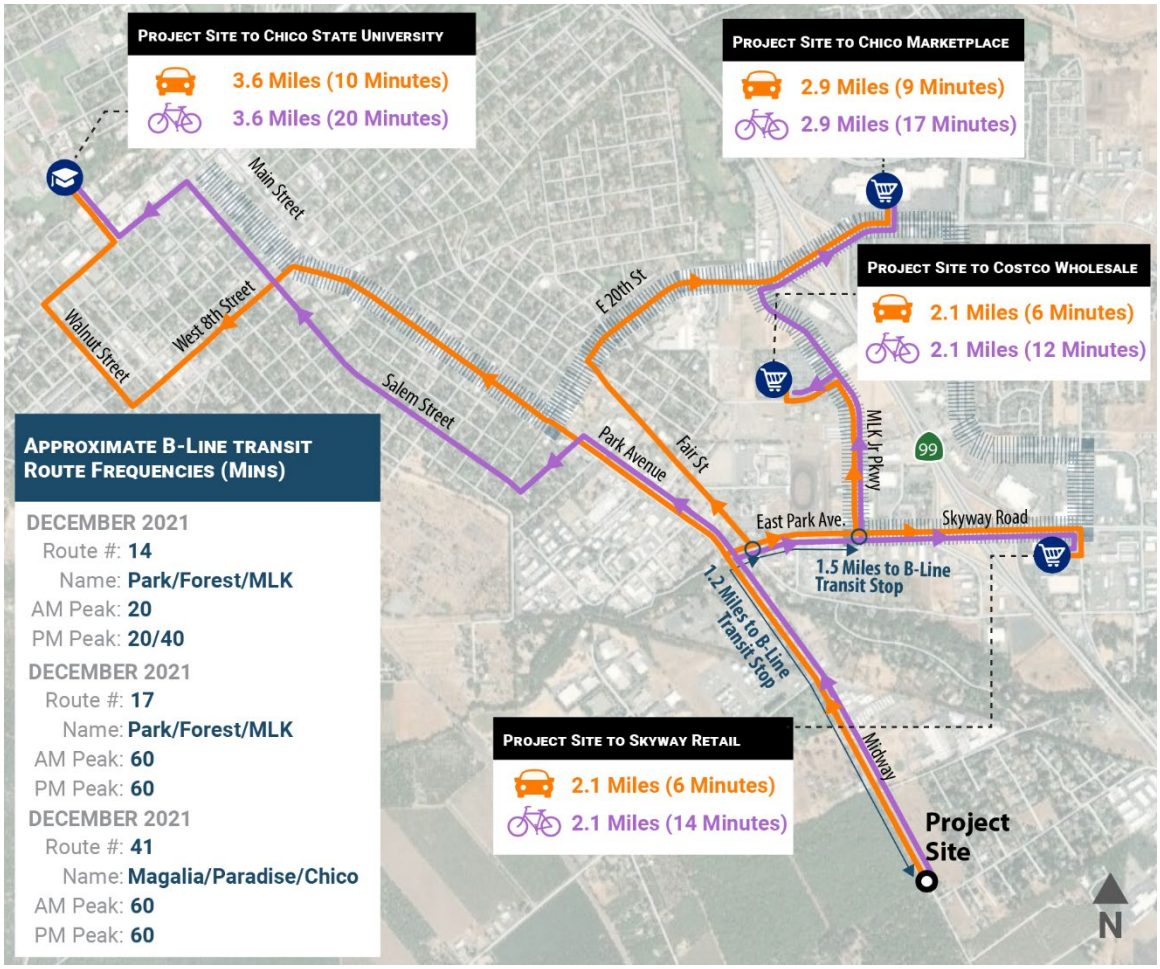
Nevertheless, using either vehicle trip rate would produce more than 110 daily vehicle trips, so the project is not considered a small project for VMT impact screening purposes.

To evaluate the second screening threshold, only the BCAG RTP/SCS model could be applied. The same methodology used to establish the threshold (i.e., 15 percent below the BCAG region average home-based VMT per resident in 2020), must be used for the project evaluation to ensure and apples-to-apples comparison. Figure 1A showed the expected home-based VMT per resident for each TAZ in the Chico area compared to the threshold above. The green TAZs all generate home-based VMT per resident below the threshold. As shown below, the proposed project is entirely enclosed within one of the green TAZs. This information confirms that the project qualifies for VMT impact screening because it is in a low VMT generating area and is similar to existing land uses nearby.



A final impact factor that can be used to support the project's screening is that the total home-based VMT of the project is less than 630 per weekday. As noted in the setting, the VMT growth budget estimated for Butte County based on ARB's scoping plan analysis is about 326,350 per weekday in 2050. Therefore, the proposed project does not jeopardize state plans for long-term VMT reduction.

The low VMT generation for the project area is largely due to the proximity to the City of Chico, which allows for short trip lengths of about 2-3 miles to nearby shopping and less than 4 miles to major destinations like California State University, Chico (see image below). B-Line Route 41 runs nearby with stops at the Fair Street and East Park Avenue intersection about 1.2 miles from the project site. Routes 14 and 17 also run nearby with stops at the MLK Jr. Parkway and East Park Avenue intersection about 1.5 miles from the project site center with headways as short as 20 minutes during peak periods. The combination of land use proximity and transportation evidence supports the presumption that the project would have a less than significant VMT impact based on the impact analysis approach recommended in the OPR Technical Advisory.



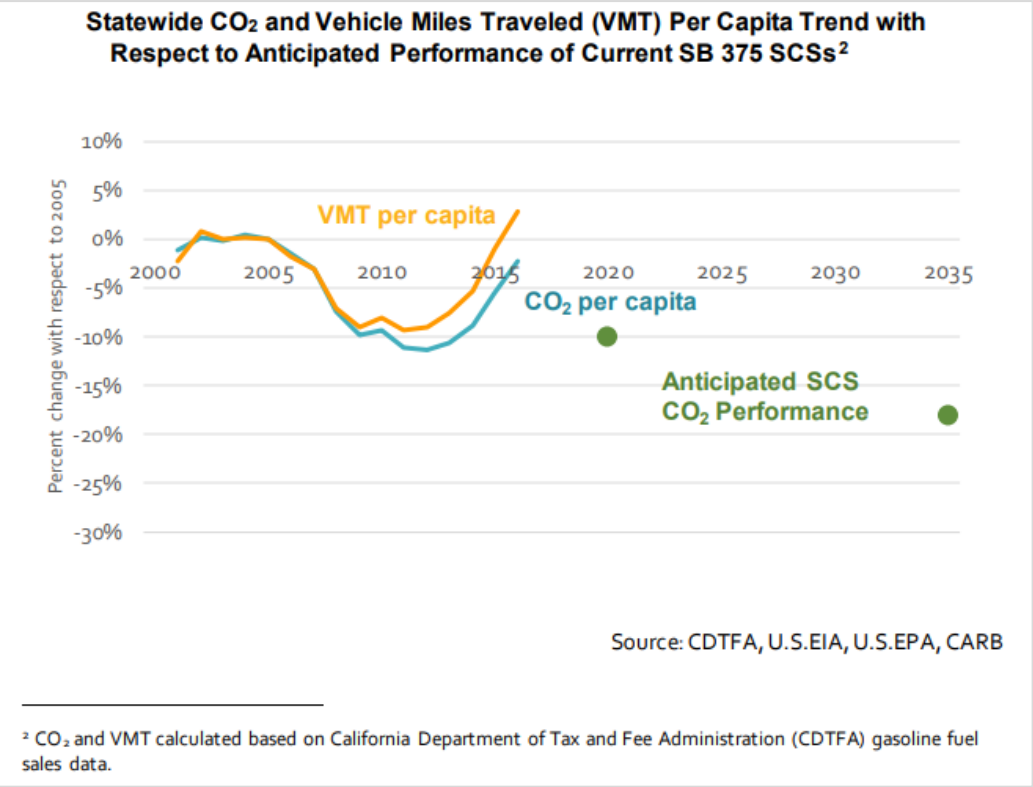
Other Impact Analysis Evidence

When making a final VMT impact determination, other available evidence related to VMT trends should be considered. This study identified the following two relevant studies.

- *2018 Progress Report, California's Sustainable Communities and Climate Protection Act,* California Air Resources Board, November 2018 (referred to as the Progress Report in the remainder of this document).
- *California Air Resources Board Improved Program Measurement Would Help California Work More Strategically to Meet Its Climate Change Goals*, Auditor of the State of California, February 2021 (referred to as the Audit Report in the remainder of this document).

The Progress Report measures the effect of SB 375 revealing that VMT and GHG per capita increased in California between 2010 and 2016 and are trending upward (see Figure 3 below).

Figure 3: VMT/Capita Trends



[2] CO_2 and VMT calculated based on California Department of Tax and Fee Administration (CDTFA) gasoline fuel sales data.

The Audit Report is a more recent assessment of ARB's GHG reduction programs, which also found that VMT and its associated GHG emissions were trending upward through 2018. Per the audit, the state is not on track to achieve 2030 GHG reduction goals, and emissions from transportation have not been declining.

The evidence from these two reports does not refute the project's VMT impact finding but does suggest greater action on the part of the state may be needed to achieve the state's GHG reduction

goals. The project contributes to the basic objectives of SB 743 for local agencies such as adding development in a land use efficient area where the short-trip lengths to destinations allows for more multi-modal choices and low VMT generation. The monitoring of state performance indicates that the state may need to take further action to discourage vehicle travel (i.e., increasing the cost of driving) while reducing the barriers or constraints that prevent more efficient use of vehicles and greater use of transit, walking, and bicycling. If these types of actions are taken, residents of the proposed project would have multiple travel options to further reduce their vehicle use because of the proximity to existing destinations in Chico.

Analysis Limitations

This analysis was performed in January 2022 during the COVID-19 pandemic. The COVID-19 response has dramatically changed human activities and associated travel patterns. Performing more activities from home was already a trend due to the internet, but COVID-19 accelerated transitions to working and shopping from home. In addition, other disruptive trends related to demographic changes, new travel choices such as Uber and Lyft, and the potential for autonomous vehicle (AV) travel make predicting future travel demand and outcomes less certain. Given these limitations of modeling and forecasting, the general consistency of the project with the broader SB 743 objectives and the legislative intent of CEQA noted below may warrant greater emphasis in the VMT impact assessment.

> Public Resources Code 21001. ADDITIONAL LEGISLATIVE INTENT
>
> *The Legislature further finds and declares that it is the policy of the state to:*
>
> *(d) Ensure that the long-term protection of the environment, consistent with the provision of a decent home and suitable living environment for every Californian, shall be the guiding criterion in public decisions.*

APPENDIX - B

Environmental Noise Assessment
January 31, 2022

Environmental Noise Assessment

Entler Subdivision

Butte County, California

BAC Job # 2021-182

Prepared For:

Butte County

Attn: Rowland Hickel
7 County Center Drive
Oroville, CA 94854

Prepared By:

Bollard Acoustical Consultants, Inc.

Paul Bollard, President

January 31, 2022

Introduction

The proposed Entler Residential Subdivision Project (project), is located at the southeast quadrant of the intersection of Speedway Avenue and Midway, in Butte County, California (APN's: 040-040-001, 040-040-010, 040-040-014). Specifically, the project proposes the development of 15 single-family residences on the 17.6-acre site. The project area and site plan are shown on Figures 1 and 2, respectively.

Due to the proximity of the proposed residences to Speedway Avenue, Midway, and the Smucker's industrial facility, Butte County required that a noise analysis be prepared for this project. In response to that requirement, Bollard Acoustical Consultants, Inc. (BAC) was retained by Butte County to prepare this noise assessment.

Because the developer has designed the site to include a 6-foot-tall barrier adjacent to the lots proposed next to Midway (shown on Figure 2), and to setback the residences and proposed outdoor activity areas (backyards) of those lots beyond areas which are impacted by Midway noise, no additional noise mitigation measures would be warranted for Midway. As a result, the focus of this analysis is on the evaluation of noise generated at the lots proposed adjacent to Speedway Avenue (Lots 6 and 7). This report contains the results of BAC's evaluation.

Noise Fundamentals and Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard, and thus are called sound. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Appendix A contains definitions of Acoustical Terminology. Figure 3 shows common noise levels associated with various sources.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighing network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels.

Legend

Project Boundaries (Approximate)

Long-term Noise Measurement Location

N

Scale (Feet)

0 125 250

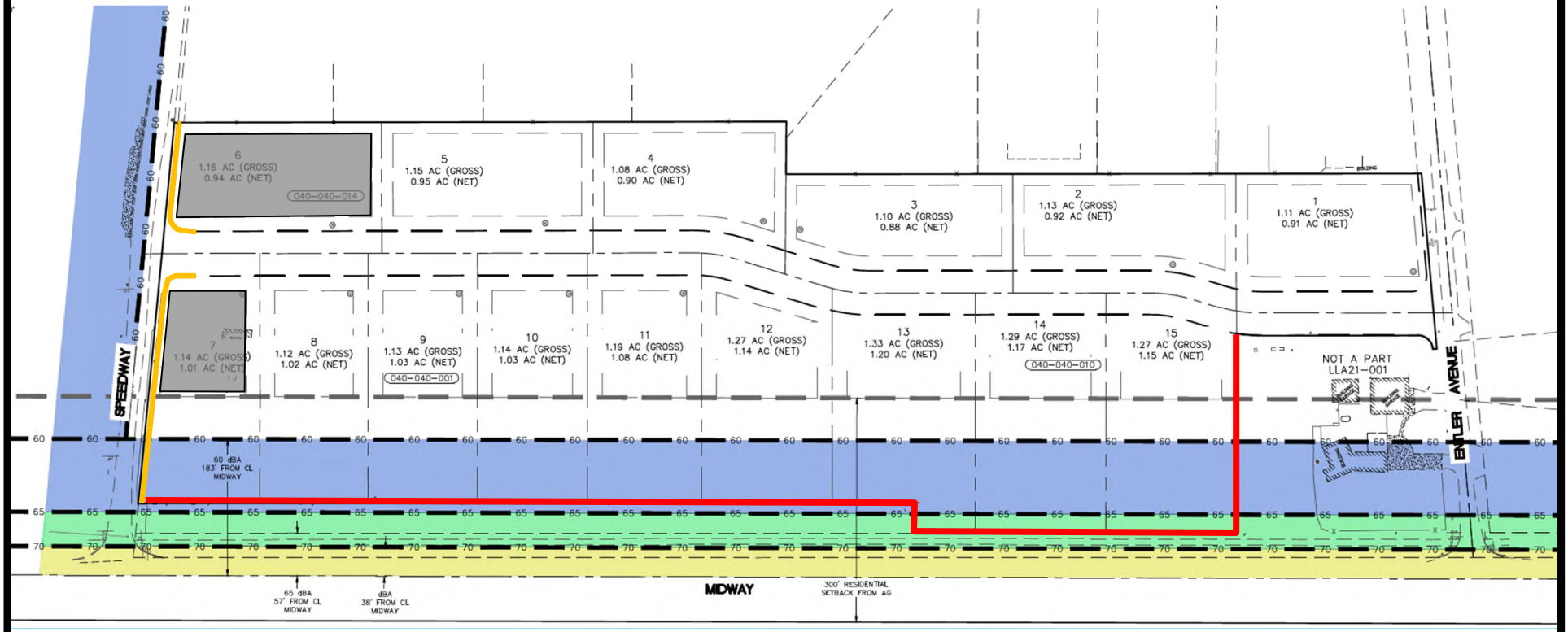
Entler Subdivision

Butte County, California

Project Area

Figure 1

BOLLARD Acoustical Consultants



Legend

- Residencies where 2nd floor bedroom window upgrades would be required
- Proposed 6' tall Midway noise barrier
- Recommended 6' tall Speedway Avenue noise barrier

Entler Subdivision

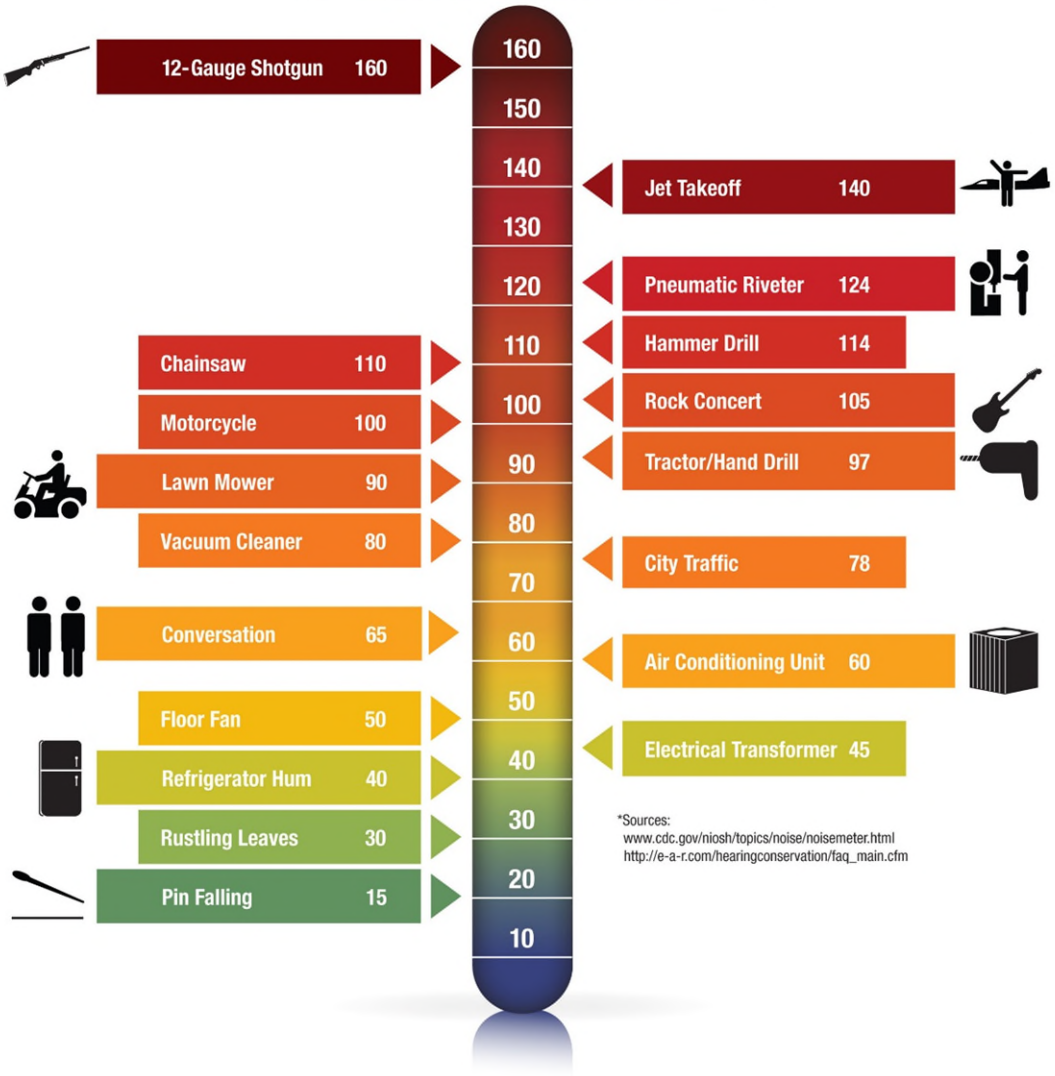
Butte County, California

Project Site Plan

Figure 2

BOLLARD Acoustical Consultants

Figure 3
Noise Levels Associated with Common Noise Sources



Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}) over a given time period (usually one hour). The L_{eq} is the foundation of the Day-Night Average Level noise descriptor, L_{dn} or DNL, and shows very good correlation with community response to noise.

The Day-Night Average Level (DNL) is based upon the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment. DNL-based noise standards are commonly used to assess noise impacts associated with traffic, railroad, and aircraft noise sources.

Criteria for Acceptable Noise Exposure

Butte County General Plan

The Health and Safety element of the Butte County General Plan establishes an exterior noise level standard of 60 dB DNL (same as L_{dn}), at outdoor activity areas of residential land uses exposed to transportation noise sources (i.e., traffic). The intent of this standard is to provide an acceptable exterior noise environment for outdoor activities. Where it is not possible to reduce noise in outdoor activity areas to 60 dB DNL or less using a practical application of the best-available noise reduction measures, an exterior noise environment of up to 65 dB DNL may be allowed, provided that available exterior noise-level reduction measures have been implemented and interior noise levels are in compliance with this table.

The General Plan utilizes an interior noise level standard of 45 dB DNL or less within interior spaces of residential uses. The intent of this interior noise limit is to provide a suitable environment for indoor communication and sleep.

Existing Ambient Noise Environment at the Project Site

The existing ambient noise environment at the project site is defined primarily by traffic on Speedway Avenue and Midway. As noted in the Introduction section of this report, noise generated by Midway will be mitigated to a state of compliance with Butte County exterior and interior noise standards through a combination of the use of setbacks and noise barrier construction at the lots located adjacent to Midway. As a result, this analysis is limited to the evaluation of noise generated on Speedway Avenue.

To quantify the existing Speedway Avenue traffic noise environment at the project site, BAC conducted long-term (48-hour) noise level measurements on the project site from Monday, January 17, 2022 – Wednesday, January 19, 2022. The noise survey location is shown on Figure 1, identified as site LT-1. Photographs of the noise survey location are provided in Appendix B.

A Larson Davis Laboratories (LDL) Model 831 precision integrating sound level meter was used to complete the noise level measurement survey. The meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

The ambient noise level survey results are summarized in Table 1. The detailed results of the ambient noise survey are contained in tabular format in Appendix C and in graphical format in Appendix D. Appendix E shows the results of the 48-hour noise monitoring period in 1-minute periods.

Table 1
Summary of Long-Term Noise Survey Measurement Results[1]

Site Description[2]	Date	DNL	Average Measured Hourly Noise Levels (dBA)			
			Daytime[3]		Nighttime[4]	
			L_{eq}	L_{max}	L_{eq}	L_{max}
Site Lt-1: Northwest end of project site, approx. 20' from centerline of Speedway Avenue	1/17/22	55	56	79	43	72
	1/18/22	62	59	80	55	76
	1/19/22	60	55	79	53	74

[1] Detailed summaries of the noise monitoring results are provided in Appendices C and D.
[2] Long-term noise survey locations are identified on Figure 1.
[3] Daytime hours: 7:00 a.m. to 10:00 p.m.
[4] Nighttime hours: 10:00 p.m. to 7:00 a.m.
Source: Bollard Acoustical Consultants, Inc. (2022)

As indicated in Table 1, the measured day-night average noise level at the measurement site located approximately 20 feet from the center of Speedway Avenue was 62 dB DNL on the full day of monitoring (Tuesday, January 18, 2022). Inspection of the Appendix D data indicates that the highest measured maximum noise levels during each hourly period were typically between 70 and 86 dBA, with a few late night and early morning hours registering maximum noise levels below 70 dBA Lmax. Inspection of Appendix E illustrates that minute-by-minute measured maximum noise levels frequently exceeded 70 dBA but also exceeded 80 dBA on approximately 16 occasions during the noise survey period.

Evaluation of Future Traffic Noise Levels at the Project Site

Predicted Future Exterior Traffic Noise Levels

In order to predict future traffic noise exposure from Speedway Avenue at the project site, BAC utilized the long-term ambient data collected at the project site January 17-19, 2022. Specifically, future roadway traffic volumes were conservatively assumed to double in the future, resulting in a 3 dB increase in traffic noise levels relative to measured existing conditions. The predicted future traffic noise levels were projected to the nearest proposed building facades and outdoor activity areas (backyards) based on a 15 dB decrease per doubling of distance from the roadway centerline. The results of the future Speedway Avenue traffic noise projections are provided in Table 2.

Table 2
Predicted Future Speedway Avenue Exterior Traffic Noise Levels at Project Site[1]

Location	Distance from Roadway Centerline (ft)[2]	Predicted Future Noise Level, DNL (dB)[3]
Nearest backyards	40	61
Nearest first-floor facades	40	61
Nearest upper-floor facades	40	63

[1] Predicted future Speedway Avenue traffic noise levels are based on a reference noise level of 64 dB DNL at 20 feet, which includes an adjustment of +3 dB to account for a doubling of future traffic volume.
[2] Distances measured from the centerline of the roadway to said locations.
[3] An offset of +2 dB was applied at upper-floor facades due to reduced ground absorption of sound at elevated positions.
Source: Bollard Acoustical Consultants, Inc. (2022)

Analysis of Future Exterior Traffic Noise Exposure at Outdoor Activity Areas

As indicated in Table 2, the predicted future traffic noise levels at the nearest locations of the outdoor activity areas (backyards) of lots 6 & 7 are predicted to be approximately 60 dB Ldn. Although these levels would just exceed the Butte County General Plan exterior noise level standard of 60 dB DNL for residential uses, BAC recommends that the 6-foot-tall wall proposed along Midway be extended along the northern boundaries of Lots 6 & 7 to ensure satisfaction with that standard. Such wall would also be consistent with the existing masonry sound walls at the residences adjacent to the eastern boundary of the project site. With the construction of a 6-foot-tall sound wall at the locations shown on Figure 2, no additional exterior traffic noise mitigation measures would be required for this project.

Analysis of Future Interior Traffic Noise Exposure within Residences

After construction of the recommended 6-foot-tall traffic noise barriers, future exterior traffic noise levels are predicted to be approximately 56 dB DNL at the first-floor facades of the 2 residences constructed nearest to Speedway Avenue. Due to reduced ground absorption at elevated positions and lack of shielding by the recommended noise barriers, noise levels at the upper-floor facades of those residences are predicted to be approximately 63 dB DNL. In order to satisfy the Butte County General Plan 45 dB DNL interior noise level standard, minimum noise reductions of 11 dB and 18 dB would be required of the first- and upper-floor building facades (respectively) of the residences constructed adjacent to the Speedway Avenue.

Standard residential construction (stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. This level of noise reduction would be adequate to reduce Speedway Avenue traffic noise levels within first- and upper-floor rooms of all residences to 45 dB DNL or less. As a result, no consideration of additional building facade construction improvements would be required for either first or second-floor facades provided mechanical ventilation (air conditioning) is included to allow

occupants to close doors and windows as desired for additional acoustical isolation. However, due to the presence of heavy trucks on Speedway Avenue, BAC recommends that the 2nd floor bedroom windows of the residences constructed on Lots 6 & 7 be upgraded to STC 32 to provide an additional factor of safety against sleep disturbance.

Conclusions

Residences of the Entler Subdivision development are predicted to be exposed to future Midway and Speedway Avenue traffic noise exposure in excess of the applicable Butte County General Plan interior noise level standard for residential uses. To ensure compliance with the County standards and to reduce the potential for sleep disturbance at the residences constructed adjacent to Speedway Avenue (Lots 6 & 7), the following specific noise mitigation measures are recommended:

1) Air conditioning should be provided for all residences within this development so that windows can be kept closed at the occupant's discretion to control interior noise.

2) 6-foot-tall traffic noise barriers should be constructed along Midway as proposed. Figure 2 shows the locations of the proposed barriers.

3) 6-foot-tall traffic noise barriers should be constructed along Speedway Avenue as indicated in Figure 2.

4) 2nd floor bedroom windows of the residences constructed on Lots 6 & 7 from which Speedway Avenue would be visible should be upgraded to STC 32. Figure 2 shows the lots where such upgrades would be required.

These conclusions are based on the collected noise level data at the project site, the project site plan shown on Figure 2, and on noise reduction data for standard residential dwellings. Deviations from the project site plan shown on Figure 2 could cause future traffic noise levels to differ from those predicted in this assessment. In addition, Bollard Acoustical Consultants, Inc. is not responsible for degradation in acoustic performance of the residential construction due to poor construction practices, failure to comply with applicable building code requirements, or for failure to adhere to the minimum building practices cited in this report.

This concludes our environmental noise assessment for the Entler Subdivision in Butte County, California. Please contact BAC at (530) 537-2328 or paulb@bacnoise.com with comments or questions regarding this assessment.

Appendix A
Acoustical Terminology

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

IIC Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.

L_{dn} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{eq} Equivalent or energy-averaged sound level.

L_{max} The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness A subjective term for the sensation of the magnitude of sound.

Masking The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise Unwanted sound.

Peak Noise The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.

RT_{60} The time it takes reverberant sound to decay by 60 dB once the source has been removed.

STC Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.

Legend

A Site: LT-1

B Site: LT-1

C Site: LT-1

Entler Subdivision

Butte County, California

Photographs of Noise Survey Locations

Appendix B

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Appendix C-1
Long-Term Ambient Noise Monitoring Results - Site 1
Entler Subdivision - Butte County, California
Monday, January 17, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM				
1:00 AM				
2:00 AM				
3:00 AM				
4:00 AM				
5:00 AM				
6:00 AM				
7:00 AM				
8:00 AM				
9:00 AM				
10:00 AM				
11:00 AM				
12:00 PM	60	79	50	44
1:00 PM	56	75	48	41
2:00 PM	56	80	48	42
3:00 PM	60	86	48	43
4:00 PM	59	86	51	46
5:00 PM	57	74	53	49
6:00 PM	55	77	51	47
7:00 PM	53	77	50	47
8:00 PM	56	80	50	46
9:00 PM	56	78	49	45
10:00 PM	48	68	44	41
11:00 PM	50	76	48	42

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	60	53	56	50	48	43
Lmax (Maximum)	86	74	79	76	68	72
L50 (Median)	53	48	50	48	44	46
L90 (Background)	49	41	45	42	41	41

Computed DNL, dB	55
% Daytime Energy	97%
% Nighttime Energy	3%

GPS Coordinates	39°42'16.58"N
	121°48'17.31"W

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Appendix C-2
Long-Term Ambient Noise Monitoring Results - Site 1
Entler Subdivision - Butte County, California
Tuesday, January 18, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	52	73	47	46
1:00 AM	49	73	46	45
2:00 AM	52	76	47	46
3:00 AM	49	65	47	46
4:00 AM	55	79	50	48
5:00 AM	57	80	52	50
6:00 AM	60	80	56	54
7:00 AM	62	79	57	55
8:00 AM	61	81	57	53
9:00 AM	59	78	51	47
10:00 AM	58	77	49	43
11:00 AM	60	81	50	44
12:00 PM	61	84	53	46
1:00 PM	61	85	49	44
2:00 PM	59	80	50	44
3:00 PM	60	84	50	45
4:00 PM	60	79	53	50
5:00 PM	60	79	55	52
6:00 PM	57	78	52	48
7:00 PM	57	78	51	47
8:00 PM	55	78	49	45
9:00 PM	52	74	46	43
10:00 PM	55	80	46	43
11:00 PM	52	75	44	42

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	62	52	59	60	49	55
Lmax (Maximum)	85	74	80	80	65	76
L50 (Median)	57	46	51	56	44	48
L90 (Background)	55	43	47	54	42	47

Computed DNL, dB	62
% Daytime Energy	82%
% Nighttime Energy	18%

GPS Coordinates	39°42'16.58"N
	121°48'17.31"W

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Appendix C-3
Long-Term Ambient Noise Monitoring Results - Site 1
Entler Subdivision - Butte County, California
Wednesday, January 19, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	45	67	42	39
1:00 AM	45	61	41	39
2:00 AM	47	71	42	40
3:00 AM	53	77	43	40
4:00 AM	56	78	49	43
5:00 AM	56	80	51	47
6:00 AM	58	81	54	51
7:00 AM	61	78	56	54
8:00 AM	60	78	57	54
9:00 AM	58	81	50	46
10:00 AM	60	85	50	45
11:00 AM	58	76	49	46
12:00 PM	59	78	51	45
1:00 PM				
2:00 PM				
3:00 PM				
4:00 PM				
5:00 PM				
6:00 PM				
7:00 PM				
8:00 PM				
9:00 PM				
10:00 PM				
11:00 PM				

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	61	58	55	58	45	53
Lmax (Maximum)	85	76	79	81	61	74
L50 (Median)	57	49	52	54	41	46
L90 (Background)	54	45	48	51	39	43

Computed DNL, dB	60
% Daytime Energy	75%
% Nighttime Energy	25%

GPS Coordinates	39°42'16.58"N
	121°48'17.31"W

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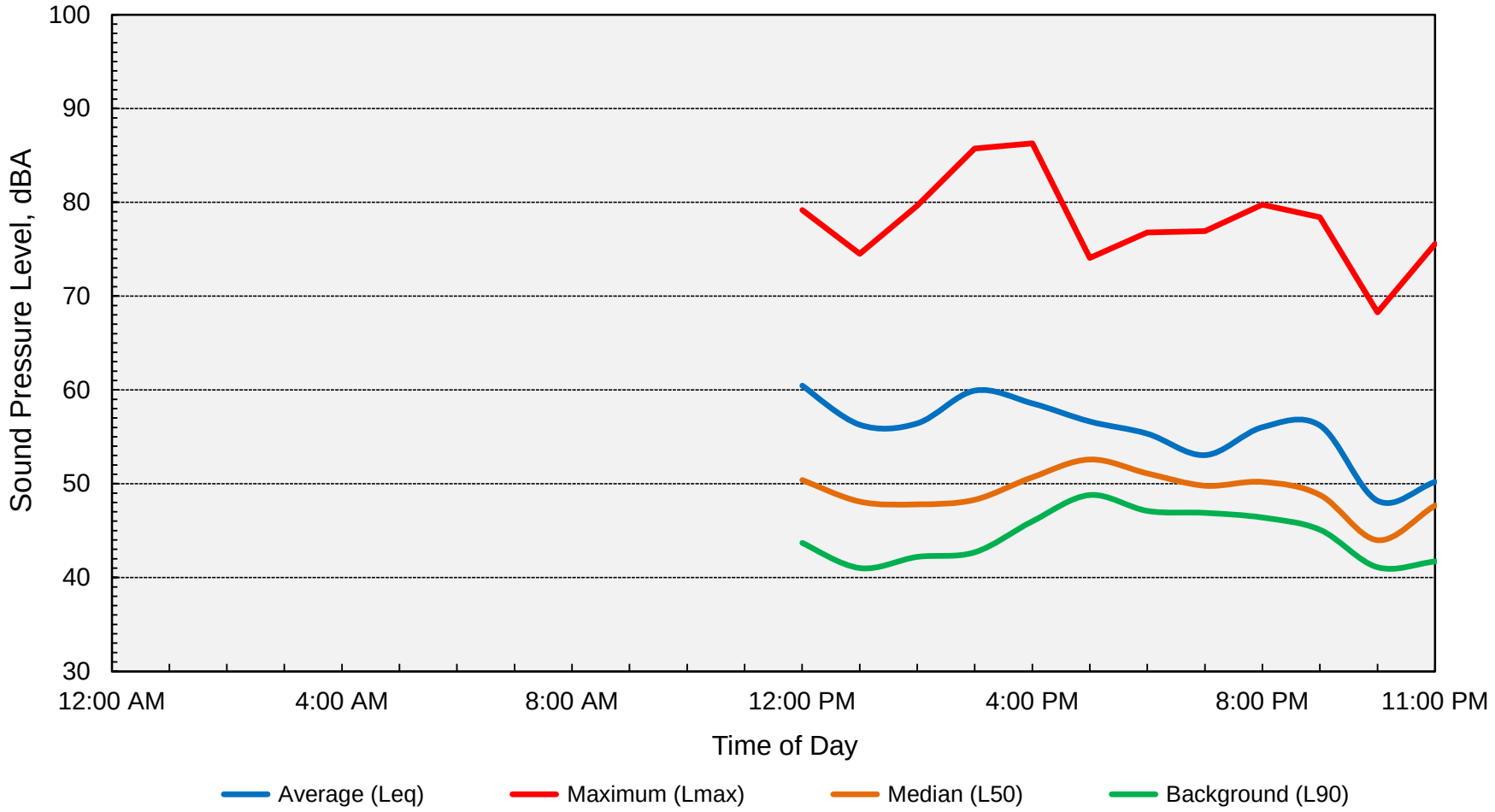
Appendix D-1
Long-Term Ambient Noise Monitoring Results - Site 1
Entler Subdivision - Butte County, California
Monday, January 17, 2022



Computed DNL = 55 dB

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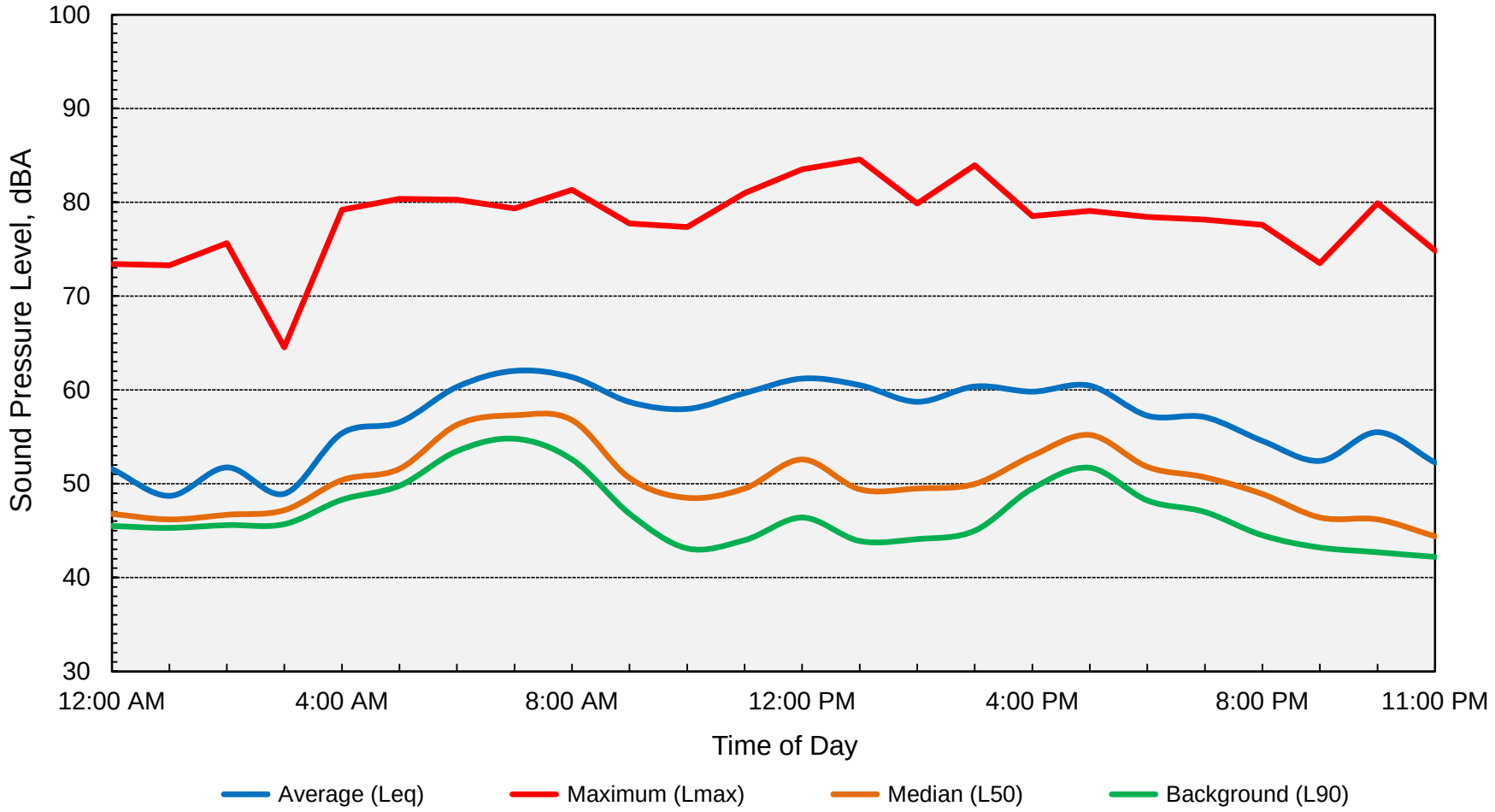
Appendix D-2
Long-Term Ambient Noise Monitoring Results - Site 1
Entler Subdivision - Butte County, California
Tuesday, January 18, 2022



Computed DNL = 62 dB

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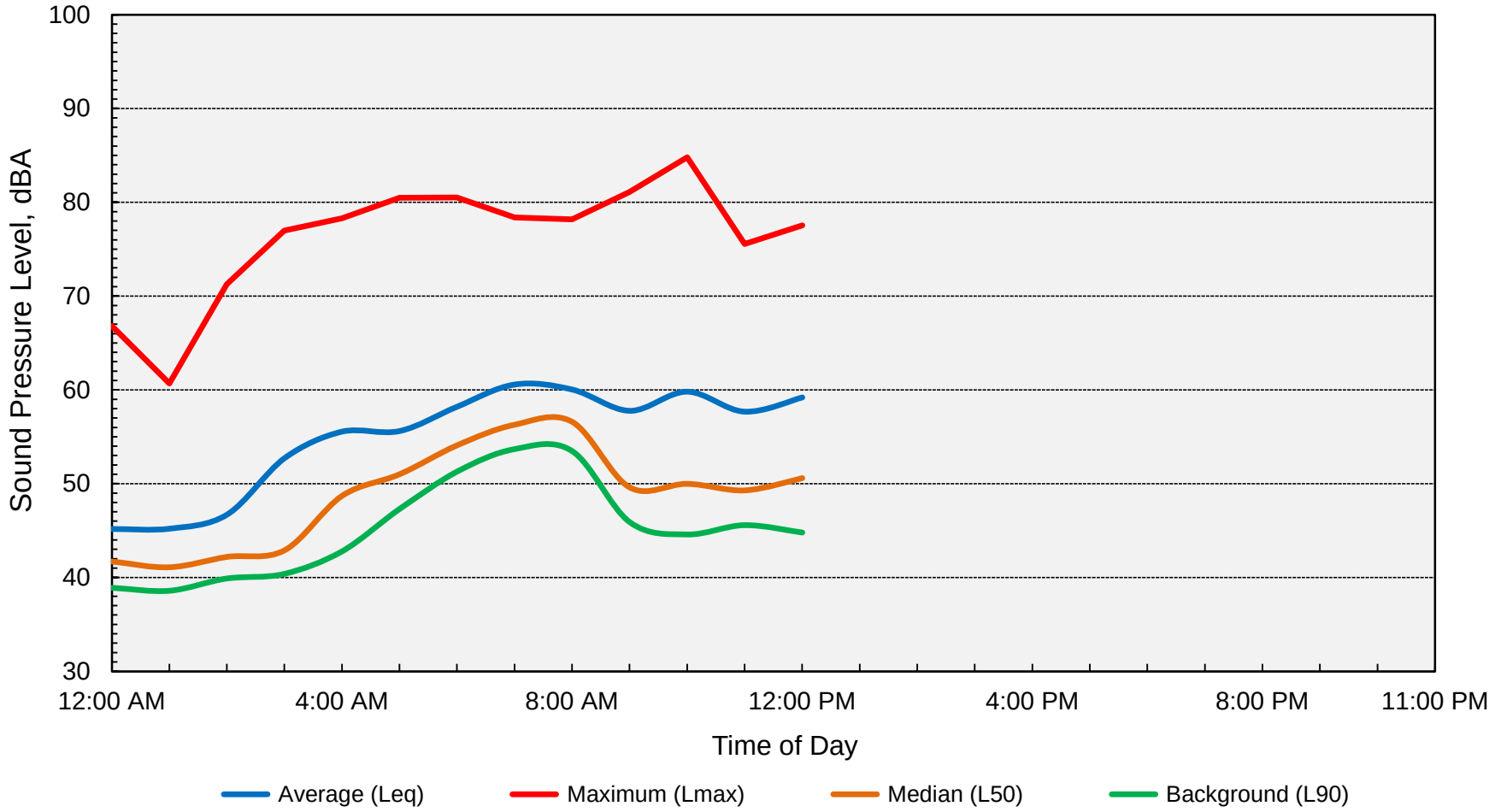
Appendix D-3
Long-Term Ambient Noise Monitoring Results - Site 1
Entler Subdivision - Butte County, California
Wednesday, January 19, 2022



Computed DNL = 60 dB

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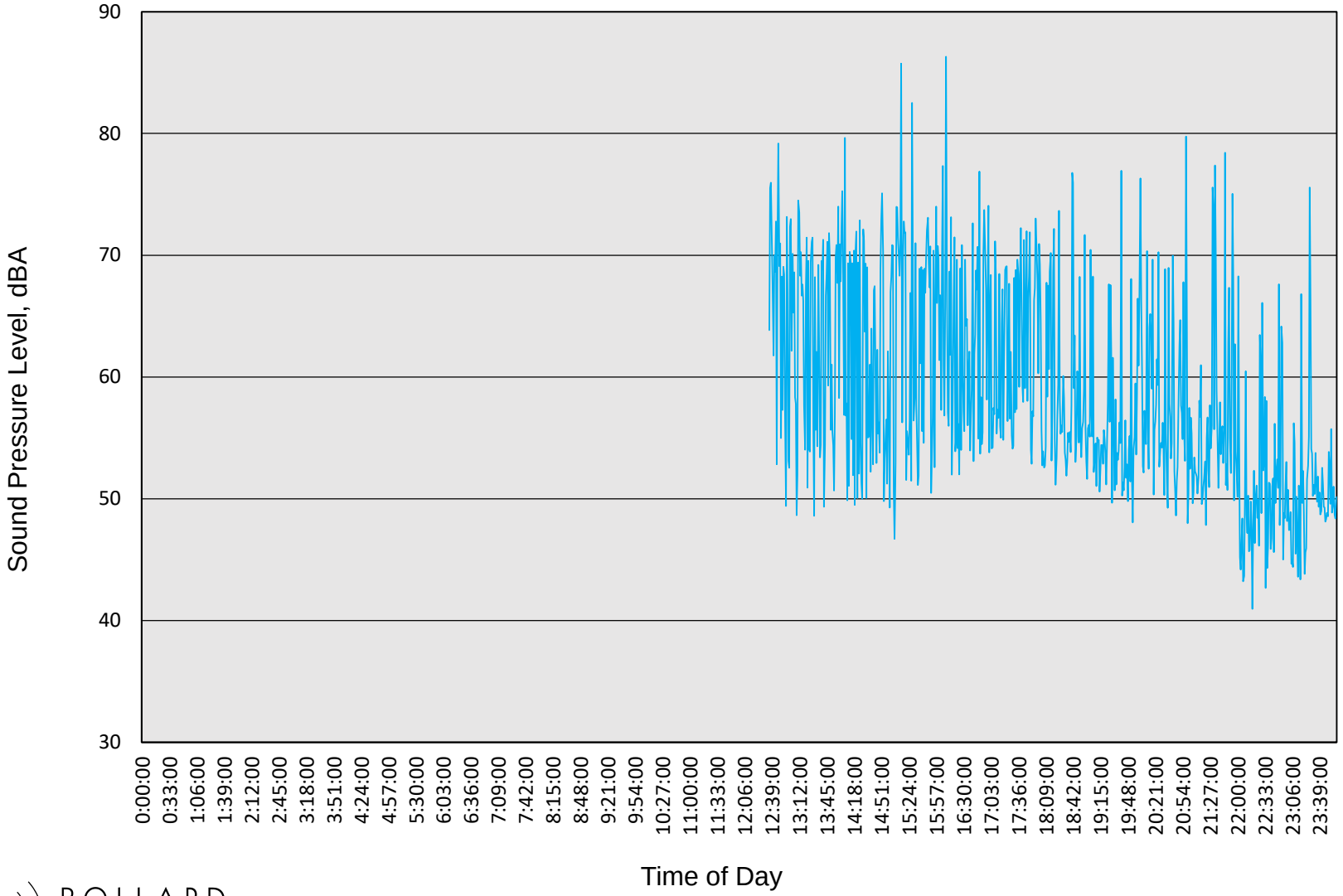
Appendix E-1
Measured Minute-by-Minute Noise Levels - Site 1
Monday, January 17, 2022



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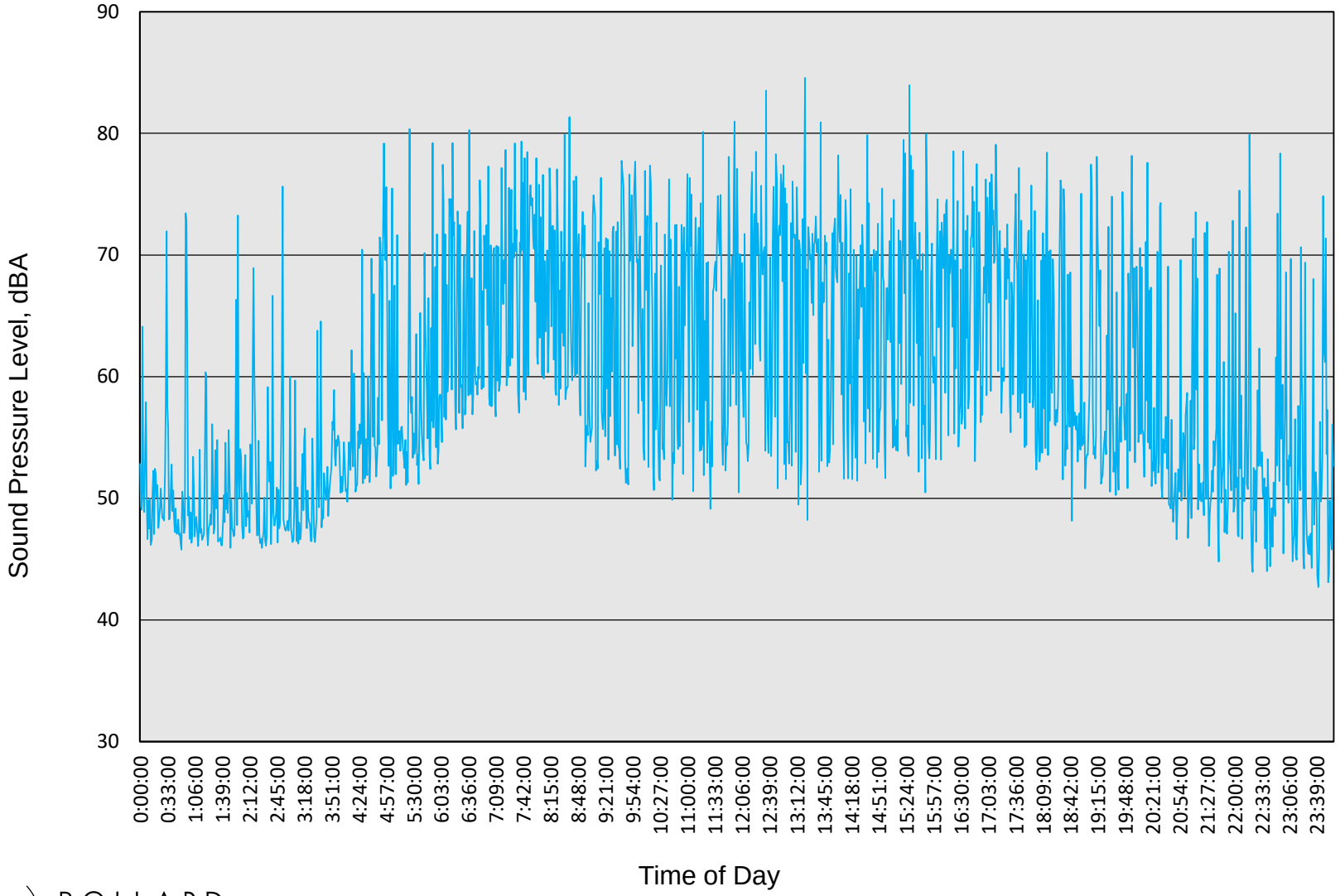
Appendix E-2
Measured Minute-by-Minute Noise Levels - Site 1
Tuesday, January 18, 2022



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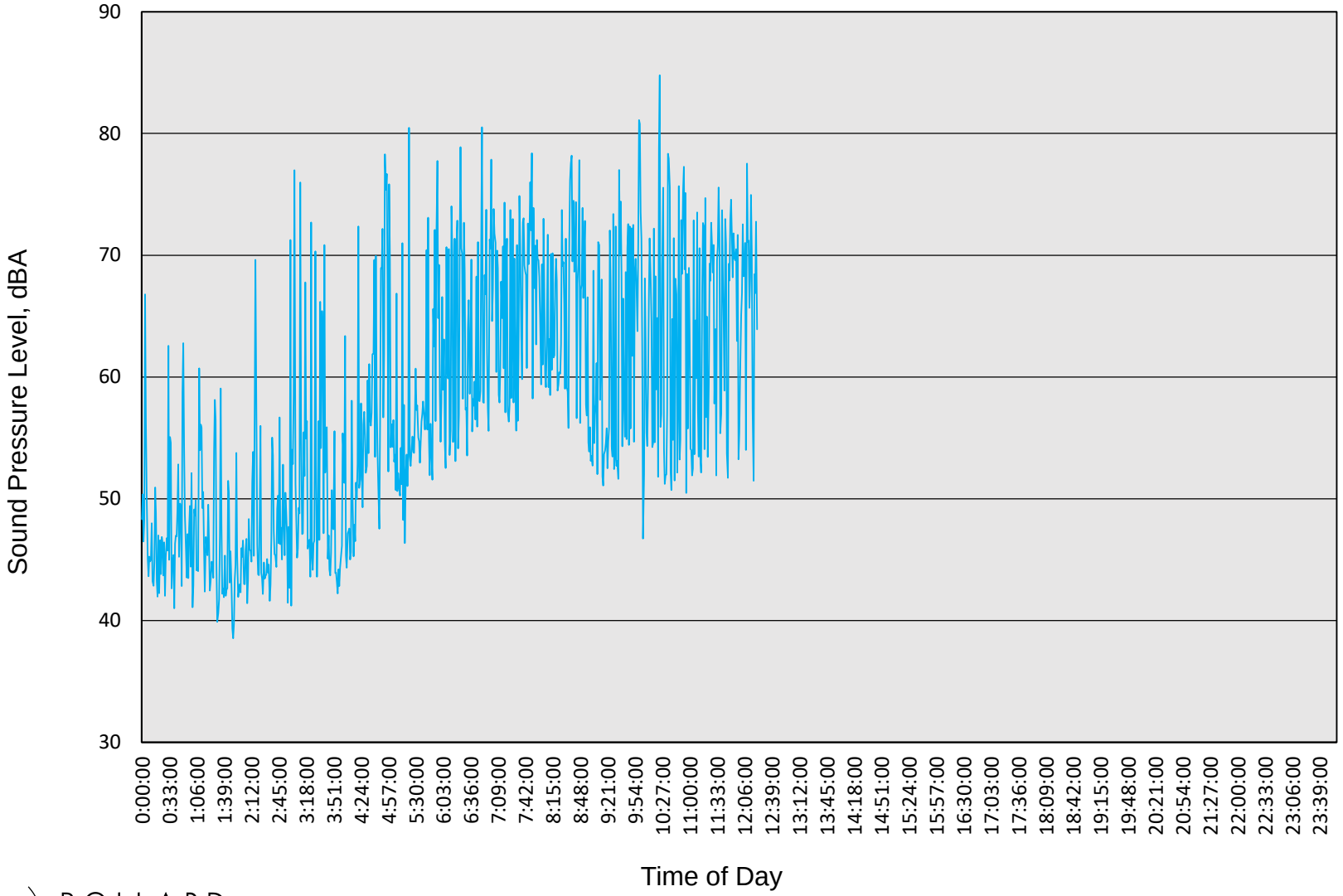
Appendix E-3
Measured Minute-by-Minute Noise Levels - Site 1
Wednesday, January 19, 2022



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APPENDIX - C

Focused Transportation Analysis
April 4, 2022

To obtain a copy, please email Butte County Planning DSPlanning@buttecounty.net