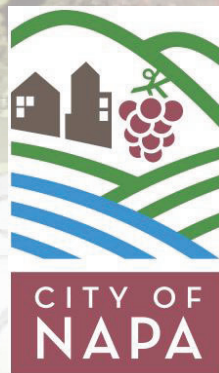


Draft Environmental Impact Report/Environmental Assessment

Valle Verde and Heritage House Continuum of Housing Project

SCH# 2018082019

Prepared by the



In Consultation with



July 2019

TABLE OF CONTENTS

Summary	viii
Section 1.0	Introduction 1
Section 2.0	Project Information and Description 4
Section 3.0	Environmental Setting, Impacts, and Mitigation..... 29
3.1	Aesthetics..... 35
3.2	Agricultural and Forestry Resources 42
3.3	Air Quality 48
3.4	Biological Resources 64
3.5	Cultural Resources..... 89
3.6	Energy..... 98
3.7	Geology and Soils..... 105
3.8	Greenhouse Gas Emissions..... 114
3.9	Hazards and Hazardous Materials 118
3.10	Hydrology and Water Quality 124
3.11	Land Use and Planning..... 143
3.12	Mineral Resources 148
3.13	Noise and Vibration..... 150
3.14	Population and Housing..... 166
3.15	Public Services 172
3.16	Recreation..... 178
3.17	Transportation/Traffic..... 181
3.18	Tribal Cultural Resources 196
3.19	Utilities and Service Systems 200
3.20	Wildfire..... 209
Section 4.0	Other Sections Required by NEPA 211
Section 5.0	Growth-Inducing Impacts..... 244
Section 6.0	Significant and Irreversible Environmental Changes..... 246
Section 7.0	Significant and Unavoidable Impacts..... 246
Section 8.0	Alternatives 248
Section 9.0	References 254

Figures

Figure 2.6-1:	Regional Map	5
Figure 2.6-2:	Vicinity Map.....	6
Figure 2.6-3:	Aerial Photograph and Surrounding Land Uses	7
Figure 2.7-1:	Site Plan.....	9
Figure 2.7-2:	Grading Plan.....	10
Figure 2.7-3:	Heritage House Building Elevations	12
Figure 2.7-4:	Heritage House Ground Floor Plan	13
Figure 2.7-5:	Valle Verde Building Elevations.....	15
Figure 2.7-6:	Landscape Plan.....	21
Figure 2.7-7:	Site Plan (Stitch Wall).....	23
Figure 3.1-1:	Color and Materials Board	42
Figure 3.3-1:	Off-site Receptors & Maximum TAC Impacts	59
Figure 3.4-1:	Natural Communities	69
Figure 3.4-2:	Tree Survey	76
Figure 3.4-3:	Riparian Setback.....	86
Figure 3.10-1:	Project Location and Effective FEMA Flood Hazard Areas.....	130
Figure 3.10-2:	Project Floodplain Impacts.....	137
Figure 3.10-3:	Project Base Flood Elevation Contour Impacts.....	138
Figure 3.10-4:	Salvador Creek Profile	139
Figure 3.10-5:	Floodplain Impacts (Project Plus Bridge Removal).....	140
Figure 3.10-6:	Base Flood Elevation Contour Impacts (Project Plus Bridge Removal).....	141
Figure 3.13-1:	Noise Measurement Locations	156
Figure 3.17-1:	Study Intersections	190
Figure 4.1-1:	Napa Airport Land Use Compatibility Map.....	221
Figure 4.1-2:	Project Location and Effective FEMA Flood Hazard Areas.....	222
Figure 4.1-3:	USGS 7.5 Min Quadrangle	223
Figure 4.1-4:	USFWS Inventory	224

Photos

Photos 1 & 2.....	19
Photos 3 & 4.....	20
Photos 5 & 6.....	36
Photos 7 & 8.....	37
Photos 9 & 10.....	38
Photo 11	39

Tables

Table 2.10-1: City of Napa Regional Housing Needs Allocation, 2015-2023	27
Table 3.0-1: Cumulative Projects List	31
Table 3.0-2: Geographic Considerations in Cumulative Analysis.....	33
Table 3.3-1: Community Risk Significance Thresholds.....	52
Table 3.3-2: Bay Area 2017 Clean Air Plan Applicable Control Measures	53
Table 3.3-3: Criteria Air Pollutant Significance Thresholds for Project Emissions	55
Table 3.3-4: Impacts from Sources at Construction MEI.....	62
Table 3.4-1: Study Area Natural Communities and Land Use	68
Table 3.4-2: Potentially Occurring Special-Status Wildlife Species	73
Table 3.4-3: Tree Survey Results.....	75
Table 3.4-4: Impacts to Aquatic Natural Communities	82
Table 3.6-1: Estimated Annual Operational Energy Use of Proposed Development ¹	103
Table 3.8-1: Annual Project GHG Emissions (CO ₂ e) in Metric Tons.....	117
Table 3.10-1: Base Flood Elevations	135
Table 3.10-2: Structure Elevations	136
Table 3.13-1: Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels	151
Table 3.13-2: Groundborne Vibration Impact Criteria	153
Table 3.13-3: Typical Ranges of Construction Noise Levels at 50 Feet, L _{eq} (dBA)	159
Table 3.13-4: Calculated Construction Noise Levels for Each Phase of Construction	159
Table 3.13-5: Vibration Source Levels for Construction Equipment	162
Table 3.14-1: Employment Figures and Unemployment Rate	169

Table 3.17-1:	Existing Transit Service	185
Table 3.17-2:	Signalized Intersection Level of Service Definition Based on Average Delay.....	187
Table 3.17-3:	Project Trip Generation Estimates	189
Table 3.17-4:	Project Level of Service Summary.....	191
Table 3.17-5:	Cumulative Conditions Intersection Level of Service Summary	192
Table 3.17-6:	Project Vehicle Miles Traveled.....	193

Appendices

Appendix A:	Notice of Preparation and Comment Letters Received
Appendix B:	Air Quality and Greenhouse Gas Assessment
Appendix C:	Biological Resources Technical Report
Appendix D:	Arborist Report
Appendix E:	Section 106 Technical Report
Appendix F:	Geotechnical Investigation
Appendix G:	GreenPoint Rated Checklists
Appendix H:	Phase I Environmental Site Assessment
Appendix I:	HUD Explosive and Fire Hazards Review
Appendix J:	Hydraulic Analysis
Appendix K:	Noise and Vibration Analysis
Appendix L:	Traffic Impact Analysis
Appendix M:	NEPA Noise Assessment

ACRONYMS AND ABBREVIATIONS

ABAG/MTC)	Association of Bay Area Governments
AMI	Area Median Income
APE	Area of Potential Effect
BAAQMD	Bay Area Air Quality Management District
BAU	Business as Usual
Bgs	Below ground surface
BMPs	Best Management Practices
BTU	British Thermal Unit
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code (
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
DOT	US Department of Transportation
DPM	Diesel Particulate Matter
EDD	Employment Development Department
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FONSI	Finding of No Significant Impact
FRAP	Fire and Resource Assessment Program
HCD	Housing and Community Development
HRI	Historic Resources Inventory
HUD	U.S. Department of Housing and Urban Development

LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
LOS	Level of Service
MEI	Maximally Exposed Individual
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MTC	Metropolitan Transportation Commission
NCSPPP	Napa Countywide Stormwater Pollution Prevention Program
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NOD	Notice of Determination
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NRWS	Napa Recycling and Waste Services
NWD	Napa Water Division
NVTA	Napa Valley Transportation Authority
NVUSD	Napa Valley Unified School District
NSD	Napa Sanitation District
OES	Office of Emergency Services
PBV	Project Based Vouchers
PDA	Priority Development Areas
PM	Particulate Matter
RHNA	Regional Housing Needs Allocation
RMS	Root Mean Square
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
SCS	Sustainable Communities Strategy
SFBAAB	San Francisco Bay Area Air Basin
SFHA	Special Flood Hazard Areas
SHMA	Seismic Hazards Mapping Act
SRO	Single Room Occupancy
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

TAC Toxic Air Contaminants
TAZ Transportation Analysis Zone
USFWS United States Fish and Wildlife Service

SUMMARY

In accordance with the California Environmental Quality Act (“CEQA”) Guidelines Section 15123, this combined Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the Valle Verde and Heritage House Continuum of Housing Project (proposed project/proposed action) “Project” contains a brief summary of the proposed Project, the proposed actions, areas of controversy known to the lead agency and issues to be resolved, and a summary of significant impacts and proposed Mitigation Measures or alternatives that would reduce or avoid those effects.

The City of Napa has prepared this combined Draft EIR/EA for Project in compliance with the California Environmental Quality Act (CEQA), CEQA Guidelines, and the National Environmental Policy Act (NEPA). In order to satisfy both CEQA and NEPA for the proposed Project/proposed action, the City has prepared this environmental document as a joint document, consisting of an EIR under CEQA and an EA under NEPA.

PROJECT LOCATION

The approximately 2.9-acre Site (APNs 038-170-042, -043, and -046) is located at 3700, 3710, and 3720 Valle Verde Drive, just north of the intersection of Firefly Drive and Valle Verde Drive (“Site”). The Site is bordered by a three-story multi-family residential development (Silverado Creek Apartments) to the west, Salvador Creek to the east, a two-story residential condominium development to the south, and a City of Napa-owned property that functions as a stormwater detention area and open space trail to the north.

EXISTING SITE CONDITIONS

A portion of the Site (approximately 1.6 acres) located at 3700 Valle Verde drive, is currently developed with the vacant, approximately 39,771 square foot Sunrise Napa Assisted Living Facility. The vacant facility is three stories in height and built with 72 units. It has been vacant since 2004.

The remainder of the Site (approximately 1.3 acres) located at 3710 and 3720 Valle Verde Drive is vacant.

PROJECT OVERVIEW

The Valle Verde and Heritage House Continuum of Housing Project (proposed project/proposed action) “Project” proposes to rehabilitate the vacant Sunrise Napa Assisted Living Facility with 66 single-room occupancy (SRO) units, including eight American with Disability Act (ADA) accessible one-bedroom units. Of the 66 total units, 33 would be operated as permanent supportive housing with on-site supportive services, and property management (Heritage House). The remaining 33 units would be operated as affordable rental units occupied by income-eligible tenants who do not require supportive services. Heritage House would implement a management plan and have day and night on-site property management. The Project would also include construction of a new three-story multi-family apartment building with 24 affordable units (Valle Verde Apartments), adjacent to the Heritage House. A management plan would also be implemented for the Valle Verde Apartments, including on-site management.

General Plan

The Site is currently designated Multi-Family Residential (MFR-33H) in the City of Napa General Plan (Envision Napa 2020), which is intended to develop or redevelop into a medium to high intensity predominantly attached unit development pattern. Allowable uses include multi-family units, attached single family, SRO facilities, live-work housing, and similar compatible uses such as day care and larger group quarters (e.g., residential facilities and nursing homes).

The Site is also located within the Vintage Planning Area. The MFR-33H designation allows for a density of 18 to 25 dwelling units per acre and 37 to 50 SRO units per acre. On the 1.3-acre Valle Verde Site, between 24 to 33 multifamily units are allowed within this density range. The Project proposes 24 multifamily units on the Valle Verde Site, which is within the permitted density range of the MFR-33H designation. On the 1.6-acre Heritage House Site, the Project proposes 58 SROs and eight one-bedroom units, which is within the permitted density range for SRO projects.

Zoning

The Site is zoned *Multi-Family Residential*. This district provides opportunities for a mix of predominantly attached residential development patterns. Allowable uses include medium and higher density multifamily apartments, single-family attached and detached units, group residential, live-work housing, larger residential care facilities, and similar compatible uses such as day care.

Pursuant to the City's Zoning Ordinance, a factor of two is applied to the permitted General Plan density range for SRO projects. The Heritage House would have a density of 41.3 rooms per acre, which is within the permitted density range of 37 to 50 rooms per acre for SRO projects.

SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS

The following table summarizes the potentially significant impacts of the Project on the environment and mitigation measures proposed to reduce those impacts to a less than significant level. A significant impact on the environment is a substantial, or potentially substantial, adverse change to the environment. Potential impacts that are less than significant without mitigation are not described in this summary and can be found in the text of the EIR/EA. A complete description of the Project, its potential impacts, and proposed mitigation measures can be found in the text of this EIR/EA.

Significant Impact	Mitigation Measures
Air Quality	
<p>Impact AIR-3: The Project would expose sensitive receptors to substantial pollutant concentrations.</p>	<p>MM AIR-3.1: During any construction period ground disturbance, the Applicant shall ensure that the Project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following best management practices that are required of all projects:</p> <ol style="list-style-type: none"> 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). 5. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 6. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 7. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). 8. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 9. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 10. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

11. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

MM AIR-3.2: The Project shall develop a plan demonstrating that the off-road equipment used on-site to construct the Project would achieve a fleet-wide average 21 percent reduction in particulate matter exhaust emissions or more. One feasible plan to achieve this reduction would include the following:

- All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall, at a minimum, meet U.S. EPA particulate matter emissions standards for Tier 2 engines or equivalent. The use of equipment that includes CARB-certified Level 3 Diesel Particulate Filters would also meet this requirement. Alternatively, the use of alternatively-fueled equipment (i.e., non-diesel) would meet this requirement.

Biological Resources

Impact BIO-1: The Project would have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

MM BIO-1.1: A survey for active bird nests shall be conducted by a qualified biologist no more than 14 days prior to the start of Project activities (vegetation removal, grading, or other initial ground-disturbing activities) if ground disturbing activities commence during the nesting season (February 1 through August 31). The survey shall be conducted in a sufficient area around the Study Area to identify the location and status of any nests that could potentially be directly or indirectly affected by vegetation removal, or grading activities. Based on the results of the pre-construction breeding bird survey, the following measure shall apply.

- If active nests of protected species are found within the Study Area or close enough to the area for construction activity to affect nesting success, a work exclusion zone shall be established around each nest. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g. due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers, ambient sound levels, and other factors. An exclusion zone radius may be as small as 25 feet (for common, disturbance-adapted species) or as large as 250 feet or more for raptors. Exclusion zone size may also be reduced from established levels if supported with nest monitoring by a qualified biologist indicating that work activities are not significantly impacting the nest.
-

MM BIO-1.2: A pre-construction survey shall be conducted of the existing structures, bridge, and trees within 100 feet of the work areas to determine if any suitable roost habitat is present and the potential for occupancy. Based on the results of the survey, the following measure shall apply.

- If an active maternity roost is located within features scheduled for removal, then consultation with CDFW would be required.
- If any large trees are identified during the preconstruction survey which contain potential roosting features, the tree shall be felled outside of the maternity season (September 1 through April 30) and shall be allowed to lay on the ground for one night to allow any undetected bats to leave the tree before it is processed.
- If no roosts or potential bat roosting substrates are located, then work may proceed without further measure.

MM BIO-1.3: The following avoidance and minimization measures shall be implemented during bridge removal activities:

- A debris containment device (e.g. net, or tarp) shall be installed prior to work in order to prevent material from entering Salvador Creek.
- Riparian vegetation removed within the Study Area shall be the minimum amount needed for work to occur.
- The extent of disturbance shall be delineated with construction fencing or other high visibility marker to prevent disturbance to areas below top of bank or outside of the construction footprint.

Impact BIO-2: The Project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.

MM BIO-2.1: Prior to initiating any Project activities within these areas, the Applicant shall obtain any required permits for impacts to jurisdictional areas. Permanent impacts to all jurisdictional resources would be compensated at 1:1 replacement ratio, or as required by the USACE, CDFW, and RWQCB.

Impact BIO-4.: The Project would 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

MM BIO-4.1: The following measures shall be implemented:

- Hours for initial phases of work shall be limited to 30 minutes after sunrise to 30 minutes before sunset in order to avoid causing disturbance when wildlife are most likely to migrate through surrounding habitats.
- Any lighting used for the Project shall be kept to the minimum necessary to safely operate. Those lights shall also be directed inward toward the Study Area, and not into surrounding habitats.
- All work shall occur only within designated work areas.

impede the use of native wildlife nursery sites.

Cultural Resources

Impact CUL-2: The Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

MM CUL-2.1: In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, work within 50 ft. of the find shall cease until a qualified archaeologist can assess the find and provide recommendations for further treatment, if warranted. Construction and potential impacts to the area(s) within a radius determined by the archaeologist shall not recommence until the assessment is complete. Implementation of this mitigation measure would reduce potential impacts to archaeological resources to a less than significant level.

Impact CUL-3: While the Project is not expected to disturb any human remains, including those interred outside of dedicated cemeteries, the potential exists that unknown resources could be uncovered during subsurface construction activities.

MM CUL-3.1: Human Remains: Native American coordination shall follow the protocols established under Assembly Bill 52, State of California Code, and applicable City of Napa procedures. In addition, the following measures shall be implemented with regard to human remains:

- The treatment of any human remains and associated, or unassociated funerary objects discovered during soil disturbing activities shall comply with applicable state laws. Such treatment would include immediate notification of the Napa County Coroner. In the event of the coroner’s determination that the human remains are Native American, the coroner shall notify of the Native American Heritage Commission, which would appoint a Most Likely Descendant (MLD) (PRC § 5097.98). The archaeological consultant, the City of Napa, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects (CEQA Guidelines § 15064.5[d]). The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The PRC allows 48 hours to reach agreement on these matters. If the MLD and the other parties could not agree on the reburial method, the Event Authority shall follow Section 5097.98(b) of the PRC, which states that “the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.”

Geology and Soils

Impact GEO-2:

The Project would result in substantial erosion or the loss of topsoil.

MM GEO-2.1: The Project Civil Engineer shall design and implement a site drainage system to collect surface water and direct towards an established storm drainage system. The Civil Engineer shall also design an erosion control plan prior to Project construction, per the current guidelines of the *California Stormwater Quality Association's Best Management Practice Handbook* (2003).

Impact TCR-1a: The Project would cause a substantial adverse change in the significance of a tribal cultural resource that is 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).

MM TCR-1.1 The Nation shall have the opportunity to provide tribal monitoring and consultation for the Project during the archaeological investigations and ground disturbing activities related to underground utility trenching and the stitch wall required for the Project. The Nation's monitors may work in collaboration with the archaeologists and Project engineers hired/employed by the Applicant. Applicant shall provide written notice to the Nation ten days in advance of any earth-disturbing activities related to utility trenching and stitch wall digging. If the Nation fails to respond or fails to provide monitoring and consultation personnel, on the date(s) of the activities, the Contractor may continue with those activities.

MM TCR-1.2: In the event that Native American human remains are discovered during Project construction activities, and where the Nation has been designated as the Most Likely Descendant (MLD), the following provisions shall be implemented:

Impact TCR-1b: The Project would cause a substantial adverse change in the significance of a tribal cultural resource that is 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.

- I. The Nation shall be allowed, under California Public Resources Code sections 5097.98 (a) and 21083.2 and State CEQA Guidelines section 15064.5 (e), to: (1) inspect the site of the discovery; and (2) make recommendations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity.
- II. The Nation shall complete its inspection within twenty-four (24) hours of receiving notification from either the Contractor or the NAHC, as required by California Public Resources Code section 5097.98 (a). The City and the Nation agree to discuss, in good faith, what constitutes "appropriate dignity" as that term is used in the applicable statutes.
- III. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code sections 5097.98 (a) and (b) and 21083.2 and State CEQA Guidelines section 15064.5 (e).
- IV. The City is aware that the Nation may wish to rebury the human remains and associated ceremonial and cultural items (artifacts) on or near the site of their discovery, in an area that shall not be subject to future subsurface

disturbances. Should the Nation recommend reburial of the human remains and associated ceremonial and cultural items (artifacts) on or near the site of their discovery, the City and Contractor shall make good faith efforts to accommodate the Nation's request.

- V. The term "human remains" encompasses more than human bones because Yocha Dehe's traditions periodically necessitated the ceremonial burning of human remains, and monitors shall make recommendations for removal of cremations. Grave goods are those artifacts associated with any human remains. These items and the soil, in an area encompassing up to two (2) feet in diameter around the burial, and other funerary remnants and their ashes, are to be treated in the same manner as human bone fragments or bones that remain intact.

MM TCR-1.3: Treatment and Disposition of Cultural Items (Artifacts). Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Nation. Applicant agrees to cause its contractor to return all Native American ceremonial items and items of cultural patrimony that may be found on the Site to the MLD for appropriate treatment, unless Contractor or Applicant is ordered to do otherwise by a court or agency of competent jurisdiction. In addition, the Nation requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations on or adjacent to the Site. Where appropriate (from the perspective of the Nation), and agreed upon in advance by the Nation, certain analyses of certain artifact types will be permitted, which may include, but which may not necessarily be limited to, shell, bone, ceramic, stone and/or other artifacts.

SIGNIFICANT UNAVOIDABLE IMPACTS

With implementation of the foregoing mitigation measures, the Project would not result in any significant impacts.

SUMMARY OF ALTERNATIVES

The CEQA requires that an EIR identify alternatives to the project as proposed. The CEQA Guidelines state that an EIR must identify alternatives that would feasibly attain the most basic objectives of the project, but avoid or substantially lessen significant environmental effects. Pursuant to 24 CFR 58.40(e), NEPA requires that an EA discuss appropriate alternatives where the proposal involves unresolved conflicts concerning alternative uses of available resources and the

environmental impacts of the proposed action and alternatives. A summary of Project alternatives follows. A full analysis of Project alternatives is provided in Section 8.0 Alternatives.

Project Objectives

Pursuant to CEQA Guidelines Section 15124(b), the EIR must include a statement of the objectives sought by the proposed Project. The stated objectives of the Project proponent are to:

- Provide needed housing on an infill parcel of approximately 2.9 acres, consistent with the City of Napa’s General Plan Housing Element, housing policies, and State law for lower income residents in two modalities: apartments for families; and single room occupancy units for individuals.
- Aid the City of Napa in meeting its Regional Housing Needs Allocation (RHNA) obligation identified by the Association of Bay Area Governments (ABAG/MTC) for affordable housing and confirmed by the California Department of Housing and Community Development (HCD).
- Develop a project meeting the City and Napa County’s Housing First policy to address the needs of Napa’s homeless and vulnerable populations, which includes seniors, those with disabilities, veterans, and at-risk families and individuals.
- Redevelop and retrofit an existing dilapidated structure to accommodate supportive housing and affordable housing.
- Construct an affordable housing apartment complex for lower income families.
- Support the goals of the non-profit Applicants (the Gasser Foundation and Burbank Housing) to provide permanent housing for all Napa residents, which is a fundamental community need and the foundation for a healthy and vibrant community.

Alternatives Considered But Rejected

Location Alternative

Location alternatives were rejected because the number of potentially suitable sites is extremely limited and development of such sites would not substantially reduce the severity of any of the Project’s potentially significant impacts. Specifically, development of any potential alternative sites would not reduce the Project potential toxic air contaminant (TAC) and tribal cultural resources impacts because construction would occur on alternative sites in a similar manner to the proposed Site and the surrounding uses in an urban infill setting would likely be similar to that of the proposed Site. Alternative sites that are not located along a creek would avoid potential impacts to riparian habitats and the species they support, however most sites have trees on or near the site that could host nesting activity that would require pre-construction surveys to prevent construction disturbance. Alternative sites could also have the potential for uncovering unknown tribal cultural resources, which would not be determined until the CEQA process was initiated for the site. Further, these sites are not controlled by the Applicant. Since no feasible alternative site was identified that would avoid or lessen the Project’s potential impacts, a location alternative was not further analyzed.

No Abandonment of the Valle Verde Drive Right-of-Way Alternative

This alternative was rejected because the Site would not be able to accommodate the Project as there would be insufficient site area available to accommodate the Valle Verde Apartments building and

associated parking. In addition, this alternative would not substantially reduce the severity of any of the Project's potentially significant impacts because construction would occur in the same manner and require the same mitigation measures to reduce potential construction impacts to less than significant levels. Because this alternative would not avoid or lessen the Project impacts, it was not further analyzed.

Project Alternatives

No Project – No Development Alternative

The CEQA Guidelines stipulate that an EIR include a No Project Alternative to allow decision-makers to compare the impacts of approving the Project with the impacts of not approving the Project. Under the No Project – No Development Alternative, the existing Sunrise Napa Assisted Living Facility on the Heritage House Site would remain and the adjacent Valle Verde Site is undeveloped; therefore, this alternative would avoid the mitigated construction TAC impacts, the potential for erosion during construction, potential for bird nesting disturbance, and all other less than significant impacts. The No Project - No Development Alternative would not meet any of the proposed Project objectives to address underserved housing needs in the City of Napa.

No Project – Existing Plans and Policies Alternative

The Guidelines specifically advise that the No Project Alternative is “what would be reasonably expected to occur in the foreseeable future if the Project is not approved, based on current plans and consistent with available infrastructure and community services.” The Guidelines emphasize that an EIR should take a practical approach, and not “...create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment [Section 15126.6(e)(3)(B)].”

Since the Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility, the “No Project – Existing Plans and Policies alternative could include the re-occupancy of the vacant building. The Valle Verde Site (approximately 1.3 acres) is vacant and presumably could be developed with a range of medium and higher density multifamily apartments, single-family attached and detached units, group residential, live-work housing, larger residential care facilities, and similar compatible uses such as day care. Under the MFR-33H General Plan designation, the Valle Verde Site could be developed with a maximum buildout of 32 dwelling units (25 dwelling units per acre).

The No Project – Existing Plans and Policies Alternative would have similar environmental impacts as the proposed Project because any development of the Site would likely result in the same construction TACs and erosion impacts because construction of this alternative would occur in a similar manner to the proposed Project. In addition, any development of the Site involving ground disturbance would have a similar potential for uncovering unknown tribal cultural or archaeological resources.

While the No Project – Existing Plans and Policies alternative would provide some amount of housing on the Valle Verde Site in the form of new construction and some expected re-use of the existing Sunrise Napa Assisted Living Facility on the Heritage House Site, it would not provide the same housing opportunities for the target resident population as the proposed Project, and therefore would not achieve the stated Project objectives to the same extent as the proposed Project.

Reduced Scale Alternative

Under the Reduced Scale Alternative, the existing vacant Sunrise Napa Assisted Living Facility on the Heritage House Site would be developed with 66 SRO units (including 8 accessible one-bedroom units), like the Project. Under this alternative, the Valle Verde Site (approximately 1.3 acres) would not be developed. Developing the Site with a smaller project would likely involve a shorter construction timeframe and less grading, which may lessen construction TAC impacts as compared to the Project. A portion of Valle Verde Drive would not be abandoned, and there would not be a need for a lot line adjustment/lot merger. On-street parking would not be displaced. The Reduced Scale Alternative would have reduced erosion and loss of top soil compared to the Project, due the reduced construction disturbance area on the Site. However, the proposed stitch wall would still need to be constructed to minimize bank erosion. In addition, the Reduced Scale Alternative would have the same potential for uncovering unknown tribal cultural resources as the Project, although the Valle Verde Site would remain undisturbed. While this alternative would have reduced environmental impacts, the basic objectives related to the provision of affordable housing for low income families would not be met since the 24 affordable units would not be constructed, although the objectives related to the provision of supportive housing and SRO units would be achieved.

Bridge Removal Alternative

Under this alternative, as a condition of Project approval, the City of Napa would require removal of portions of the Zerba Bridge. Under this alternative, the City would require removal of the bridge decking and tops of piers in order to improve flood conditions, since the bridge acts as an impediment to floodwater flows during large storm events.

As described in *Section 3.10*, under the Bridge Removal Alternative, the base flood elevation (BFE) at the existing Sunrise Napa Assisted Living Facility and the proposed Valle Verde Apartments would be 38.0 and 39.5 feet, respectively. Similar to the Project, the Valle Verde Apartments could be removed from the special flood hazard area, as its lowest adjacent grade is equal to or greater than the BFE of 39.5 feet. As with the Project, the existing Sunrise Napa Assisted Living Facility lowest adjacent grade on the northeast corner of the building would still be below the 38.0-foot BFE and would need to be elevated at or above the BFE to be removed from the floodplain.

Under the Bridge Removal Alternative, there are slight increases in flood elevations downstream of the Project Site due to the removal of the bridge deck and piers (refer to Figure 3.10-5 and 3.10-6). However, removal of the bridge would improve conditions in the floodplain upstream of the Project resulting from blockage due to the proposed Valle Verde Apartment building. As with the Project, the Bridge Removal Alternative would result in less than one-foot increase in floodplain elevations although the location of the increased elevations would shift from upstream of the bridge to downstream with the bridge removed. In addition, the Bridge Removal Alternative would result in slight decreases in in-channel water surface elevation upstream of the Project whereas there are slight increases at the Project boundary.

Under the Bridge Removal Alternative, impacts to biological resources would be greater than the proposed Project. As described in *Section 3.4*, the Bridge Removal Alternative would result in potential impacts to steelhead within Salvador Creek. Under this alternative, the Applicant would be required to implement avoidance and minimization measures during bridge removal activities to reduce potential impacts to steelhead. Removal of the bridge would temporarily impact

approximately 23 linear feet and 0.01 acre of USACE jurisdictional intermittent stream. The CDFW and RWQCB would also take jurisdiction over the intermittent stream and approximately 0.13 acre of riparian habitat. Under this alternative, the Applicant would be required to obtain any required permits for impacts to jurisdictional areas and compensate any permanent impacts at a 1:1 replacement ratio.

The Bridge Removal Alternative would have similar TAC and erosion impacts because construction of this alternative would occur in a similar manner to the proposed Project, i.e. the incremental effects of bridge removal would add slightly to the construction impacts disclosed in a number of EIR sections, including Air Quality and Noise. In addition, any development of the Site would have a similar potential for uncovering unknown tribal cultural resource.

No Bikeway Improvements Alternative

The Project proposes to build an eight-foot wide bike path adjacent to its parking lot. The path would replace the current Valle Verde Drive connection to nearby trails. Under the No Bikeway Improvements alternative, bikeway improvements would not be implemented, and cyclists would either cycle through the Site drive aisle to connect to nearby trails, or use the existing offsite sidewalk which is narrow. This alternative would have similar environmental impacts as the proposed Project because it would likely result in the same construction TAC and erosion impacts because construction of this alternative would occur in a similar manner to the proposed Project. Under the No Bikeway Alternative, there would be a similar potential for uncovering unknown tribal cultural resource. The No Bikeway Improvements alternative would achieve all of the Project objectives. However, this alternative would not require the removal of seven trees to accommodate construction of the multi-use trail.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The *CEQA Guidelines* state that an EIR shall identify an environmentally superior alternative. If the environmentally superior alternative is the “No Project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (Section 15126.6(e)(2)).

Based upon the previous discussion, the environmentally superior alternative would be the No Project – No Development Alternative, which would avoid all Project impacts. This alternative would not meet any Project objectives.

The Reduced Scale Alternative would eliminate the Valle Verde Apartments from the Project, which may lessen the severity of the already less than significant (with mitigation) construction-related TAC impact. This alternative would partially meet the Project objectives, though to a lesser extent since the 24 affordable units would not be constructed. The Reduced Scale Alternative would be the environmentally superior alternative to the Project. However, as discussed in each section of the EIR, all Project impacts are capable of being reduced to less than significant levels through implementation of feasible measures and conditions, and there would be no significant and unavoidable impacts from Project implementation.

AREAS OF KNOWN CONTROVERSY

Pursuant to Section 15123(b)(2) of the state CEQA Guidelines, an EIR shall identify areas of controversy known to the lead agency including issues raised by agencies and the public. Comments

were received on the Notice of Preparation and are included in Appendix A of this EIR. There are no known areas of substantial controversy; however, issues raised by some of the members of the community include: traffic generation and congestion, water quality, land use incompatibility with the surrounding neighborhood, noise impacts, impacts to Salvador Creek, parking impacts, and safety concerns. These issues noted above are analyzed further in Section 3 of this EIR/EA.

Under CEQA, economic or social effects are not considered significant effects on the environment. Rather, these effects are considered in the context of physical changes resulting from economic or social changes linked to the project. More specifically, Section 15131(a) of the CEQA Guidelines states:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on physical changes.

In the case of the Project, concern has been expressed regarding socioeconomic and demographic changes resulting from the introduction of the future occupants of Heritage House. These topics do not require analysis under CEQA, except to the extent that there is substantial evidence to support a finding that they would result in physical environmental effects.

Under NEPA, Executive Order 12898 requires consideration of how federally assisted projects may have disproportionately high and adverse human health or environmental effects on minority and low-income populations. The issue of environmental justice is analyzed further in Section 4 of this EIR/EA.

SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT

The City of Napa has prepared this combined Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the Valle Verde and Heritage House Continuum of Housing Project (proposed project/proposed action) “Project” in compliance with the California Environmental Quality Act (CEQA), CEQA Guidelines, and the National Environmental Policy Act (NEPA). In order to satisfy both CEQA and NEPA for the proposed Project/proposed action, the City has prepared this environmental document as a joint document, consisting of an EIR under CEQA and an EA under NEPA.

1.1.1 CEQA

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to the proposed Project that could reduce or avoid adverse environmental impacts (CEQA Guidelines 15121(a)). As the CEQA Lead Agency for this Project, the City of Napa is required to consider the information in the EIR along with any other available information in deciding whether to approve the Project. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, cumulative impacts, alternatives, and growth-inducing impacts. It is not the intent of an EIR to recommend either approval or denial of a project.

1.1.2 NEPA

The proposed Project would receive U.S. Department of Housing and Urban Development (HUD) assistance, potentially in the form of project-based vouchers from the Housing Authority of the City of Napa. As a result, the proposed Project is subject to NEPA environmental review in conformance with HUD (24 CFR 58.36) requirements. The Housing Authority of the City of Napa would serve as the NEPA Responsible Entity, assuming lead federal agency status on behalf of HUD for the proposed Project.

1.2 EIR/EA PROCESS

1.2.1 Notice of Preparation and Scoping

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the City of Napa prepared a Notice of Preparation (NOP) for this EIR/EA. The NOP was circulated to local, state, and federal agencies on August 7, 2018. The standard 30-day comment period concluded on September 7, 2018. The NOP provided a general description of the proposed Project and identified possible environmental impacts that could result from implementation of the Project. The City of Napa also held a public scoping meeting on August 20, 2018 at the Napa Senior Center to discuss the Project and solicit public input as to the scope and contents of this EIR. Appendix A of this EIR includes the NOP and comments received on the NOP.

1.2.2 Public Review and Comment Period

Publication of this Draft EIR/EA will mark the beginning of a 45-day public review and comment period. During this period, the Draft EIR/EA will be available to local, state, and federal agencies and to interested organizations and individuals for review. Notice of this Draft EIR will be sent directly to every agency, person, and organization that commented on the NOP. Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

Kathy Pease, AICP, Contract Planner
City of Napa Community Development Department (Planning Division)
P.O. Box 660, Napa
CA 94558

Comments may also be sent by email to kpease@cityofnapa.org.

1.3 FINAL EIR/RESPONSES TO COMMENTS

Following the conclusion of the 45-day public review period, the City of Napa will prepare a Final EIR/EA in conformance with CEQA Guidelines Section 15132 and Article 14 of the CEQA Guidelines. The Final EIR/EA will consist of:

- Revisions to the Draft EIR/EA and revisions thereto, as necessary;
- List of individuals and agencies commenting on the Draft EIR/EA and comments received;
- Responses to comments received on the Draft EIR/EA, in accordance with CEQA Guidelines (Section 15088);
- Copies of letters received on the Draft EIR/EA.

Section 15091(a) of the CEQA Guidelines stipulates that no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings. If the lead agency approves a project despite it resulting in significant adverse environmental impacts that cannot be mitigated to a less than significant level, the agency must state the reasons for its action in writing. This Statement of Overriding Considerations must be included in the record of project approval.

1.3.1 Notice of Determination

If the Project is approved, the City of Napa will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15094(g)).

1.3.2 Notice of Finding of No Significant Impact

Upon finalization of environmental review, the Housing Authority of the City of Napa, as the NEPA Responsible Entity, will publish a Notice of Finding of No Significant Impact (Notice of FONSI).

The publishing of the Notice of FONSI starts a 15-day public comment period. After the 15-day comment period, if no comments are received, HUD will approve the release of funds to the Project.

SECTION 2.0 PROJECT INFORMATION AND DESCRIPTION

2.1 PROJECT NAME

Valle Verde and Heritage House Continuum of Housing Project

2.2 CEQA LEAD AGENCY/NEPA RESPONSIBLE ENTITY

City of Napa
Community Development Department
1600 First Street, Napa
CA 94559

2.3 CERTIFYING OFFICER

Vincent Smith, Community Development Director

2.4 GRANT RECIPIENT

Burbank Housing
790 Sonoma Avenue
Santa Rosa, CA 95404
Contact: Larry Florin
707-526-9782, lflorin@burbankhousing.org

2.5 CONSULTANT

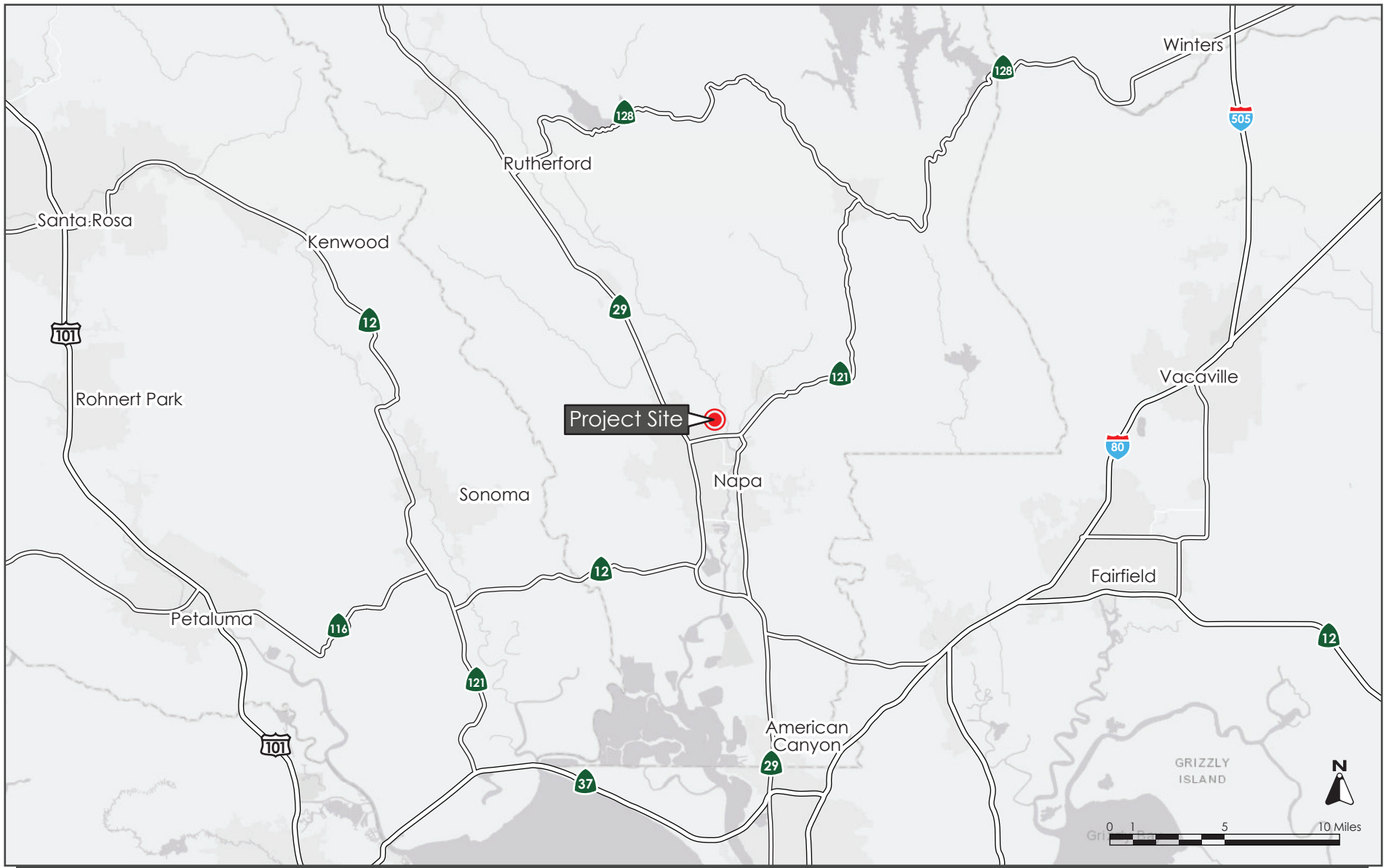
David J. Powers and Associates, Inc.
1736 Franklin Street, Suite 300
Oakland, CA 94612
Contact: Natalie Noyes, Project Manager
nnoyes@davidjpowers.com

2.6 PROJECT LOCATION

The approximately 2.9-acre Site (APNs 038-170-042, -043, and -046) is located at 3700, 3710, and 3720 Valle Verde Drive, just north of the intersection of Firefly Drive and Valle Verde Drive (“Site”). The Site is bordered by a three-story multi-family residential development (Silverado Creek Apartments) to the west, Salvador Creek to the east, a two-story residential condominium development to the south, and a City of Napa-owned property that functions as a stormwater detention area and open space trail to the north. Regional, vicinity, and aerial maps of the Site are attached as Figure 2.6-1, Figure 2.6-2, and Figure 2.6-3, respectively.

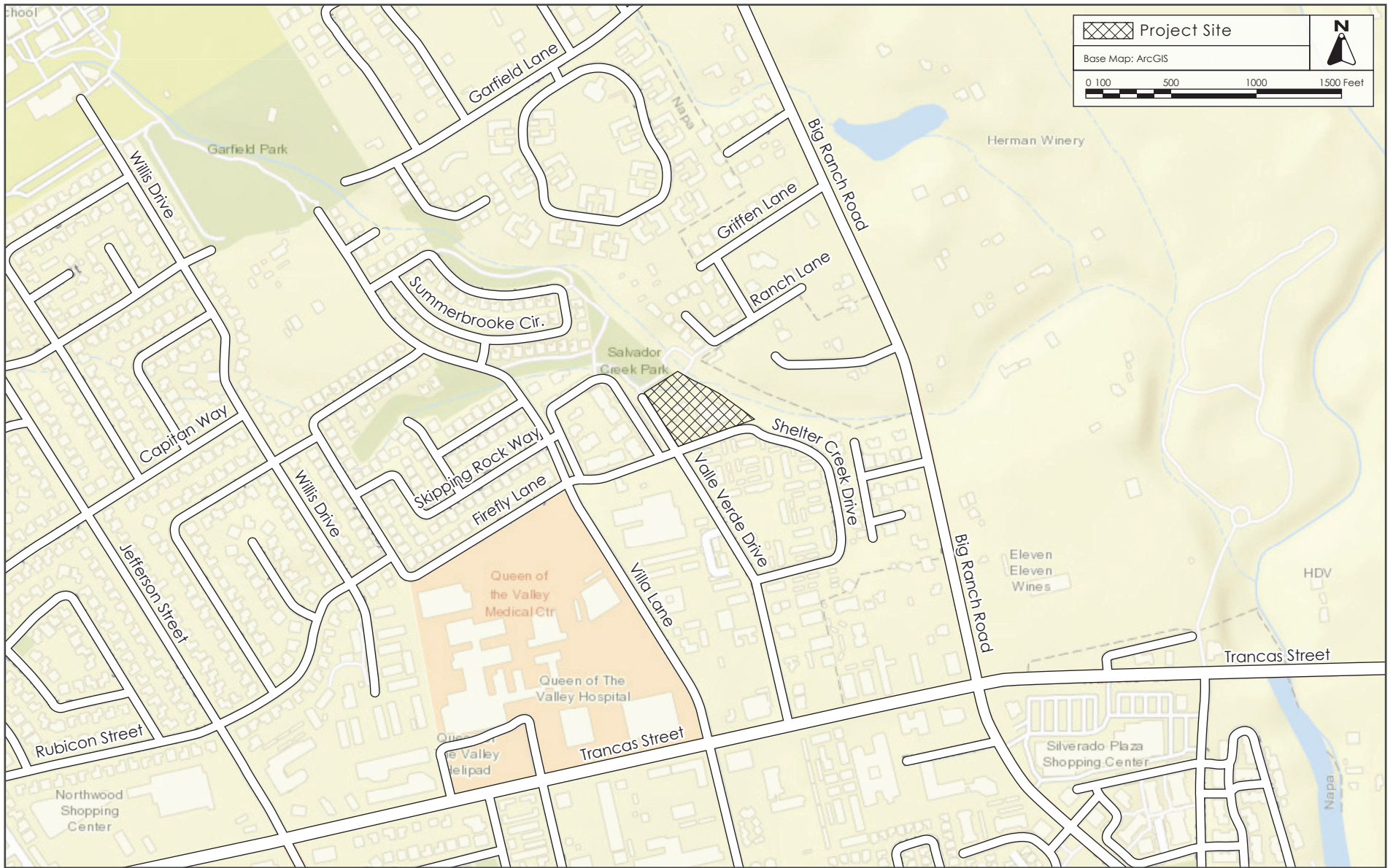
2.6.1 Existing Site Conditions

A portion of the Site (approximately 1.6 acres) located at 3700 Valle Verde drive, is currently developed with the vacant, approximately 39,771 square foot Sunrise Napa Assisted Living Facility. The vacant facility is three stories in height and built with 72 units. It has been vacant since 2004.



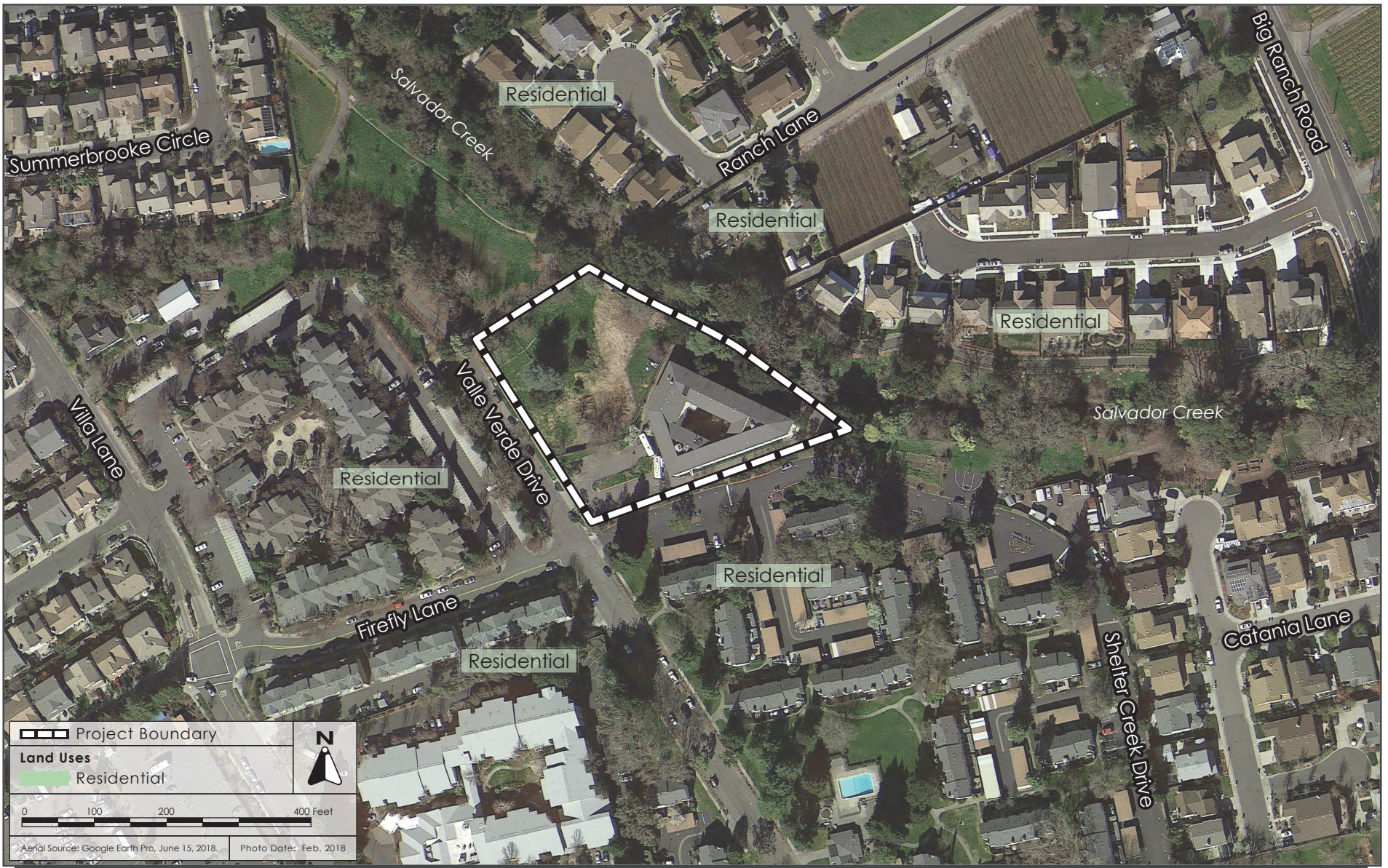
REGIONAL MAP

FIGURE 2.6-1



VICINITY MAP

FIGURE 2.6-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.6-3

The remainder of the Site (approximately 1.3 acres) located at 3710 and 3720 Valle Verde Drive is vacant.

There are approximately 107 trees on and immediately adjacent to the Site, the majority of which are located along the eastern property line and within the riparian setback of Salvador Creek.

2.7 DESCRIPTION OF THE PROPOSED PROJECT

2.7.1 Project History and Background

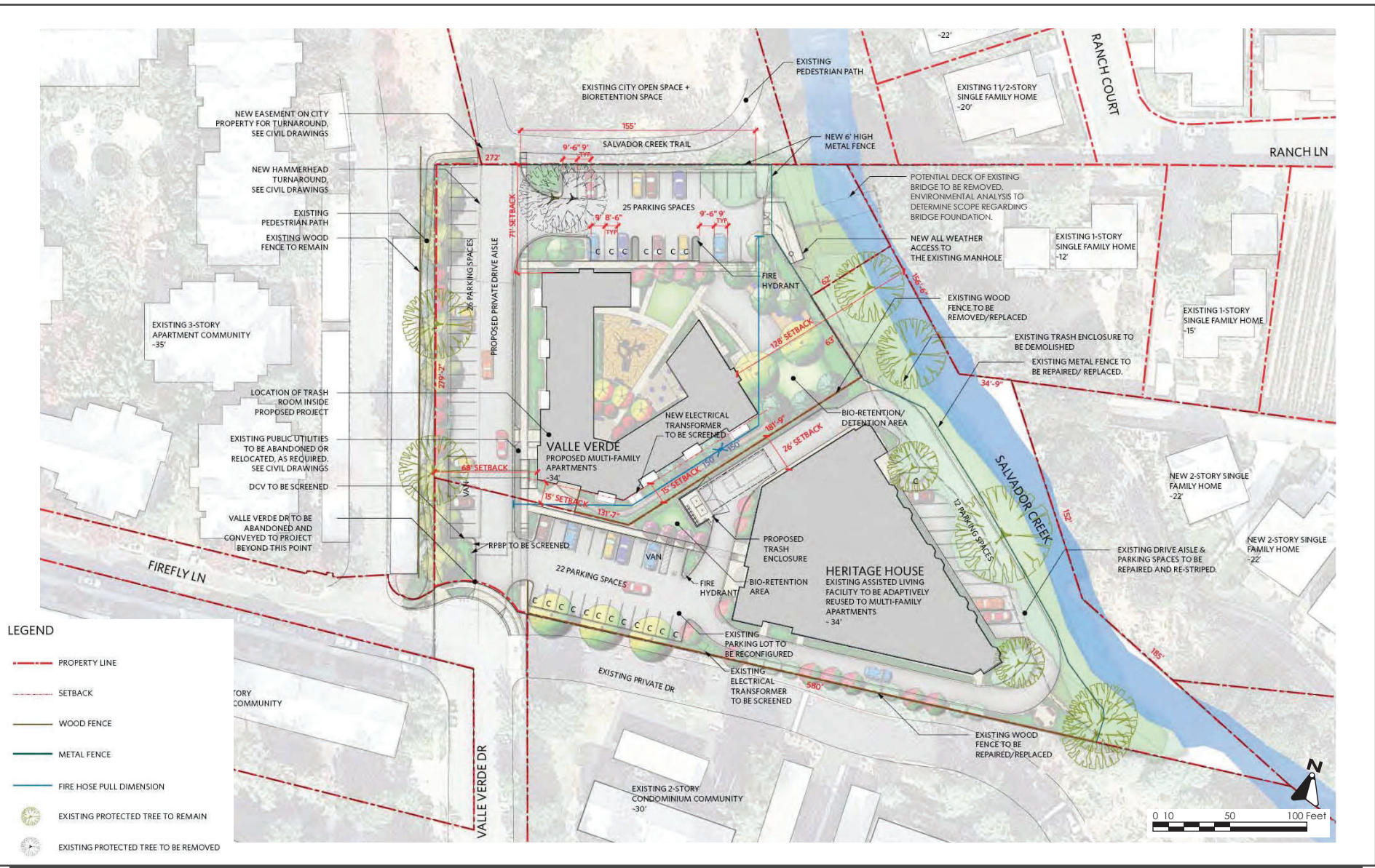
The Site was previously the subject of approvals associated with the proposed Napa Creekside Apartments project (File No. PL11-0089) issued in 2013. The former project applicant (BRIDGE Housing Corporation) had proposed a 57-unit, income-restricted multi-family development. The former applicant proposed to remodel the vacant Sunrise Napa Assisted Living Facility to accommodate 33 of the 57 residential units and to construct the remaining 24 residential units in a new three-story building on-site. In May 2012, the City of Napa evaluated the potential environmental impacts of the project under the California Environmental Quality Act (CEQA) and subsequently adopted a Mitigated Negative Declaration (MND).

A lawsuit challenging the adequacy of the environmental review under CEQA was filed after the project's approval. In April 2013, the Napa Superior Court issued a Peremptory Writ of Mandate requiring additional environmental analysis of potential impacts on biological resources in Salvador Creek. The City of Napa subsequently approved the Napa Creekside Apartments in June 2013, following the submittal of supplemental environmental analysis regarding potential impacts on Salvador Creek. In March 2014, the Napa County Superior Court issued a Peremptory Writ of Mandate, which concluded that an Environmental Impact Report (EIR) was required and ordered the City to set aside and vacate all previous project approvals.

The former project applicant subsequently withdrew its application. In compliance with the Superior Court's Peremptory Writ of Mandate, the City of Napa vacated all previous approvals associated with the project in March 2016. Subsequently, BRIDGE Housing Corporation sold the Site to the current project applicant (Gasser Foundation) "Applicant".

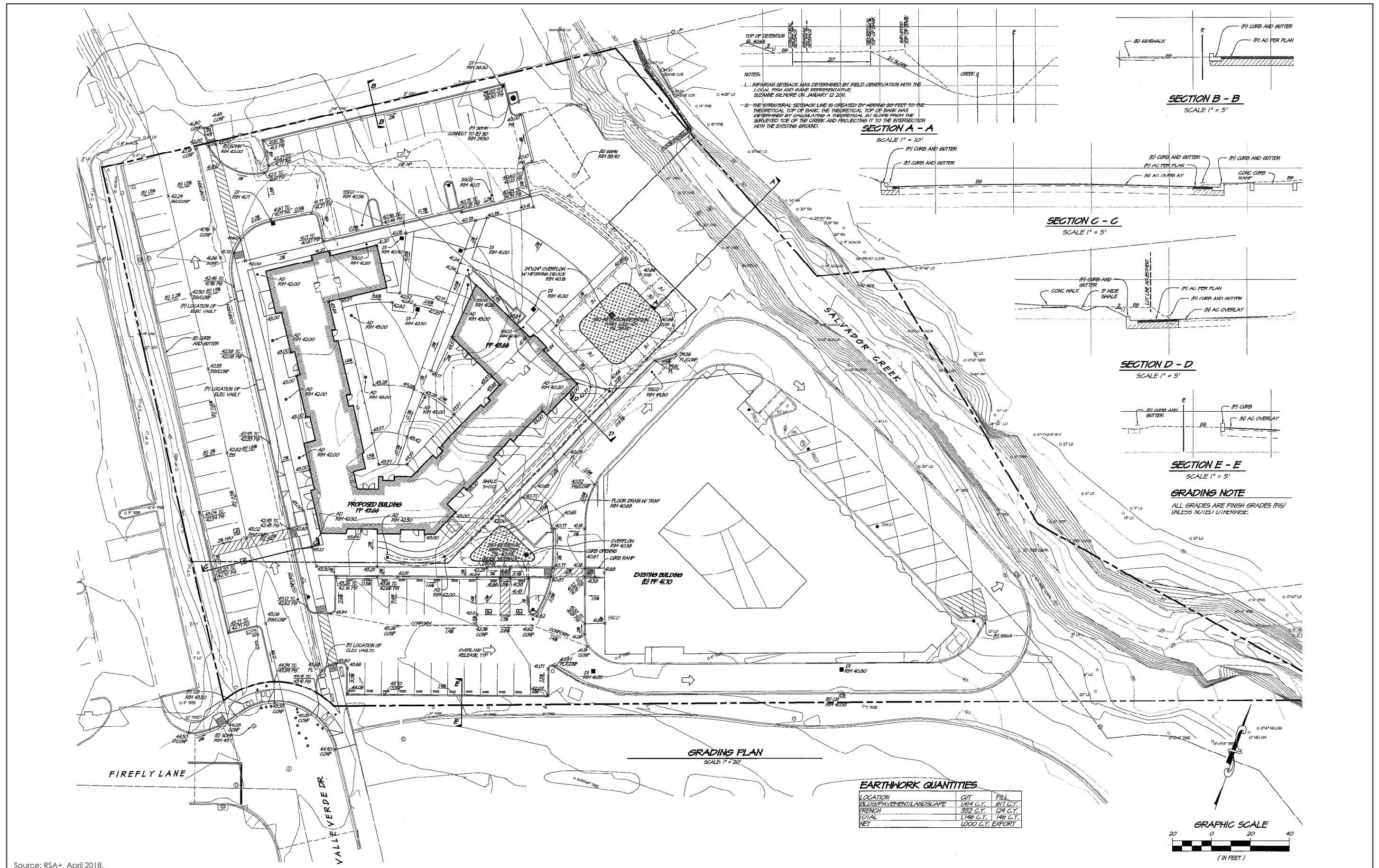
2.7.2 Proposed Project

The Project proposes to rehabilitate the vacant Sunrise Napa Assisted Living Facility with 66 single-room occupancy (SRO) units, including eight American with Disability Act (ADA) accessible one-bedroom units. Of the 66 total units, 33 would be operated as permanent supportive housing with on-site supportive services, and property management (Heritage House). The Project would also include construction of a new three-story multi-family apartment building with 24 affordable units (Valle Verde Apartments), adjacent to the Heritage House, as described further below and shown in Figure 2-4.



SITE PLAN

FIGURE 2.7-1



Source: RSA+, April 2018.

GRADING PLAN

Valle Verde & Heritage House
City of Napa

FIGURE 2.7-2

2.7.2.1 *Heritage House*

The Heritage House would be located in the existing, vacant three-story 38,770 square-foot, Sunrise Napa Assisted Living Facility building at 3700 Valle Verde (“Heritage House Site”). Heritage House would provide 66 affordable SRO-units, including eight ADA accessible one-bedroom units. Thirty-three of these units would be permanent supportive units which would be linked with on- and off-site services that support resident access to social and physical well-being and employment opportunities. The remaining 33 units would be dedicated to the very-low income. The units would range from 215 to 605 square feet (averaging 345 square feet) and would be 100 percent affordable to lower income persons. The Project would include exterior and interior modifications to accommodate the on-site services and resident amenities as described below.

Existing Facility

Heritage House Exterior Modifications

The majority of the existing Sunrise Napa Assisted Living Facility building exterior would be replaced, including asphalt shingle roof, vinyl windows, partial or complete replacement of siding, and painting throughout the exterior (refer to Figure 2.7-3). A portion of the entrance would also be modified, and an entrance canopy would be added. Solar photovoltaic panels are proposed on the roof to offset a portion of the common area electrical load.

Heritage House Interior Modifications

The Project would generally maintain the existing floor plan, including common, mechanical, and administrative spaces. The existing 72-unit residential rooms would be converted into 66-SRO units (including eight ADA accessible one-bedroom units). The majority of the common space renovations would be on the ground floor of the building (refer to Figure 2.7-4). The existing commercial kitchen would be converted into a trash room and mechanical and storage space. The existing dining room would be repurposed into a large community room with adjacent community kitchen. Several existing rooms on the ground floor would either be demolished or reutilized to create new, more usable supportive service, community or property management spaces.

The existing residential rooms would be renovated to include efficiency kitchens in every unit. Eight units would be made accessible for persons with disabilities.

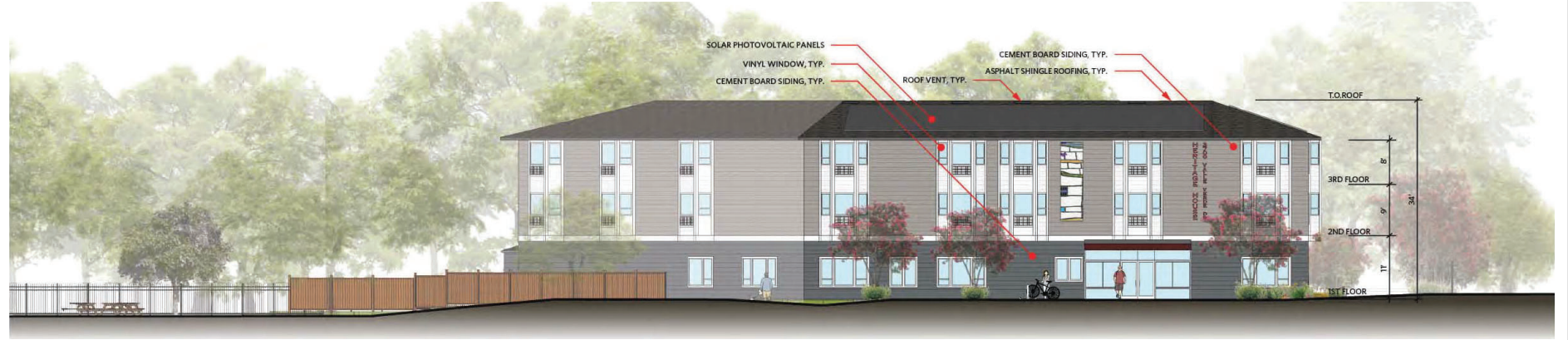
Utilities throughout the building will be upgraded to current. All spaces within the building would be renovated with new finishes, fixtures, and appliances, such as new lighting, paint, flooring, and cabinetry.

Resident Services

Heritage House would offer a healing and learning community to help formerly homeless individuals maintain stable housing. Residents of the 33 permanent supportive housing units in Heritage House would be pre-screened with many coming from short-term and temporary housing arrangements (e.g. emergency shelters, etc.). The Applicant is partnering with Abode Services to provide resident services for the permanent supportive housing residents at Heritage House.



South Elevation



West Elevation



LEGEND

- RESIDENTIAL - SRO (NON-ACCESSIBLE)
- RESIDENTIAL - SRO (ACCESSIBLE)
- COMMUNITY AMENITIES/SERVICES
- ADMINISTRATIVE
- UTILITIES/MAINTENANCE/ JANITORIAL
- CIRCULATION

UNIT MIX

	1ST FLR	2ND FLR	3RD FLR	TOTAL
SRO (STD)	12	23	23	58 (88%)
SRO (ACC)	2	3	3	8 (12%)
IBR- MRG	0	0	0	0
TOTAL	14	26	26	66

UNIT INFORMATION

	GSF	#	TOTAL SF
SRO (STD)	309 SF	58	17,945 GSF
SRO (ACC)	600 SF	8	4,800 GSF
TOTAL - RESIDENTIAL			22,745 GSF

BUILDING INFORMATION

	GSF
RESIDENTIAL	22,745 SF
COMMUNITY AMENITIES	2,600 GSF
ADMINISTRATIVE	920 GSF
UTILITIES/ MECHANICAL	1,100 GSF
CORRIDORS, ETC	11,405 GSF
TOTAL	38,770 GSF

HERITAGE HOUSE GROUND FLOOR PLAN

FIGURE 2.7-4

Resident services would be offered by a two-plus member team, including a Clinical Housing Services Coordinator and Resident Services Coordinator. Services would include housing retention, community engagement, preventative health care, self-healing, strength-based service plans, intensive case management, and other community-based services.

Property Management and Staffing

Heritage House would have day and night on-site property management. On-site property management staffing would consist of three to five full-time equivalent employees, including a resident manager, janitor, maintenance supervisor, and evening desk clerks.

Outdoor Amenities

The Project proposes to provide an outdoor courtyard and a seating area with a view of Salvador Creek. The Project would also include an ADA compliant accessible pedestrian path to connect from the terminus of Valle Verde Drive to the City-owned open space to the north of the Site.

2.7.2.2 *Valle Verde Apartments*

The proposed Valle Verde Apartments would consist of a three-story, multi-family apartment building with 24 affordable units on the approximately 1.3-acre site (with a density of 18.5 dwellings units per acre) located at 3710 and 3720 Valle Verde drive (“Valle Verde Site”). The 24 units would include 12 one-bedroom units, six (6) two-bedroom units, and six (6) three-bedroom units. The three-story apartment building would be approximately 34 feet tall and would be setback 88 feet from Valle Verde Drive.

Amenities for residents of the Valle Verde Apartments would include a playground, outdoor seating and barbeque areas, a half-court basketball court, and laundry facilities. As previously described, the Project would also include an ADA accessible pedestrian path to connect from the terminus of Valle Verde Drive to the City-owned open space to the north of the Site.

On-site management of the Valle Verde Apartments would consist of a full-time manager, half-time janitorial staff, and quarter-time maintenance staff.

2.7.2.3 *Affordable Housing Density Bonus/Concessions*

Consistent with state housing law (Government Code 65915), projects that provide affordable housing qualify for a density bonus and concessions:

b) (1) A city, county, or city and county shall grant one density bonus, the amount of which shall be as specified in subdivision (f), and, if requested by the applicant and consistent with the applicable requirements of this section, incentives or concessions, as described in subdivision (d), waivers or reductions of development standards, as described in subdivision (e), and parking ratios, as described in subdivision (p), when an applicant for a housing development seeks and agrees to construct a housing development, excluding any units permitted by the density bonus awarded pursuant to this section, that will contain at least any one of the following:

(A) Ten percent of the total units of a housing development for lower income households, as defined in Section 50079.5 of the Health and Safety Code.

(B) Five percent of the total units of a housing development for very low income households, as defined in Section 50105 of the Health and Safety Code.

Figure 2.7-5: Valle Verde Building Elevations

(C) A senior citizen housing development, as defined in Sections 51.3 and 51.12 of the Civil Code, or a mobile home park that limits residency based on age requirements for housing for older persons pursuant to Section 798.76 or 799.5 of the Civil Code.

(D) Ten percent of the total dwelling units in a common interest development, as defined in Section 4100 of the Civil Code, for persons and families of moderate income, as defined in Section 50093 of the Health and Safety Code, provided that all units in the development are offered to the public for purchase.

(E) Ten percent of the total units of a housing development for transitional foster youth, as defined in Section 66025.9 of the Education Code, disabled veterans, as defined in Section 18541, or homeless persons, as defined in the federal McKinney-Vento Homeless Assistance Act (42 U.S.C. Sec. 11301 et seq.). The units described in this subparagraph shall be subject to a recorded affordability restriction of 55 years and shall be provided at the same affordability level as very low income units.

(f) For the purposes of this chapter, “density bonus” means a density increase over the otherwise maximum allowable gross residential density as of the date of application by the applicant to the city, county, or city and county, or, if elected by the applicant, a lesser percentage of density increase, including, but not limited to, no increase in density. The amount of density increase to which the applicant is entitled shall vary according to the amount by which the percentage of affordable housing units exceeds the percentage established in subdivision (b).

(1) For housing developments meeting the criteria of subparagraph (A) of paragraph (1) of subdivision (b), the density bonus shall be calculated as follows:

Percentage Low-Income Units	Percentage Density Bonus
10	20
11	21.5
12	23
13	24.5
14	26
15	27.5
17	30.5
18	32
19	33.5
20	35

(k) For the purposes of this chapter, concession or incentive means any of the following:

(1) A reduction in site development standards or a modification of zoning code requirements or architectural design requirements that exceed the minimum building standards approved by the California Building Standards Commission as provided in Part 2.5 (commencing with Section 18901) of Division 13 of the Health and Safety Code, including, but not limited to, a

reduction in setback and square footage requirements and in the ratio of vehicular parking spaces that would otherwise be required that results in identifiable and actual cost reductions, to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).

* * *

(3) Other regulatory incentives or concessions proposed by the developer or the city, county, or city and county that result in identifiable and actual cost reductions to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).

The Project is located in the Vintage Planning Area. The General Plan designation for the Site is MFR-33H, Multi-Family Residential, which provides for attached single-family homes and multi-family units at a density range of 18.5 to 25 units per acre. At a density of 18.5 dwelling units per acre the Valle Verde Apartment Project does not require a density bonus.

The Project is requesting the following concessions and incentives pursuant to State law (Government Code 65915) and the City's affordable housing provisions.

- **Increase in SRO Maximum Unit Size.** The SRO development standards establish the maximum unit size at 450 square feet. In order to meet clearance requirements for handicap accessible units within Heritage House, the Project is proposing to combine 16 existing rooms into eight units, resulting in eight approximately 600 square foot units. The Project is requesting a concession to allow these eight units to exceed the established maximum size.
- **Reduction in Distance from Public Transit.** The SRO development standards require that a project be located within 1,200 feet of public transit. The Project is requesting a concession to allow an increase of this distance by 360 feet due to the distance to the existing transit stop that is located near the intersection of Trancas Drive and Valle Verde. The transit stop is an approximately six-minute walk from the Project site.
- **Covered Parking.** Normally each unit of the Valle Verde apartment complex would require one covered parking space per unit. The Project site contains several storm water drainage lines and easements that run generally under the proposed parking areas. These utilities and easements prohibit the construction of any structures within the easements. Therefore, the Project is requesting a concession to wave the covered parking requirement.

2.7.2.5 *Right-of-way Abandonment*

The Applicant requests approval to abandon Valle Verde Drive along the Site frontage, on a portion of Valle Verde Drive north of the Firefly Lane intersection to transfer the abandoned right-of-way to the Applicant for incorporation into the Site to accommodate the parking area. Valle Verde Drive terminates at a dead end at this location and includes on-street parking. The proposed abandonment would facilitate and enhance the site plan of the development by providing adequate room for the required on-site parking. With the exception of the City-owned property to the north of the Site, no other properties take access from this portion of Valle Verde Drive.

2.7.2.6 *Lot Line Adjustment/Lot Merger*

If the City were to approve the abandonment of a portion of Valle Verde Drive, the abandoned right-of-way would be transferred to the Applicant and added to the Site. The Applicant requests approval

to merge the Site and the abandoned right-of-way into two parcels. The Applicant would merge the two parcels located at 3710 and 3720 Valle Verde Drive into one parcel for the Valle Verde Apartments (0.44 acre and 0.55 acre into a 0.99-acre parcel). In addition, the Applicant would merge the Heritage House Site with the abandoned right-of-way are to create a 1.6-acre parcel. Heritage House and the Valle Verde Apartments would both take access from a newly constructed “bulb-out” at the intersection of Valle Verde Drive and Firefly Way.

2.7.2.7 Site Access and Parking

Access to the Site would be provided via an existing driveway on Valle Verde Drive. The Project would provide a total of 79 uncovered, surface parking spaces for both developments. As described in Section 2.7.2.3, the Project meets the City of Napa Municipal Code requirement for the number of overall spaces. However, as part of the requested Project approvals, the Applicant is requesting that City grant the Valle Verde Apartments a concession from the City of Napa’s covered parking requirement. Of the proposed 79 parking spaces, 33 would be dedicated to Heritage House and 46 to Valle Verde Apartments.

The Project proposes onsite bicycle racks at three locations, providing a total of 20 bicycle spaces for residents, guests, and employees of both Heritage House and Valle Verde Apartments, guests, and staff. Spaces are shown located at the Heritage House patio area and near the building entrances for both the buildings. Access to the bike racks at the Heritage House patio area would be provided for residents only.

2.7.2.8 Offsite Multi-Use Recreation Improvements

The Project proposes to improve an existing sidewalk on a parcel west of the Project boundary to a multi-use recreation path with an 8-foot wide bike path, with two-foot shoulders, adjacent to its parking lot (refer to Photos 1 through 4). The path would replace the current Valle Verde Drive connection to nearby trails so that cyclists would not have to ride through the Project’s parking lot. These additions will improve bicycle connectivity.

2.7.2.9 Landscaping

The proposed landscape plan (see Figure 2.7-6) proposes native and drought tolerant landscaping, with a variety of screening trees, flowering accent trees, and ornamental trees and shrubs.

2.7.2.10 Utility Improvements

The proposed Project would replace and install 36,369 square feet of impervious surface on-site. The Project would convey runoff water to four stormwater treatment areas on-site. The Project proposes to connect to existing sanitary sewer and storm drain lines.

The Project would construct a new four-inch domestic water line that would connect to an existing water line located in Valle Verde Drive. A new eight-inch fire water line would also be constructed and connected to an existing water line located in Valle Verde Drive. New irrigation service will be constructed as part of the Project.

An existing streetlight would be relocated at the corner of Valle Verde Drive and Firefly Lane.



Photo 1: View looking north from the west side of Valle Verde Drive, just north of Firefly Lane.



Photo 2: View looking west from where Valle Verde Drive terminates.

PHOTOS 1 & 2



Photo 3: View looking south from the west side of Valle Verde Drive toward Firefly Lane.



Photo 4: View looking south from the west side of Valle Verde Drive (mid-way on the bike path) toward Firefly Lane.

PHOTOS 3 & 4



LANDSCAPE PLAN

FIGURE 2.7-6

2.7.2.1 *Stitch Pier Wall*

The Project would construct a stitch pier retaining structure to address the active erosion of the creek bank at the southern portion of the Site. The stitch pier would be located at the existing asphalt curb and would be constructed outside of the creek channel. The pier would extend approximately 28 feet below grade and would be approximately 85 feet alongside Salvador Creek (refer to Figure 2.7-7).

2.7.2.2 *Bridge Removal*

The Project Applicant is not proposing removal of the existing private concrete and steel bridge (Zerba Bridge) located to the east of the Site that spans Salvador Creek. However, the City may require partial bridge removal as a condition of project approval. As a result, this EIR/EA evaluates the potential removal of the bridge, in particular where impacts would be distinct from the Project (e.g. biological resources and hydrological resources).

Demolition of the bridge could include removal of the bridge decking and tops of piers. The bridge piers may stay in place in order to reduce disturbance to the creek channel. A more detailed discussion of bridge removal can be found in Section 8.0 Alternatives.

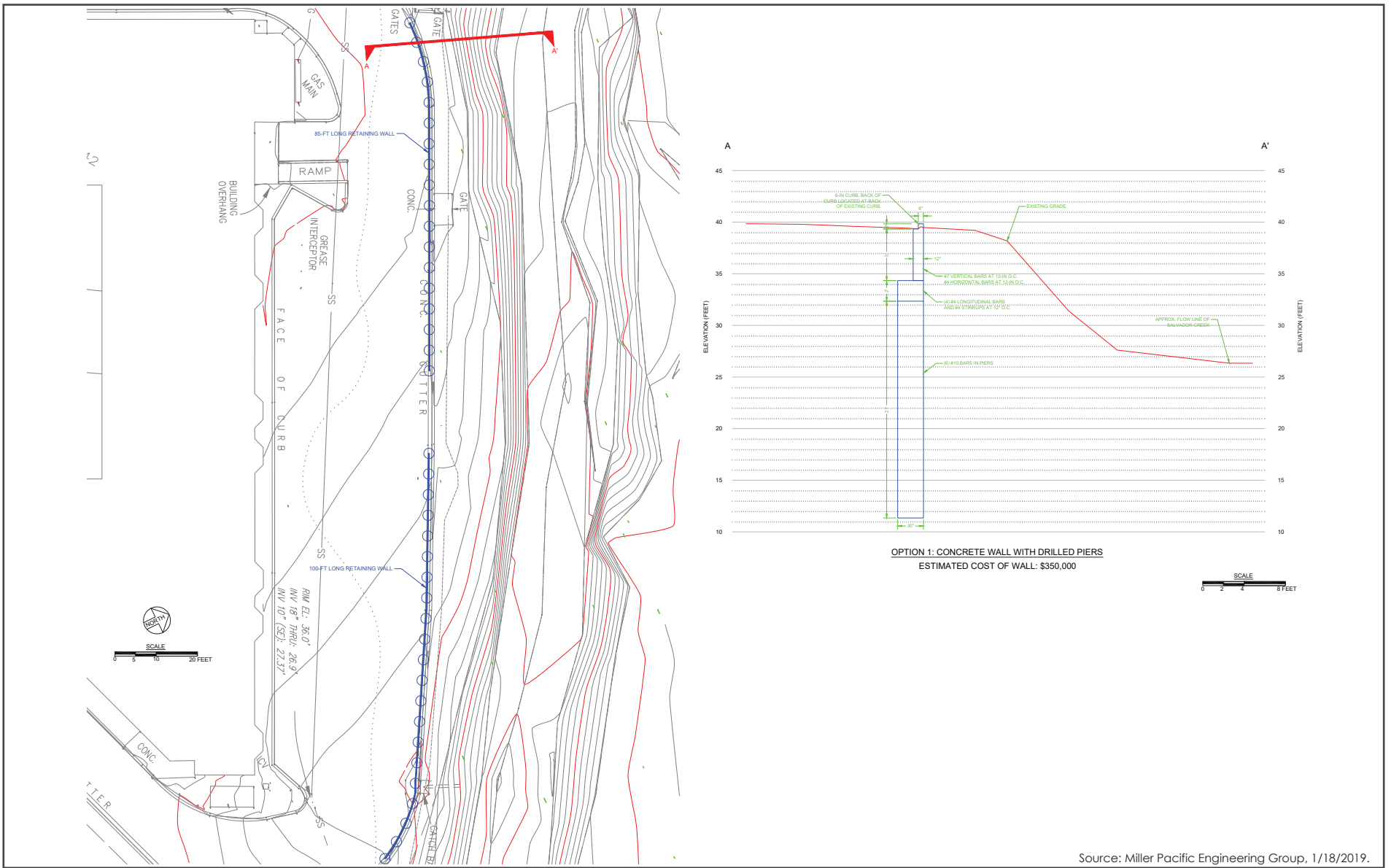
2.7.2.3 *Construction*

Construction of the entire Project is anticipated to take up to 13 months. Demolition and grading would take approximately one month. Approximately 1,746 cubic yards of soil would be removed from the Site (refer to Figure 2.7-2).

2.7.2.4 *Green Building and Energy Efficiency*

The Project proposes to implement the following green building measures and design features to both the Heritage House and Valle Verde buildings to reduce energy use on the Site:

- Reduction of light pollution by shielding fixtures and directing light downward
- Use of high efficacy site lighting
- Use of recycled insulation
- Use of low volatile organic compound materials
- Water efficient fixtures
- Energy efficient appliances
- Low-emitting flooring
- Drought tolerant landscaping



Source: Miller Pacific Engineering Group, 1/18/2019.

SITE PLAN (STITCH WALL)

FIGURE 2.7-7

2.8 LAND USE DESIGNATIONS

2.8.1 General Plan Designation

The Site is currently designated *Multi-Family Residential* (MFR-33H) in the City of Napa General Plan (Envision Napa 2020), which is intended to develop or redevelop into a medium to high intensity predominantly attached unit development pattern. Allowable uses include multi-family units, attached and detached single family, SRO facilities, live-work housing, and similar compatible uses such as day care and larger group quarters (e.g., residential facilities and nursing homes).

The Site is also located within the Vintage Planning Area. The MFR-33H designation allows for a minimum of 18.5 dwelling units per acre and up to 25 dwelling units per acre. However, for SROs, the City's Zoning Ordinance provides that a factor of two shall be applied to the permitted General Plan density range. Therefore, the MFR-33H designation allows for a density range of 37 to 50 SRO units per acre. On the 1.6-acre Heritage House Site, between 59 to 80 SRO units are allowed within this density range. The Project proposes 66 units on the Heritage House Site, including 58 SROs and eight one-bedroom units. Therefore, the proposed Heritage House is consistent with the permitted density range for SRO projects.

The Valle Verde Site is 1.3 acres, which allows for a permitted density of 23 to 33 units. The Project proposes 24 multifamily units on the Valle Verde Site, which is within the allowed density range. Therefore, both the Valle Verde Apartments and the Heritage House would be consistent with the General Plan density allowance.”

2.8.2 Zoning

The Site is zoned *Multi-Family Residential*. This district provides opportunities for a mix of predominantly attached residential development patterns. Allowable uses include medium and higher density multifamily apartments, single-family attached and detached units, group residential, live-work housing, larger residential care facilities, and similar compatible uses such as day care.

Pursuant to the City's Zoning Ordinance, a factor of two is applied to the permitted General Plan density range for SRO projects. As discussed above, the Heritage House would have a density of 41.3 units per acre, which is consistent with the density range of 37 to 50 SRO units per acre permitted in the MFR-33H designation.

2.9 PROJECT PURPOSE, NEED, AND OBJECTIVES

The Project has been designed to achieve the purpose, need, and objectives summarized below. Section 15124(b) of the CEQA Guidelines requires that the project description contain a clear statement of the project objectives, including the underlying purpose of the project. NEPA regulations (40 CFR 1508.9(b)) require that an EA contain a discussion of the purpose and need for the proposed action.

2.9.1 Project Purpose and Need

The purpose of the Project is to create a Continuum of Housing¹ to address the underserved housing needs in the City of Napa. The proposed action would include 33 SRO units of permanent supportive housing for very low-income persons, 33 SRO units for very-low and low-income persons, and 24 new apartments for low-income families.

The Applicant proposes to finance the Project through Department of Housing and Urban Development (HUD) Low Income Housing Tax Credits and Section 8 Project Based Vouchers (PBV) (together, the “HUD funding”), with affordability levels at or below 60 percent of the Area Median Income (AMI). Other sources of financing may include the City of Napa, Napa County, and the California Department of Housing and Community Development. The HUD funding for the Project would be in the form of rental assistance, and the estimated total cost of the Project is \$41.5 million.

The City and County of Napa have moved to a “housing first” model to address the needs of Napa’s homeless and vulnerable populations, which includes seniors, those with disabilities, veterans, and at-risk families and individuals. Housing first is an approach that recognizes that housing is a vital first step that provides people with the stability and security they need to address the issues that caused their homelessness. Once in housing, they are assisted in accessing the range of services and supports they need to maintain stability and maximize their self-sufficiency for the long-term.

The proposed action would help meet the City of Napa’s goals for providing affordable housing. Specifically, the proposed action would help meet the following policies in the City of Napa General Plan: (1) providing a variety of housing types, including SROs and multi-family housing, which meet a wide variety of community housing needs (*Policy H.2.*); (2) encouraging adaptive reuse of vacant buildings with residential/mixed-use projects (*Policy H2.7*); (3) meeting needs for additional supportive and transitional housing for previously homeless (*Policy H4.B*); and (4) providing additional support facilities and services to homeless persons and non-homeless persons with special needs (*Policy H4.C*).

2.9.2 Project Objectives

Pursuant to CEQA Guidelines Section 15124, the EIR must identify the objectives sought by the proposed project. The Applicant’s mission is to support affordable housing development based upon its belief that safe and secure housing for all Napa residents is a fundamental community need and the foundation for a healthy and vibrant community. To further this mission, the specific objectives of the Project are as follows:

- To provide needed housing affordable to low income households on an infill parcel of approximately 2.9 acres, consistent with the City of Napa’s General Plan Housing Element,

¹ Continuum of Housing refers to a range of housing choices, from supportive housing for the homeless to affordable housing for individuals and families. The purpose of the proposed project is to provide stable affordable housing for vulnerable individuals and families linked with on-site and off-site services to assist the residents in retaining their housing, improving their health and allowing them to live and work in the community.

housing policies, and State law for residents in two modalities: apartments for families; and single room occupancy units for individuals.

- To aid the City of Napa in meeting its Regional Housing Needs Allocation (RHNA)² obligation identified by the Association of Bay Area Governments (ABAG/MTC) for affordable housing and confirmed by the California Department of Housing and Community Development (HCD).
- To develop a project consistent with the City and Napa County's Housing First policy to address the needs of Napa's homeless and vulnerable populations, which includes seniors, those with disabilities, veterans, and at-risk families and individuals.
- To redevelop and retrofit an existing dilapidated structure to accommodate the Heritage House as an affordable housing project, including permanent supportive housing with on-site supportive services.
- To construct a new apartment complex with rents affordable to lower income families
- To support the goals of the non-profit Applicants (the Gasser Foundation and Burbank Housing) to provide permanent housing for all Napa residents, which is a fundamental community need and the foundation for a healthy and vibrant community.

2.10 EXISTING CONDITIONS AND TRENDS

Pursuant to NEPA 24 CFR 58.40(a), the EA must determine existing conditions, describe the character, features and resources of the project area and its surroundings, and identify the trends that are likely to continue in the absence of the Project.

2.10.1 Regional Outlook

The Bay Area continues to be one of the most expensive real estate markets in the country. Most Bay Area homes are unaffordable for families with average household incomes. As detailed in the City of Napa Housing Element, of the estimated 12,535 lower income households in Napa, two thirds of households spent more than 30 percent of their monthly income on housing. Of the 7,475 extremely and very low-income households in Napa, 77 percent had a cost burden of over thirty percent and 51 percent spent more than half of their monthly income on housing costs. Of the 5,060 low income households, 52 percent spent over 30 percent, and 20 percent spent over 50 percent of their income on housing.³

Data from the California Employment Development Department (EDD) shows that as of 2012 Leisure and Hospitality surpassed all other employment sectors, becoming the single largest employment sector in Napa County.⁴ A majority of jobs in the Leisure and Hospitality sector tend to

² The Regional Housing Needs Allocation (RHNA) is mandated by the California State Housing Law as part of the periodic process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specific planning periods.

³ County of Napa. *Napa County Housing Element Update Draft Housing Needs Assessment*. December 2014. Site accessed June 13, 2018. Available at <https://www.countyofnapa.org/DocumentCenter/View/3282/Draft-Final-Housing-Element-Needs-AssessmentDecember-2014-PDF>.

⁴ Ibid.

be relatively low paid, which leads to increased demand for affordable workforce housing within the City.

2.10.2 Local Perspective

According to the City of Napa Regional Housing Needs Allocation for 2015 to 2023 (see Table 2.10-1), the City of Napa must add 835 new units by 2023 (of which 185 must be very low, 106 must be low, and 141 must be moderate income units) to meet its RHNA obligation.

Table 2.10-1: City of Napa Regional Housing Needs Allocation, 2015-2023				
Very Low <50 Percent¹	Low < 80 Percent	Moderate <120 Percent	Above Moderate	Total
185	106	141	403	835
Source: City of Napa. <i>Housing Element 2015-2023</i> . Adopted March 3, 2015.				
<u>Notes:</u>				
¹ Median Income is the amount that divides the income distribution into two equal parts: one-half of the cases falling below the median income and the other half above the median.				

2.10.3 Physical Setting/Existing Conditions

As described above, the Site is located at 3700, 3710, and 3720 Valle Verde Drive, just north of the intersection of Firefly Drive and Valle Verde Drive. The Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility. The Valle Verde Site is currently vacant, but previously contained a single-family residential unit and pool, which have been removed. Salvador Creek runs north/south adjacent to the Site’s eastern boundary. There is a closed-off bridge (named the “Zerba” bridge after the former property owners) that spans Salvador Creek from the Valle Verde Site to the neighboring residential development on Ranch Lane, east of Salvador Creek. The bridge no longer provides any access.

2.11 USES OF THE EIR/EA

2.11.1 CEQA

This EIR/EA is intended to provide the City of Napa, other public agencies, and the general public with relevant environmental information needed in for consideration of the Project. The following agencies are expected to use the EIR/EA in their decision making:

- City of Napa
- Army Corps of Engineers (Clean Water Act [CWA] Section 404 Permit)
- California Department of Fish and Wildlife (Section 1602 Lake or Streambed Alteration Agreement)
- Regional Water Quality Control Board (CWA Section 401 Water Quality Certification) U.S. Fish and Wildlife Service/National Marine Fisheries Service (Endangered Species Act Section 7 Consultation)

The City of Napa anticipates the following approvals by the City:

- Right-of-Way Abandonment: A request to abandon a 0.39-acre portion of a City owned public right-of-way, located at the terminus of Valle Verde Drive.
- Lot Merger: A request to merge 3710 and 3720 Valle Verde Drive into one parcel for the Valle Verde Apartments and to merge 3700 Valle Verde Drive and the abandoned right-of-way into one parcel for the Heritage House.
- Use Permit: Section 17.08.020 of the City's Zoning Code requires a use permit for group residential projects, including SROs. Heritage House proposes 66 SROs therefore, a use permit is required for the SRO units.
- Design Review Permit: Section 17.62.050 of the City's Zoning Code requires a design review permit from the City Council for multifamily projects with 31 or more units. The Project proposes 90 units (66 for Heritage House and 24 for Valle Verde Apartments), and therefore requires a design review permit from the City Council.

2.11.2 NEPA

This EIR/EA and associated draft Finding of No Significant Impact (FONSI) is intended to provide the Housing Authority of the City of Napa and/or the City of Napa with federal NEPA environmental review in conformance with the HUD regulations (24 CFR 58.36) if federal funds are acquired for the Project. The Housing Authority of the City of Napa would serve as the NEPA Responsible Entity, assuming lead federal agency status for the proposed Project on behalf of HUD.

SECTION 3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

This combined California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) and National Environmental Policy Act (NEPA) Environmental Assessment (EA), has been completed to meet applicable requirements of both CEQA and NEPA. In order to satisfy both CEQA and NEPA for the proposed Project, this environmental document has been prepared as a joint document, consisting of an EIR under CEQA and an EA under NEPA.

This combined EIR/EA identifies and analyzes the potential environmental impacts of the Project (proposed Project / proposed action) at a project-level. The information and analysis described in this document is organized in accordance with the order of the CEQA checklist in Appendix G of the CEQA Guidelines. Other sections required by NEPA, which are not covered by Appendix G of the CEQA Guidelines, are also included in this document. If the analysis provided in this document identifies potentially significant environmental effects of the Project, mitigation measures that should be applied to the Project are prescribed.

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

3.1	Aesthetics	3.12	Mineral Resources
3.2	Agricultural and Forestry Resources	3.13	Noise and Vibration
3.3	Air Quality	3.14	Population and Housing
3.4	Biological Resources	3.15	Public Services
3.5	Cultural Resources	3.16	Recreation
3.6	Energy	3.17	Transportation/Traffic
3.7	Geology and Soils	3.18	Tribal Cultural Resources
3.8	Greenhouse Gas Emissions	3.19	Utilities and Service Systems
3.9	Hazards and Hazardous Materials	3.20	Wildfire
3.10	Hydrology and Water Quality	4.0	Other Sections Required by NEPA
3.11	Land Use and Planning	5.0	Mitigation Measures and Conditions

The discussion for each environmental subject includes the following subsections:

ENVIRONMENTAL SETTING

This subsection: 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the Project and 2) describes the existing, physical environmental conditions at the Site and in the surrounding area, as relevant.

IMPACTS

This subsection: 1) includes thresholds of significance for determining impacts, 2) discusses the Project's consistency with those thresholds, and 3) discusses the Project's consistency with

applicable plans. For potentially significant impacts, feasible mitigation measures are identified. “Mitigation measures” are measures that will minimize, avoid, or eliminate a potentially significant impact (CEQA Guidelines Section 15370). Each impact is numbered using an alphanumeric system that identifies the environmental issue. For example, **Impact HAZ-1** denotes the first potentially significant impact discussed in the Hazards and Hazardous Materials section. Mitigation measures are also numbered to correspond to the impact they address. For example, **MM NOI-2.3** refers to the third mitigation measure for the second impact in the Noise section.

Cumulative Impacts

The Project’s cumulative impact on the environment are also discussed. Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant effects taking place over a period of time. CEQA Guideline Section 15130 states that an EIR should discuss cumulative impacts “when the project’s incremental effect is cumulatively considerable.” The discussion does not need to be in as great detail as is necessary for project impacts, but is to be “guided by the standards of practicality and reasonableness.” The purpose of the cumulative analysis is to allow decision makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed Project addressed in this EIR/EA.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence. To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document. The analysis must then determine whether the Project’s contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guideline Section 15065(a)(3).

The cumulative discussion for each environmental issue addresses two aspects of cumulative impacts: 1) would the effects of all of the pending development listed result in a cumulatively significant impact on the resources in question? And, if that cumulative impact is likely to be significant, 2) would the contributions to that impact from the proposed Project make a cumulatively considerable contribution to those cumulative impacts?

For the purposes of this document, “reasonably foreseeable” refers to projects that federal, state, or local agency representatives have knowledge of from the formal application process. Table 3.0-1 identifies the pending and approved projects that are within approximately one mile of the Project that are evaluated in the cumulative analysis.

Table 3.0-1: Cumulative Projects List				
Project Name	Address	Distance from Project (miles)	Project Description	Status
Wood Residence	121 Griffen Lane	0.1	Single-family home	Under Construction
Lambrix Residence	133 Griffen Lane and 1132 Serendipity Way	0.1	Single-family home	Under Construction
Riva Reserve House Plans (Big Ranch Road Subdivision)	2091 and 2097 Big Ranch Road	0.1	17 single-family homes	Constructed
Rubenstein Subdivision	47 Garfield Lane	0.3	Eight single-family homes	Under Construction
Old Vine Way Subdivision	40 Garfield Lane	0.3	Six single-family homes	Under Construction
Tyson Court Parcel Map	721 Trancas Street	0.3	Divide 3.28-acre lot into one multi-family lot and a church	Approved
Pheasant Lane Subdivision	5 Pheasant Lane	0.3	Eight single-family homes	Approved
Pear Tree Terrace	1151-1187 1080-1180 Pear Tree Lane	0.5	71 townhome units	Under Review
Manzanita Family Apartments	2951 Soscol Avenue	0.6	51-unit multi-family apartment complex	Approved
Allwest Parcel Map	1155 La Homa Drive	0.6	One single-family home	Approved
Meritage Parcel Map	1180 La Homa Drive	0.6	Four single-family homes	Under Construction
Hoffman Parcel Map	1135 La Homa Drive	0.6	Two single-family homes	Under Construction
Mayacamas Shops	1685 Permanente Way	0.7	14,564 square feet of retail	Under Construction
Emmanuel Eco Village	3875 Jefferson Street	0.8	15 affordable, single-family homes	Under Review
Jaeger Guest House	1835 Sierra Avenue	0.9	One accessory unit	Under Construction

Table 3.0-1: Cumulative Projects List				
Project Name	Address	Distance from Project (miles)	Project Description	Status
Altamura Silverado Hotel	2009 Silverado Trail	0.9	98-room hotel and winery	Under Review
Pietro Place	725 and 737 Central Avenue; 2269 and 2263 Soscol Avenue	1.0	171-unit multi-family apartment complex	Approved
Redwood Duets Amendment	2033 Redwood Road	1.1	34 townhome units	Approved
Khan/Michael Parcel Map	4021 Jefferson Street	1.0	Two single-family homes	Under Review
Miliken Creek Inn Extension	1815 Silverado Trail	1.2	Addition of 16 rooms and 12,800 square feet	Approved
Sources: City of Napa. Planning Division. Projects List.				

For each environmental issue, cumulative impacts may occur over different geographic areas. For example, the Project effects on air quality would combine with the effects of projects in the entire air basin, whereas noise impacts would primarily be localized to the surrounding area. The geographic area that could be affected by the Project varies depending upon the type of environmental issue being considered. Section 15130(b)(3) of the CEQA Guidelines states that lead agencies should define the geographic scope of the area affected by the cumulative effect. Table 3.0-2 provides a summary of the different geographic areas used to evaluate cumulative impacts.

Table 3.0-2: Geographic Considerations in Cumulative Analysis	
Environmental Issue	Geographic Area
Aesthetics	Site and adjacent parcels
Air Quality	San Francisco Bay Area Air Basin
Biological Resources	Site and adjacent parcels
Cultural Resources	Site and adjacent parcels (Prehistoric Resources) Area of Potential Effect (Historic Resources);
Energy	Statewide
Geology and Soils	Site and adjacent parcels
GHGs	Planet-wide
Hazards and Hazardous Materials	Site and adjacent parcels
Hydrology and Water Quality	Napa River watershed
Land Use and Planning/Population and Housing	Site and surrounding neighborhood
Noise and Vibration	Site and adjacent parcels
Public Services and Recreation	City of Napa
Transportation/Traffic	Traffic Impact Analysis study area
Utilities and Service Systems	City of Napa

CONCLUSION

This subsection provides a summary of the Project’s impacts on the resource.

Important Note to the Reader

The California Supreme Court in a December 2015 opinion [*California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478)] confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the Project on the environment, including whether a project may exacerbate existing environmental hazards.

The City of Napa currently has policies that address existing conditions (e.g., air quality, noise, and hazards) affecting a proposed project, which are also addressed in this section. This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or Initial Study) can include information of interest even if such information is not an “environmental impact” as defined by CEQA.

Therefore, where applicable, in addition to describing the impacts of the Project on the environment, this chapter will discuss Planning Considerations that relate to policies pertaining to existing conditions. Such examples include, but are not limited to, locating a project near sources of air emissions that can pose a health risk, in a floodplain, in a geologic hazard zone, in a high noise environment, or on/adjacent to sites involving hazardous substances.

3.1 **AESTHETICS**

3.1.1 **Environmental Setting**

3.1.1.1 ***Regulatory Framework***

State

Scenic Highways Program

The California Scenic Highway Program is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highway Code, Sections 260 through 263. Within the City of Napa, State Route (SR-) 29 and 121 are eligible State Scenic Highways, but not officially designated.

City of Napa

Envision Napa 2020

The City of Napa General Plan establishes policies for future development and redevelopment within the City. The Community Character and Identity section of the Land Use Element includes policies to ensure the City’s small-town identifying character and qualities are maintained. The General Plan includes the following policies for the purpose of reducing or avoiding impacts associated with aesthetics.

Policy	Description
LU-1.2	The City shall strive to preserve and enhance the integrity of existing neighborhoods and to develop new neighborhoods with similar qualities as the existing neighborhoods.
LU-1.8	The City shall strive to preserve its urban forest by maintaining its street tree program and encouraging the preservation of trees on private property.

3.1.1.2 ***Existing Conditions***

Project Site

The Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility, a former senior care facility that is currently fenced off from access (refer to Photos 5 & 6, 7&8). The Valle Verde Site is undeveloped and devoid of structures (refer to Photos 9 & 10). There is a private bridge (named the Zerba bridge,) extending from the Valle Verde Site onto the opposite bank of Salvador Creek (see Photo 11). The bridge is currently not in use.

Mature trees are located adjacent to the Site’s interface with Salvador Creek which runs alongside the Site’s eastern border. The Valle Verde Site has overgrown grass and shrubbery with few mature trees throughout the Site. The Heritage House Site has some ornamental landscaping around the structure



Photo 5: View of Heritage House from Shelter Creek Drive



Photo 6: View of Heritage House from Valle Verde

PHOTOS 5 & 6



Photo 7: View of Salvador Creek from Valle Verde site



Photo 8: View of Valle Verde project site facing Valle Verde

PHOTOS 7 & 8



Photo 9: View of Valle Verde project site from Salvador Creek riparian understory



Photo 10: View of Valle Verde project site from Valle Verde

PHOTOS 9 & 10



Photo 11: View of Zerba Bridge from project site

PHOTO 11

and in the back portion within the parking lot area. The existing sidewalk located adjacent to the Project's western boundary also contains several mature trees.

Surrounding Area

The Site is located within a mixed-density residential neighborhood. There are townhomes directly to the south, across Shelter Creek Drive and catty-corner to the Site along Firefly Lane. There are apartments across Valle Verde Drive to the west. The townhomes and apartments range in height from two to three stories. There are single-story commercial buildings along Valle Verde Drive towards its intersection with Trancas Street.

Single-family residences located across Salvador Creek are visible from the Site. A pedestrian path maintained by the City of Napa runs along the northern boundary of the Site and is accessible from the terminus of Valle Verde Drive.

Scenic Views and Corridors

The City of Napa General Plan Policies LU-1.6 and LU-1.7 identify the City's key gateways and scenic corridors, which include SR 29, SR 121, and SR 221. The nearest of these scenic corridors, SR 121 is approximately 1.3 miles east of the Site. The Site is not identified in the City's General Plan as a key gateway or adjacent to a designated scenic corridor.

3.1.2 Aesthetic Impacts

3.1.2.1 *Thresholds of Significance*

For the purposes of this EIR, an aesthetic impact is considered significant if the Project would:

- 1) Have a substantial adverse effect on a scenic vista;
- 2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- 3) Substantially degrade the existing visual character or quality of the site and its surroundings;
or
- 4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.2.2 *Project Impacts*

Impact AES-1: The Project would not have a substantial adverse effect on a scenic vista.
(Less than Significant Impact)

The Site is not located along a State scenic highway, rural scenic corridor, or City Gateway. Due to the flat topography of the Site, views from the Site are limited to the surrounding residential development in the immediate area. The Project is located within a developed residential area, and there are no scenic vistas that would be impacted by the Project.

The proposed buildings would be consistent in height and massing with surrounding residential and medical facility development. Views of the developed Site would be consistent with the residential character of the surrounding area since the area is already developed with a range of housing

densities and the Project would include landscaping, consistent with the other residential developments in the immediate area.

Impact AES-2: The Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(No Impact)**

The Site is not located along a state scenic highway and no scenic resources such as heritage trees or rock outcroppings are located on the Site.⁵ The proposed trees on-site that would be removed would be replaced in accordance with the requirements of the City's Municipal Code. The existing Sunrise Napa Assisted Living Facility is not designated as a historic resource.

Impact AES-3: The Project would not substantially degrade the existing visual character or quality of public views of the Site and its surroundings. The Project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

Site and Surrounding Development

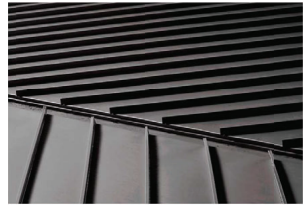
The Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility and associated surface parking lot, while the Valle Verde Site is vacant. The Project area is well developed with mixed residential development and contains a mix of architectural styles and building heights, with no particular design aesthetic being dominant. The proposed Site is located within a mixed residential development area in Napa and any new construction on the Site would be visible from surrounding roadways and properties. The Project would change the visual character of the site by refurbishing the existing Sunrise Napa Assisted Living Facility building and constructing a new three-story multi-family apartment building. The Project's exterior finishing's would include cement board siding, a metal roof, and metal balcony rails (refer to Figure 3.1-1). Refurbishing the dilapidated vacant building and installing and regularly maintaining landscaping would improve the appearance of the Site.

There are 45 trees⁶ that would be removed on the Site due to their locations within the proposed development area or overall poor condition. Overall, the existing landscape at the Project Site is in a neglected condition. The Project proposes to plant a variety of screening trees, flowering accent trees, ornamental trees, and shrubs (refer to Figure 2.7-6). The Project's proposed landscaping would represent a visual improvement over the existing onsite landscaping.

The Project would be required to meet the City's design standards and undergo design review as part of the entitlement process. The City's development review process would ensure that the architecture and design of the Project would be consistent with the City's visual environment. For this reason and

⁵ City of Napa. *City of Napa Registry of Significant Trees*. January 27, 2016. Accessed on April 29, 2019. Available at: https://docs.wixstatic.com/ugd/51100c_4d351324e01d4fd492cadd8e731b99ff.pdf.

⁶ Of the 45 trees to be removed, 12 are protected native trees as defined by the City's Municipal Code. The Project would replace trees consistent with the City's Municipal Code, refer to Section 3.4 Biological Resources.



STANDING SEAM METAL ROOFING



CEMENT BOARD SIDING



VINYL WINDOW



METAL BALCONY RAILING

MATERIAL PALETTE

VALLE VERDE



COLOR PALETTE

HERITAGE HOUSE



SITE PERSPECTIVE

Source: MWA Architects, 4/26/2018.

COLOR AND MATERIALS BOARD

FIGURE 3.1-1

those stated above, the proposed Project would not substantially degrade the existing visual character of the Site or its surroundings.

Shade and Shadow

There is no specific City policy which quantifies the impact of shadows from new development projects. The City of Napa, however, typically identifies shade and shadow impacts as occurring when a building or other structure substantially reduces natural sunlight on public open spaces.

Development of the Project would result in the addition of a new three-story multi-family apartment building, comparable in size to existing surrounding development. While the Project would shade portions of the adjacent open space area to the north used as a storm detention basin, maintaining access to sunlight is not intrinsic to its function/purpose. No other areas of existing public parks or open space areas would be shaded by the buildings during the summer. While the Project would slightly increase shading on the storm detention basin during the mid-day, the increase would not be substantial, and the increased shading would not preclude use of the public open space area. The proposed Valle Verde Apartments would be three stories in height, which is comparable to surrounding development, and would be setback from both the open space area to the north by approximately 70 feet, and from the riparian corridor by approximately 100 feet. Therefore, shadows cast by the proposed buildings would have a less than significant impact.

Impact AES-4: The Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

The Site is developed and located in a residential area with single- and multi-story residences. The existing Sunrise Napa Assisted Living Facility on the Heritage House Site includes some minimal outdoor lighting (i.e., security lights on the buildings). The Project would install new light fixtures as part of the redevelopment of the Heritage House Site and development of the Valle Verde Site. Lighting would be shielded and focused to limit spillover, consistent with City requirements. Glare-producing or reflective materials are not proposed for the project exterior.

Lighting of the buildings would be required to be consistent with the City's design guidelines and applicable zoning code. The design of the Project would also be subject to the City's design review process and would be required to utilize exterior materials that do not result in a substantial new source of light and glare, consistent with General Plan policies. As a result, the Project would not significantly impact adjacent uses with light and glare from building materials. In addition, Project lighting would comply with ratings listed in the California Building Standards Code (CBC), which minimizes light pollution that is disruptive to the environment by reducing the amount of backlight, uplight, and glare generated by luminaires. For these reasons, the Project would not create a substantial new source of light and glare that would adversely affect day or nighttime views in the area.

3.1.2.1 *Cumulative Impacts*

Impact AES-C: The Project would not result in a cumulatively considerable contribution to a significant cumulative aesthetics impact. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative aesthetic impacts is the immediate Project vicinity. A cumulative aesthetic impact would only occur if multiple projects are constructed within the same viewshed. None of the projects lists in Table 3.0-1 are located within the same view corridor (e.g. surrounding properties) as the Project. Further, all cumulative projects occurring within the City of Napa would be subject to the City's design guidelines and lighting standards. Implementation of these guidelines and standards would minimize visual impacts associated with aesthetics to a less than significant level. For these reasons, the cumulative projects, including the Project, would not contribute considerably to a significant cumulative aesthetic or visual impacts.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

3.2.1 Environmental Setting

3.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Resources Agency's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published County maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space use. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to identify sites that may include agricultural resources or are zoned for agricultural uses.

Forest Land, Timberland, and Timberland Production

The California Department of Forestry and Fire Protection (Cal Fire) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.⁷ Programs such as Cal Fire's Fire and Resource Assessment Program (FRAP) and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.

3.2.1.2 *Existing Conditions*

According to the State of California, Department of Conservation *Farmland Mapping and Monitoring Program*, the Site is designated Urban and Built-Up Land.⁸ Urban and Built-up Land is defined as residential land with a density of at least six units per ten-acre parcel, as well as land used for industrial and commercial purposes, golf courses, landfills, airports, sewage treatment, and water

⁷ *Forest land* is land that can support 10-percent native tree cover and allows for management of one or more forest resources, including timber, fish, wildlife, and biodiversity (California Public Resources Code Section 12220(g)); *Timberland* is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing a crop of trees used to produce lumber and other forest products, including Christmas trees (California Public Resources Code Section 4526); and *Timberland Production* is land devoted to and used for growing and harvesting timber and other compatible uses (Government Code Section 51104(g)).

⁸ State of California, Department of Conservation. *California Important Farmland Finder*. Accessed August 8, 2018. Available at: <https://maps.conservation.ca.gov/dlrp/ciff/>.

control structures. No forest land or timberland, as defined in Public Resources Code Section 12220(g), is located near the Site.

3.2.2 Agricultural and Forestry Resources Impacts

3.2.2.1 *Thresholds of Significance*

For the purposes of this EIR, an agricultural and forestry resource impact is considered significant if the Project would:

- 1) 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;
- 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- 3) 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));
- 4) Result in a loss of forest land or conversion of forest land to non-forest use; or
- 5) 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.

3.2.2.2 *Project Impacts*

Impact AG-1: The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, 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 Site is not used for agricultural purposes and is not designated by the Department of Conservation as farmland of any type. For these reasons, the Project would not result in impacts to agricultural resources by converting farmland to non-agricultural uses.

Impact AG-2: The Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The Site is not zoned for agriculture, and it is not the subject of a Williamson Act contract. Therefore the Project would not conflict with existing zoning for agriculture or result in the cancellation of a Williamson Act contract.

Impact AG-3: The Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

The Site and surrounding area are developed with urban uses and are not zoned for forest land or timberland. The Project would not conflict with existing zoning for forest land, timberland, or timberland production.

Impact AG-4: The Project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

Neither the Site, nor any of the properties adjacent to the Site or in the vicinity, is used for forest land or timberland. The proposed Project would, therefore, not result in a loss or conversion of forest land or timberland.

Impact AG-5: The Project would not 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)**

According to the *Napa County Important Farmland 2016* map, the Site and surrounding area are designated as Urban and Built-Up Land. Therefore, redevelopment of the Site would not result in conversion of any forest or farmlands.

3.2.2.3 Cumulative Impacts

Impact AG-C: The Project would not result in a cumulatively considerable contribution to a significant agricultural and forestry resources impact. **(No Cumulative Impact)**

The proposed Project would not impact agricultural or forest resources or lands; as neither the Site nor the surrounding area is designated as farmland or forest land or used for agricultural or forestry uses; therefore, it would not contribute to a cumulative agricultural or forest impact.

3.3 AIR QUALITY

The following discussion is based, in part, on an Air Quality and Greenhouse Gas Assessment prepared by *Illingworth & Rodkin, Inc.* in October 2018 and revised in March 2019. A copy of the report is attached as Appendix B: Air Quality and Greenhouse Gas Assessment to this EIR/EA.

3.3.1 Environmental Setting

3.3.1.1 *Regulatory Framework*

Federal and State

Air Quality Overview

Federal, state, and regional agencies regulate air quality in the San Francisco Bay Area Air Basin, within which the proposed Project is located. At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The California Air Resources Board (CARB) is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act.

Regional and Local Criteria Pollutants

The federal Clean Air Act requires the EPA to set national ambient air quality standards for six common air pollutants (referred to as “criteria pollutants”), including particulate matter (PM), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate.

Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. “Attainment” status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB. The Bay Area as a whole does not meet state or federal ambient air quality standards for ground level ozone and fine particulate matter (PM_{2.5}), nor does it meet state standards for respirable particulate matter (PM₁₀). The Bay Area is considered in attainment or unclassified for all other pollutants.

Toxic Air Contaminants and Fine Particulate Matter

Toxic Air Contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality, usually because they cause cancer. TACs are found in ambient air, especially in urban areas, and are released by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. CARB has adopted regulations for stationary and mobile sources to reduce emissions of diesel exhaust and diesel particulate matter (DPM). Several of these regulatory programs affect medium and heavy-duty diesel trucks, which represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles

are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).⁹

Fine Particulate Matter (PM_{2.5}) is a complex mixture of substances that includes elements such as carbon and metals, compounds such as nitrates, organics, and sulfates, and mixtures such as diesel exhaust and wood smoke. Because of their small size (particles are less than 2.5 micrometers in diameter), PM_{2.5} can lodge deeply into the lungs. According to the Bay Area Air Quality Management District (BAAQMD), PM_{2.5} is the air pollutant most harmful to the health of Bay Area residents.

Common stationary sources of TACs and PM_{2.5} include gasoline stations, dry cleaners, and diesel backup generators. The other more significant, common mobile source is motor vehicles on roadways and freeways. Unlike regional criteria pollutants, local risks associated with TACs and PM_{2.5} are evaluated on the basis of risk to human health rather than comparison to an ambient air quality standard or emission-based threshold.

Regional

2017 Clean Air Plan

BAAQMD is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards would be met. BAAQMD's most recently adopted plan is the *Bay Area 2017 Clean Air Plan (2017 CAP)*. The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD would continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The City of Napa and other jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality Impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

⁹ CARB. "Overview: Diesel Exhaust and Health". Accessed April 16, 2018. <https://www.arb.ca.gov/research/diesel/diesel-health.htm>.

Local

Envision Napa 2020

The following policies relate to air quality generally and are applicable to the proposed Project.

Policy	Description
NR-5.1	The City shall encourage the use of mass transit, bicycle facilities and pedestrian walkways in order to decrease use of private vehicles and thereby reduce emissions from mobile sources.
NR-5.2	The City shall encourage land use patterns and management practices that conserve air and energy resources, such as mixed-use development and provisions for local-serving commercial uses adjacent to neighborhoods.
NR-5.4	The City shall, during discretionary review, require that development proposals comply with federal and state air quality standards, or make findings that the project has overriding benefits to the community that outweigh nonattainment of the standards.
NR-5.5	<p>The City shall, during early consultation with project proponents, encourage project design that minimizes direct and indirect air emissions. Projects should consider the following air quality concerns:</p> <ul style="list-style-type: none">a) Land use and design measures to encourage alternatives to the automobile and to conserve energy,b) Land use and design measures to minimize exposure of sensitive receptors to odors, toxics, and criteria pollutants, andc) Applicable Bay Area Air Quality Management District rules, regulations, and permit requirements

3.3.1.2 *Existing Conditions*

Climate and Topography

The City of Napa is located within the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

Sensitive Receptors

The Bay Area Air Quality Management District defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill, and the chronically ill) are likely to be located. These land uses include residences, school playgrounds, child-care centers, retirement homes, convalescent homes, hospitals, and medical clinics. The closest offsite sensitive receptors to the Site are residents residing in townhomes across the street from the Site, to the west on Valle Verde Drive, with additional residences in the nearby area surrounding the Site. Queen of

the Valley Medical Center is located approximately 600 feet west of the Project site. The Project would include sensitive receptors.

3.3.2 Air Quality Impacts

3.3.2.1 *Thresholds of Significance*

For the purposes of this EIR, an air quality impact is considered significant if the Project would:

- 1) Conflict with or obstruct implementation of the applicable air quality plan;
- 2) Violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation;
- 3) Expose sensitive receptors to substantial pollutant concentrations; or
- 4) Result in substantial emissions (such as odors or dust) adversely affecting a substantial number of people.

Impacts from the Project

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Napa has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and PM_{2.5}. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 3.3-1, following page.

Impacts to the Project

The California Supreme Court issued an opinion that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards (i.e., impacts to a project) unless the Project would exacerbate existing environmental hazards.¹⁰ Specific circumstances where CEQA does require the analysis of exposing new populations to environmental hazards include the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing.¹¹ The Project does not fall under any of these situations.

Nevertheless, the City of Napa has policies that address existing air quality conditions affecting a proposed Project, which are also discussed below. The criteria used by the City of Napa for determining whether new receptors would be affected are the same as those listed for Project Health Risk and Cumulative Health Risk Table 3.3-1.

¹⁰ California Supreme Court published opinion in *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478), filed December 17, 2015.

¹¹ Although CEQA does not generally require an evaluation of the effects of existing hazards on future users of the proposed project, it calls for such an analysis in several specific contexts involving certain airport (Public Resources Code Section 21096), school projects (Public Resources Code Section 21151.8), and housing projects (Public Resources Code subsection 21159.21).

Table 3.3-1: Community Risk Significance Thresholds

Pollutant	Construction	Operation	
	Average Daily Emissions (pounds)	Average Daily Emissions (pounds)	Maximum Annual Emissions (tons)
ROG, NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
Fugitive Dust (PM ₁₀ /PM _{2.5})	Implement Best Management Practices	None	None
Risk and Hazards for New Sources and Receptors (Project)	Same as operational threshold	<ul style="list-style-type: none"> Increased cancer risk of >10.0 in one million Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute) Ambient PM_{2.5} increase: > 0.3 μ/m³ (Zone of influence: 1,000-foot radius from property line of source or receptor) 	
Risk and Hazards for New Sources and Receptors (Cumulative)		<ul style="list-style-type: none"> Increased cancer risk of >100 in one million Increased non-cancer risk of > 10.0 Hazard Index (chronic or acute) Ambient PM_{2.5} increase: > 0.8 μ/m³ (Zone of influence: 1,000-foot radius from property line of source or receptor) 	
Sources: BAAQMD CEQA Thresholds Options and Justification Report (2009) and BAAQMD CEQA Air Quality Guidelines (dated May 2017).			

Impact AIR-1: The Project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant Impact)**

BAAQMD is the agency primarily responsible for assuring the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. BAAQMD’s most recent adopted plan is the Bay Area 2017 Clean Air Plan. Determining consistency with the 2017 CAP involves assessing whether applicable control measures in the 2017 Clean Air Plan are implemented. Implementation of control measures improve air quality and protect health. The Project’s consistency with applicable control measures is summarized in Table 3.3-2, below. As shown in Table 3.3-2, the Project is consistent with applicable control measures. In addition, the Project would not exceed the BAAQMD thresholds for operational criteria air pollutant emissions, as discussed below. For these reasons, the Project would not conflict with or obstruct implementation of the CAP.

Table 3.3-2: Bay Area 2017 Clean Air Plan Applicable Control Measures		
Control Measures	Description	Project Consistency
<i>Transportation Control Measures</i>		
Trip Reduction Programs	Encourage trip reduction policies and programs in local plans, e.g., general and specific plans. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips.	The Project proposes to construct a Class I 12-foot wide bicycle facility parallel to Salvador Creek on the western boundary of the Site. The proposed bicycle facility would encourage non-automobile travel and connect the Site to the larger network of bicycle and pedestrian facilities.
Bicycle and Pedestrian Access and Facilities	Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	As stated above, the Project would construct a 12-foot wide bicycle facility alongside Salvador Creek adjacent to the Site. The proposed bicycle facility would encourage non-automobile travel and connect the Site to the larger network of bicycle and pedestrian facilities.
Land Use Strategies	Support implementation of Plan Bay Area, maintain and disseminate information on current climate action plans and other local best practices.	The Project proposes development of residential units at an infill, urban location in proximity to bus routes. The Project, therefore, is consistent with this measure.
<i>Building Control Measures</i>		
Green Building	Identify barriers to effective local implementation of the CalGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Engage with additional partners to target reducing emissions from specific types of buildings.	Both the Valle Verde Apartments and Heritage House would comply with the CALGreen building standards. The Project, therefore, is consistent with this measure.
Urban Heat Island Mitigation	Develop and urge adoption of a model ordinance for “cool parking” that promotes the use of cool surface treatments for new parking facilities. Develop and promote adoption of model building code requirements for new construction or re-roofing/roofing upgrades for commercial and residential multi-family housing.	The Project would plant new landscaping and trees throughout the Site which would help reduce the Project’s heat island effect. The Project, therefore, is consistent with this measure.
<i>Waste Management Control Measures</i>		
Recycling and Waste Reduction	Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects.	The Project would provide recycling services to Project residents via the City’s Residential Recycling Program. The Project, therefore, is consistent with this measure.

Table 3.3-2: Bay Area 2017 Clean Air Plan Applicable Control Measures		
Control Measures	Description	Project Consistency
<i>Water Control Measures</i>		
Support Water Conservation	Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	Both the Valle Verde Apartments and Heritage House would comply with CalGreen and reduce potable indoor water consumption and outdoor water use by including water efficient fixtures and planting drought tolerant non-invasive landscaping. The Project, therefore, would be consistent with this measure.

Impact AIR-2: The Project would not violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation. **(Less than Significant Impact)**

The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the federal Clean Air Act and California Clean Air Act. The area is also considered non-attainment for PM₁₀ under the California Clean Air Act, but not the federal act. The area has attained both state and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and particulate matter, BAAQMD has established thresholds of significance for these air pollutants and their precursors (refer to Table 3.3-1). These thresholds are for ozone precursor pollutants (reactive organic gases [ROG] and nitrogen oxides [NOx]), PM₁₀, and PM_{2.5}, and apply to both construction period and operational period impacts.

Air Quality Standards

As discussed below, the Project would have emissions below the BAAQMD thresholds for ozone precursors and particulate matter. Therefore, the Project would not contribute substantially to existing or projected violations of those standards. Carbon monoxide emissions from traffic generated by the Project would be the pollutant of greatest concern at the local level.

Congested intersections with a large volume of traffic have the greatest potential to cause highly localized concentrations of carbon monoxide. Air pollutant monitoring data indicate that carbon monoxide levels have been at levels that are below State and federal standards in the Bay Area since the early 1990s. As a result, the region has been designated as in attainment for the carbon monoxide standard.

The highest measured level of carbon monoxide over any eight-hour period during the last three years in the Bay Area is less than 3.0 parts per million (ppm), compared to the ambient air quality standard of 9.0 ppm. The Project would generate 264 trips (refer to Table 3.17-2 in *Section 3.17 Transportation/Traffic*). Intersections affected by the Project would have traffic volumes below the

BAAQMD screening criteria¹² and, therefore, would not cause a violation of an ambient air quality standard or have a considerable contribution to cumulative violations of these standards.

Construction Period Emissions

Renovation of the existing Sunrise Napa Assisted Living Facility building to create the Heritage House would produce small quantities of construction air pollutant emissions and would not affect the overall emissions emitted during construction of the Project. Therefore, only construction emissions from Valle Verde Apartments were analyzed in the air quality report prepared for the Project.

Construction period emissions were modeled based on an equipment list and schedule information provided by the applicant. Refer to Appendix B: Air Quality and Greenhouse Gas Assessment for more detail about the modeling, data inputs, and assumptions. Construction activities, particularly during site preparation and grading would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Construction of the Project would last approximately nine months. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. Table 3.3-3 below summarizes the Project’s estimated construction emissions of ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust.

Table 3.3-3: Criteria Air Pollutant Significance Thresholds for Project Emissions				
Scenario	ROG	NO_x	PM₁₀	PM_{2.5}
Total construction emissions (tons) ¹	0.24 tons	0.51 tons	0.06 tons	0.04 tons
Total operational emissions (tons) ¹	0.18 tons	0.27 tons	0.14 tons	0.04 tons
<i>BAAQMD Thresholds (pounds per day)</i>	<i>10 tons/yr</i>	<i>10 tons/yr</i>	<i>15 tons/yr</i>	<i>10 tons/yr</i>
<i>NEPA de minimis thresholds²</i>	<i>100 tons/yr</i>	<i>100 tons/yr</i>	<i>100 tons/yr</i>	<i>100 tons/yr</i>
Exceed Threshold?	No	No	No	No
Note: ¹ Assumes 269 workdays, ² Assumes 365-day operation ² A de minimis threshold is the minimum threshold for which a conformity determination must be performed, for various criteria pollutants in various areas.				

The calculated ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust emissions are below the BAAQMD thresholds of significance. BAAQMD considers construction emissions impacts that are below the thresholds of significance (such as those of the Project) less than significant if Best Management

¹² The BAAQMD CEQA Air Quality Guidelines state that a proposed project would result in a less than significant impact to localized carbon monoxide concentrations if the project would not increase traffic at affected intersections with more than 44,000 vehicles per hour.

Practices (BMPs) are implemented. The Project would implement the following BMPs to reduce potential fugitive dust:

Best Management Practices:

During any construction period ground disturbance, the applicant shall ensure that the Project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less than significant level. The contractor shall implement the following best management practices that are required of all projects:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations.

Operational Period Emissions

The Project proposes the development of up to 90 dwelling units (24 new affordable apartment units and conversion of an existing building into eight one-bedroom units and 58 SROs). Operational air emissions from the Project would be generated primarily from vehicles driven by future residents and employees of the Project.

Operational air emissions from the Project would be below the BAAQMD screening threshold of 78 dwelling units for the “Apartment, low-rise” land use type and 143 dwelling units for “Congregate care facility” for the proposed SRO units. The Project, therefore, would not result in a significant operational emissions impact.

Impact AIR-3: The Project would expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant with Mitigation Incorporated)**

As discussed in Impact AIR-1, the Project would have emissions below the BAAQMD thresholds for ozone precursors and particulate matter. Therefore, the Project would not contribute substantially to existing or projected violations of those standards. Carbon monoxide emissions from traffic generated by the Project would be the pollutant of greatest concern at the local level.

Congested intersections with a large volume of traffic have the greatest potential to cause highly localized concentrations of carbon monoxide. Air pollutant monitoring data indicate that carbon monoxide levels have been at levels that are below state and federal standards in the Bay Area since the early 1990s. As a result, the region has been designated as attainment for the carbon monoxide standard.

The highest measured level of carbon monoxide over any eight-hour period during the last three years in the Bay Area is less than 3.0 parts per million (ppm), compared to the ambient air quality standard of 9.0 ppm. Intersections affected by the Project would have traffic volumes below the BAAQMD screening criteria¹³ and, therefore, would not cause a violation of an ambient air quality standard or have a considerable contribution to cumulative violations of these standards.

Community Risk

Project impacts related to increased community risk can occur either by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of Toxic Air Contaminants (TACs) or by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity.¹⁴ Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. As discussed above, these exhaust air pollutant emissions would not contribute substantially to existing or projected air quality violations. Construction exhaust emissions, however, may still pose community health risks for sensitive receptors such as nearby residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors.

¹³ For a land-use project type, the BAAQMD CEQA Air Quality Guidelines state that a proposed project would result in a less than significant impact to localized carbon monoxide concentrations if the project would not increase traffic at affected intersections with more than 44,000 vehicles per hour.

¹⁴ Toxic air contaminants are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level. Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). Additional details about air pollutants and their regulations are included in Appendix B.

Community Health Risk Assessment

A health risk assessment (see Appendix B) of the Project construction activities was conducted that evaluated potential health effects of sensitive receptors at these nearby residences from construction emissions of DPM and PM_{2.5}. The closest sensitive receptors to the Site are residents in townhomes across from the construction site, to the west on Valle Verde Drive, with additional residences in the nearby area surrounding the Site (refer to Figure 3.3-1). Dispersion modeling was used to predict the off-site concentrations resulting from Project construction to evaluate lifetime cancer risks and non-cancer health effects.

Construction period emissions were modeled using the CalEEMod model and were based on a construction build-out scenario, proposed equipment lists, and schedule information provided by the Applicant. It was assumed that the Heritage House would include 3,000 square feet of building demolition¹⁵, and for the Valle Verde Apartments, 1,746 cubic yards (cy) of export and 746 cy of import of soil hauling for the grading phase, 240 one-way cement truck trips during building construction, and 40 one-way asphalt trips during paving.¹⁶

PM₁₀ exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles from all construction stages total 0.0242 tons (48 pounds). The on-road emission would result from haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. Fugitive dust emissions were calculated by CalEEMod as 0.0106 tons (21 pounds) for the overall construction period.

Predicted Cancer Risk and Hazards

Based on the US EPA AERMOD dispersion model, the maximum-modeled DPM and PM_{2.5} concentrations would occur at the single-family residence at 2115 Ranch Court, across Salvador Creek on the first-floor level. Results of this assessment indicate that the maximum increased residential cancer risks would be 12.6 in one million for an infant exposure and 0.2 in one million for an adult exposure. The maximum residential excess cancer risk would be above the BAAQMD significance threshold of 10.0 in one million. This is considered a significant impact that would be reduced to a less-than-significant level with the implementation of the following mitigation measure.

¹⁵ The air quality analysis accounted for the demolition of the former 3,000 square-foot structure to conservatively calculate the Project's impacts. By including the demolition in the modeling, the number of hauling trips has been slightly overestimated.

¹⁶ Refer to Appendix B for more detail about the modeling, data inputs, and assumptions regarding building demolition and soil export.



PROJECT CONSTRUCTION SITE AND LOCATIONS OF OFF-SITE SENSITIVE RECEPTORS AND MAXIMUM TAC IMPACTS

FIGURE 3.3-1

Mitigation Measure:

MM AIR-3.1: During any construction period ground disturbance, the applicant shall ensure that the Project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following best management practices that are required of all projects:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
5. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
6. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
7. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
8. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
9. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
10. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
11. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

MM AIR-3.2:

The Project shall develop a plan demonstrating that the off-road equipment used on-site to construct the Project would achieve a fleet-wide average 21 percent reduction in particulate matter exhaust emissions or more. One feasible plan to achieve this reduction would include the following:

- All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall, at a minimum, meet U.S. EPA particulate matter emissions standards for Tier 2 engines or equivalent. The use of equipment that includes CARB-certified Level 3 Diesel Particulate Filters would also meet this requirement. Alternatively, the use of alternatively-fueled equipment (i.e., non-diesel) would meet this requirement.

Implementation of MM AIR-3.1 and MM AIR-3.2 would reduce fugitive dust emissions by over 70 percent and reduce on-site diesel exhaust emissions by over 50 percent. Thereby reducing the cancer risk proportionally, such that the residential receptor would be less than 9.3 in one million and the maximum annual PM_{2.5} concentration would be reduced to less than 0.07 µg/m³, which is less than the BAAQMD significance thresholds. As a result, the Project would have a less-than-significant impact with respect to community risk, as shown in Table 3.3-4.

Cumulative Impacts on Construction Maximally Exposed Individual (MEI)

Permitted stationary sources of air pollution near the Site were identified using BAAQMD's Stationary Source Risk & Hazard Analysis Tool. The nearest stationary source of air pollution to the Site is Queen of the Valley Medical Center which has emergency diesel generators and is located at 1000 Trancas Street, approximately 950 feet from the Site. The cumulative impacts of TAC emissions from construction of the Project and the nearby stationary source on the construction MEI¹⁷ are shown in Table 3.3-4 below. The construction MEI would represent the worst-case scenario as its calculated unmitigated maximum cancer risk concentrations exceeded the BAAQMD single-source threshold. The screening levels reported for cumulative sources were computed in the same manner described above.

As shown in Table 3.3-4, the predicated maximum-modeled annual PM_{2.5} concentration and maximum annual residential DPM concentration would be below the respective BAAQMD significance thresholds. Project construction would not result in a Hazard Index in excess of the BAAQMD threshold. The sum of impacts from combined sources at the construction MEI would not exceed the cumulative threshold for cancer risk of 100.0 cases per million. The Project's contribution to the cumulative construction impact would be less than significant.

¹⁷ The construction maximally exposed individual (MEI) is the individual that is exposed to the highest concentration of an air pollutant during project construction.

Table 3.3-4: Impacts from Sources at Construction MEI				
Source		Maximum Cancer Risk (per million)	PM_{2.5} concentration (µg/m³)	Hazard Index
Project Construction	Unmitigated	12.6 (infant)	0.12	0.02
	Mitigated	9.3 (infant)	0.07	0.01
BAAQMD Single-Source Threshold Significant?		>10.0 Yes (Unmitigated)	>0.3 No	>1.0 No
Plant # 1082 (Generators) at 950 feet		12.7	0.02	0.01
<i>Combined Sources</i>	<i>Unmitigated</i>	25.3	0.14	0.03
	<i>Mitigated</i>	22.0	0.09	0.02
BAAQMD Threshold – Combined Sources Significant?		100 No	0.8 No	10.0 No

Impact AIR-4: The Project would not result in substantial emissions (such as odors or dust) adversely affecting a substantial number of people. **(Less than Significant Impact)**

Odors are generally considered an annoyance rather than a health hazard. Land uses that have the potential to be sources of odors that generate complaints include, but are not limited to, wastewater treatment plants, landfills, composting operations, and food manufacturing facilities. Residential development, such as the proposed Project, does not typically generate objectionable odors.

3.3.2.2 *Cumulative Impacts*

Impact AIR-C: The Project would not result in a cumulatively considerable contribution to a significant air quality impact. **(Less than Significant Cumulative Impact)**

The San Francisco Bay Area Air Basin (SFBAAB) is currently designated as a non-attainment area for state and national ozone standards and national particulate matter ambient air quality standards. SFBAAB's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is cumulatively considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in

significant adverse air quality impacts to the region's existing air quality conditions. As described in this section and Appendix B, the project would not exceed thresholds for criteria pollutants either during construction or operation and, therefore, would not make a considerable contribution to cumulative regional air quality impacts.

3.4 **BIOLOGICAL RESOURCES**

The following discussion is based, in part, on a Biological Resources Technical Report and an Arborist Report, prepared by *WRA* in May 2019 and revised in July 2019. Copies of the reports are attached as Appendix C: Biological Resources and Appendix D: Arborist Report.

For the purposes of this EIR/EA, the “Study Area” includes only areas where biological resources are anticipated to be impacted by the Project. The 3.27-acre area includes the proposed limits of work for the Project and additional areas along the Salvador Creek.

3.4.1 Environmental Setting

3.4.1.1 *Regulatory Framework*

Federal and State

Special-Status Species

Individual plant and animal species listed as rare, threatened or endangered under state and federal Endangered Species Acts are considered ‘special-status species.’ Federal and state “endangered species” legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the “take” of a species listed as threatened or endangered. To “take” a listed species, as defined by the State of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” said species. “Take” is more broadly defined by the federal Endangered Species Act to include “harm” of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Section 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Guidelines. These may include plant species of concern in California listed by the California Native Plant Society and CDFW listed “Species of Special Concern”.

Migratory Bird and Birds of Prey Protections

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, a violation of the MBTA. Additionally, nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines “taking” as causing abandonment and/or loss of reproductive efforts through disturbance.

California Native Plant Protection Act

The California Native Plant Protection Act (CNPPA) affords protection to plant species designated rare or endangered by the Fish and Game Commission through prohibition of “take,” with some exceptions. Plants designated as rare or endangered through CNPPA are subject to review through CEQA.

California Fish and Game Code

The CDFW is authorized under the California Fish and Game Code, Sections 1600 to 1603, to enter into a Streambed Alteration Agreement with applicants and develop mitigation measures when a proposed project will obstruct the flow or alter the bed, channel, or bank of a river or stream in which there is a fish or wildlife resource, including intermittent and ephemeral streams.

Waters of the U.S.

The U.S. Army Corps of Engineers (USACE) regulates “Waters of the United States” under Section 404 of the Clean Water Act. Waters of the U.S. are defined in the Code of Federal Regulations as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (intrastate waterbodies, including wetlands), and their tributaries (33 Code of Federal Regulations 328.3). The USACE requires that a permit be obtained if a project proposes placing structures within, over, or under navigable waters and/or discharging dredged or fill material into waters of the U.S. below the ordinary high water mark in non-tidal waters. USACE permits typically require a project to provide mitigation that results in no net loss of wetland functions or values.

Sensitive Habitats

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation, protection, or consideration by the USACE, Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Bats

Section 2000 and 4150 of the California Fish and Wildlife Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as “an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering”.

CDFW Stream/Riparian Habitat

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW. Provisions of these regulations apply to modifications of sensitive aquatic habitats and riparian habitats within the City of Napa.

Local

Envision Napa 2020

General Plan policies related to biological resources and are applicable to the Project include the following.

Policy	Description
NR-1.1	The City shall protect riparian habitat along the Napa River and its tributaries from incompatible urban uses and activities.
NR-1.4	The City shall review all future waterway improvement projects (e.g., flood control, dredging, private development), as well as all projects that are within 100 feet of the waterway, to ensure that they protect and minimize effects on the riparian and aquatic habitats. The City shall also encourage native plantings along the river and creek banks to stabilize the banks, reduce sedimentation, reduce stormwater runoff volumes, and enhance aquatic habitats.
NR-1.6	The City shall require as a condition of approval that development provide protection for significant on-site natural habitat whenever possible.
NR-1.7	During development review, the City shall endeavor to identify and protect significant species and groves or clusters of trees on project sites.
NR-1.13	The City shall require that the composting and recycling of landscape maintenance debris be located so as to avoid adverse impacts on wetland, riparian, and fish habitat.
NR-2.4	When acting as a project proponent or when reviewing proposals for private projects requiring discretionary review by the City, the City shall ensure that its environmental review documents identify any feasible means of avoiding any net loss of habitat or of habitat value for endangered, threatened, and rare species. Where necessary or desirable, such avoidance can be achieved through off-site mitigation measures. As part of the environmental review, the City shall determine whether the Department of Fish and Game, in implementing the California Endangered Species Act, and/or the United States Fish and Wildlife Service, in implementing the Federal Endangered Species Act, will likely require mitigation sufficient to avoid any net loss of habitat or of habitat value for such species. Where these agencies are likely to require such a level of mitigation, the City may formulate its own mitigation measures so as to minimize the extent to which those measures duplicate the efforts of these agencies.

City of Napa Municipal Code – Native Tree Protection

Chapter 12.45 - Trees on Private Property of the City of Napa Municipal Code calls for the protection of native trees on private property from the impacts of construction. Protected native trees include trees on private properties over one acre in size and zoned for residential or agricultural purposes, or trees located on property zoned for commercial or industrial purposes. The following trees are considered protected:

Protected Species	Trunk Diameter Requirements
Valley oak (<i>Quercus lobata</i>)	12 inches or greater
Coast live oak (<i>Quercus agrifolia</i>)	12 inches or greater
Black oak (<i>Quercus kelloggii</i>)	12 inches or greater
Blue oak (<i>Quercus douglasii</i>)	16 inches or greater
Coast redwood (<i>Sequoia sempervirens</i>)	36 inches or greater
California bay (<i>Umbellularia californica</i>)	12 inches or greater
Black walnut (<i>Juglans hindsii</i>)	12 inches or greater

City of Napa Municipal Code – Streambed and Creek Protection

Section 17.52.110. (Creeks and Other Watercourses) of the City of Napa Municipal Code implements general plan policies pertaining to stream bank safety and protection and enhancement of riparian habitat corridors. The ordinance requires that development shall comply with public works streambank stabilization requirements for setbacks from banks of watercourses and riparian habitat. These standards require a structure setback of 20 feet, except for an accessory structure less than 500 square feet in area, from the top of the creek, stream, or riverbank. Where the average depth of the bank is 8 feet or greater, the required setback from “the toe of the stream bank shall be two times the depth of the bank plus 20 feet unless special provisions for bank stabilization are installed as approved by the Public Works Director.” Riparian setbacks are not quantified and depend on site-specific conditions. The ordinance also specifies that waivers may be issued by the decision-making body if plans are approved by the City after review by public wildlife agencies.

3.4.1.2 Existing Conditions

Vegetation within the Study Area (Figure 3.4-1) is comprised of ruderal vegetation and remnant ornamental trees on the Valle Verde site; sparse vegetation surrounding the vacant Sunrise Napa Assisted Living Facility and associated paved roads and parking areas; and riparian vegetation associated with Salvador Creek along the northeastern boundary. The existing Sunrise Napa Assisted Living Facility and associated parking lot is legally non-conforming for the City’s riparian setback.

The Study Area is surrounded on all sides by residential developments, with the exception of a small, undeveloped area to the northwest as well as Salvador Creek to the northeast and east.

Natural Communities

Natural communities observed in the Study area are summarized in Table 3.4-1, depicted in Figure 3.4-1, and described below.

Table 3.4-1: Study Area Natural Communities and Land Use	
Natural Community/Land Use	Acres
<i>Non-Sensitive Communities</i>	
Ruderal	0.92
Developed	1.71
<i>Sensitive Communities</i>	
Intermittent Stream	0.32
Riparian	0.32
Total	3.27

Developed

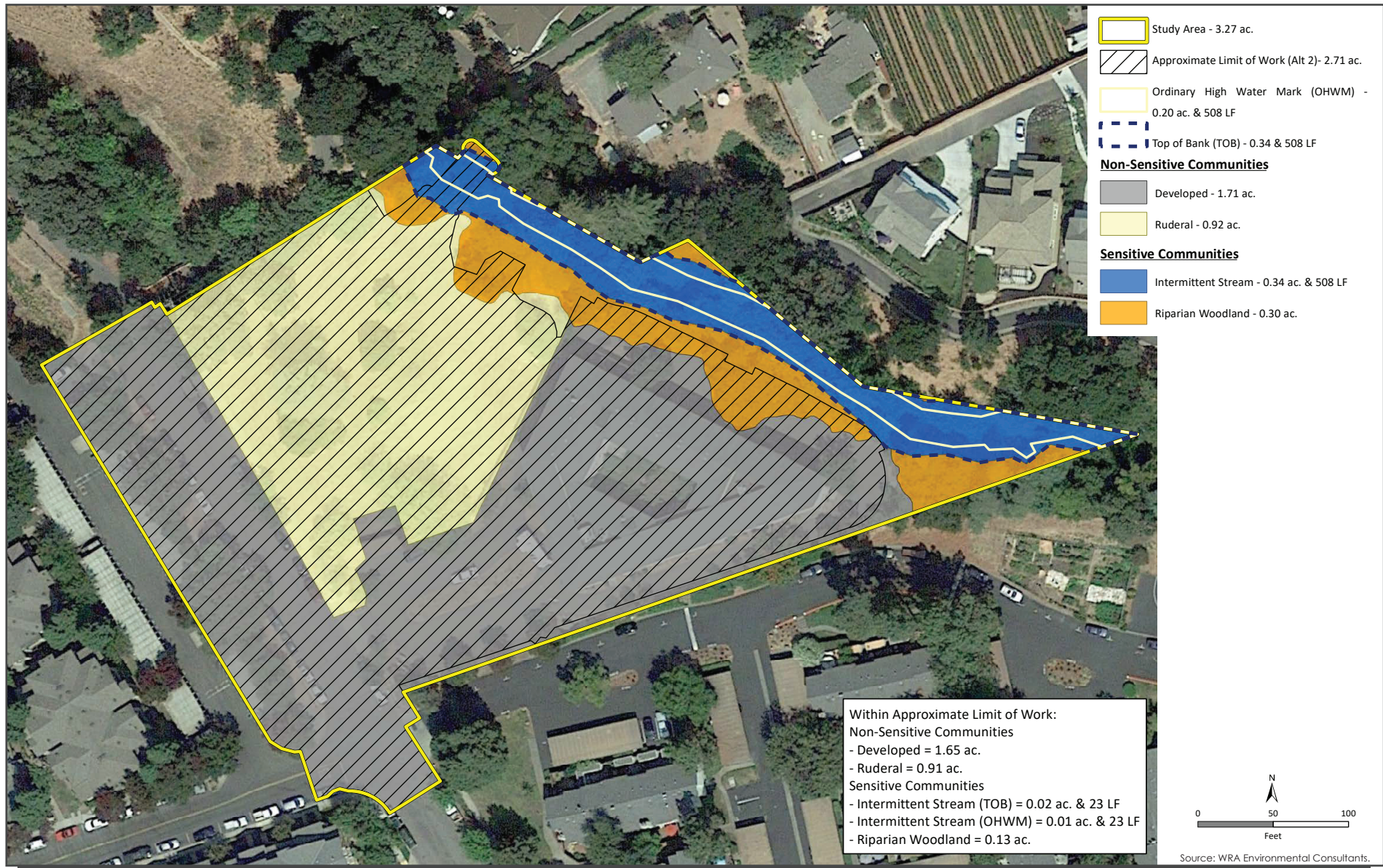
In the Study Area, developed land cover was mapped in the southeastern portion on the Heritage House Site, where the vacant pervious Sunrise Napa Assisted Living Facility building and associated paved areas (parking spaces and roadways) are located. This area is generally unvegetated, with the exception of the occasional ornamental species or species typical of disturbed conditions. Tree species observed include mayten and coast live oak. Herbaceous species include slim oat and rigput brome.

Intermittent Stream

A single intermittent stream—Salvador Creek—is present along the northeastern boundary of the Study Area. Within the Study Area, most of Salvador Creek has a dense riparian tree canopy, but small portions are fully or partially outside of the tree canopy. The tree canopy is a mix of species and contains elements of several vegetation alliances¹⁸ that are too small to map separately, including red willow thickets, Oregon ash groves, coast live oak woodland. Other tree species include silver wattle and Lombardy poplar. The understory is typically sparse and includes Himalayan blackberry and poison oak. Where canopy cover is open or absent, water primrose was observed in the channel bottom, and Himalayan blackberry was often dense.

Salvador Creek is a tributary to Napa Creek, which drains to the San Francisco Bay, a navigable water of the U.S.; therefore, the portion of Salvador Creek within the Study Area is potentially jurisdictional by the USACE. As discussed previously, the USACE requires that a permit be obtained if a project proposes placing structures within, over, or under navigable waters and/or discharging dredged or fill material into waters of the U.S. below the ordinary high water mark in non-tidal waters. USACE permits typically require a project to provide mitigation that results in no net loss of

¹⁸ An “Alliance” is a category of vegetation which describes repeating patterns of plants across a landscape, as defined by the *Manual of California Vegetation*. Each alliance is defined by plant species composition, and reflects the effects of local climate, soil, water, disturbance, and other environmental factors.



NATURAL COMMUNITIES

FIGURE 3.4-1

wetland functions or values. In addition, this feature is also potentially jurisdictional by the RWQCB and CDFW.

Riparian

Riparian was mapped within the Study Area where the tree canopy is adjacent to, but not directly above, Salvador Creek. The tree canopy is typically dense and comprised of a mix of species as described above. The understory is also as described above.

Riparian, non-wetland areas above ordinary high-water mark are not considered jurisdictional by the USACE. However, riparian within the Study Area is potentially jurisdictional by the RWQCB and CDFW.

Special-Status Species

Special-status species are plants and animals that are legally protected under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. For purposes of this analysis, special-status plants include the following:

- Plants listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Plants listed under CESA as threatened, endangered, rare, or a candidate species.
- Plants listed by the California Native Plant Society as California Rare Plant Rank (CRPR) 1, 2, or 3¹⁹

For purposes of this analysis, special-status wildlife include the following:

- Animals listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Animals listed under CESA as threatened, endangered or a candidate threatened or endangered species.
- Animals designated by the CDFW as a California species of special concern.
- Animals listed in Sections 3511, 4700, 5050, or 5515 the California Fish and Game Code as a fully protected species.
- Animals designated by the USFWS as Birds of Conservation Concern.
- Bats designated as a “High Priority” or “Medium Priority” species for conservation by the Western Bat Working Group.

Potential occurrence of special-status species in the Study Area was evaluated by first determining which special-status species occur in the vicinity of the Study Area through a literature and database

¹⁹ Rank 4 species may be afforded lesser protection under CEQA but generally must still be considered.

review. Database searches for known occurrences of special-status species focused on the 7.5-minute USGS quadrangles.

A site visit was made to the Study Area to search for suitable habitats for special-status species. Habitat conditions observed at the Study Area were used to evaluate the potential for presence of special-status wildlife based on these searches and the professional expertise of the investigating biologists. The potential for each special-status species to occur in the Study Area was then evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Unlikely.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (i.e. CNDDDB, other reports) on the site in the recent past.

Special-Status Plants

A total of 81 special-status plant species have been documented in the vicinity of the Study Area. All of these species are unlikely or have no potential to occur in the Study Area due to the highly disturbed nature of the Study Area and/or because of one or more of the following reasons:

- Hydrologic conditions (e.g. marsh habitat) necessary to support the special-status plant(s) are not present in the Study Area;
- Edaphic (soil) conditions (e.g. serpentine, volcanic, alkaline) necessary to support the special-status plant(s) are not present in the Study Area;
- Topographic positions (e.g. north-facing slopes) necessary to support the special-status plant(s) are not present in the Study Area;
- Associated vegetation communities (e.g. chaparral, lower montane coniferous forest) necessary to support the special-status plant(s) are not present in the Study Area;
- The Study Area is outside of the known elevation and/or localized distribution of the special-status plant(s) (e.g. coastal sites).

No special-status plant species, including locally rare species, were observed during the site assessment.

Special-Status Wildlife

A total of 56 special-status wildlife species have been documented in the vicinity of the Study Area. All but those listed in Table 3.4-2 were determined to be unlikely or have no potential to occur within the Study Area due to the following reasons.

- Suitable fresh or brackish water features are absent;
- Suitable soils to support host plants are absent;
- Vernal pools are absent from the Study Area;
- Historic rookery sites are absent;
- Continuous anthropomorphic disturbances are present;
- Suitable burrows, burrow surrogates, or burrowing mammals are absent;
- Species specific habitat (e.g. salt marsh, open grassland) is not present;
- The Study Area is outside of the species known range; and/or
- There is no connectivity between known occurrences in the area, and the Study Area.

Four special-status wildlife species have a high or moderate potential to occur in the Study Area. One special-status wildlife species, Nuttall's woodpecker, was observed in the Study Area during the site assessment. Special-status wildlife species that are present within or have moderate or high potential to occur in the Study Area are discussed below.

Nuttall's woodpecker

Nuttall's Woodpecker is a year-round resident throughout most of California west of the Sierra Nevada. Typical habitat is oak or mixed woodland, and riparian areas. Nesting occurs in tree cavities, principally those of oaks and larger riparian trees. Nuttall's woodpecker also occurs in older residential settings and orchards where trees provide suitable foraging and nesting habitat. This species forages on a variety of arboreal invertebrates.

Trees within the Study Area have suitable cavities and complex structures that are likely to support nesting by this species. In addition, this species is fairly common in oak woodlands throughout this portion of California. Therefore, because the species was observed within the Study Area, and suitable habitat is present, the species is considered Present.

Steelhead

The Central California Coast Distinct Population Segment of Steelhead includes all naturally spawned populations of steelhead (and their progeny) in California streams from the Russian River to Aptos Creek, and the drainages of San Francisco and San Pablo Bays eastward to the Napa River (inclusive), excluding the Sacramento-San Joaquin River Basin.

Steelhead typically migrate to marine waters after spending two years in freshwater, though they may stay up to seven. They then reside in marine waters for two or three years prior to returning to their natal stream to spawn as four or five-year-old's.

Steelhead are generally classified into two groups based on their timing in returning from the ocean to freshwater systems and their state of sexual maturity at that time. "Summer-run" steelhead are sexually immature when they enter freshwater in the spring and early summer. They then hold in

Table 3.4-2: Potentially Occurring Special-Status Wildlife Species		
Species Name	Conservation Status	Potential to Occur
Steelhead – central California coast DPS	Federally Threatened	Moderate Potential. This species has been documented in Salvador Creek.
Pallid bat	Species of Special Concern	High Potential. This species has a moderate potential to utilize the existing structures within the Study Area for roosting, as well as the larger trees within the riparian area.
Western red bat	Species of Special Concern	Moderate Potential. The Study Area contains broad-leaved tree species typically associated with this species. Riparian habitats along Salvador Creek provide foraging habitat for this species.
Nuttall’s woodpecker	Bird of Conservation Concern	Present. Oak trees within the Study Area may provide suitable nesting habitat for this species. This species has been observed both in the local area as well as within the Study Area.

suitable freshwater habitat, preferring deep (three meters or more) cold (10 to 15° Celsius) pools, for several months while they sexually mature. “Winter-run” steelhead enter freshwater systems during late fall or early winter and are either at or near sexual maturity. Steelhead adults typically return to their natal streams to spawn between December and June.

Juvenile steelhead prefer to rear in eddies and along velocity breaks where they can exert minimal energy holding in one position while being in close proximity to forage on terrestrial and aquatic invertebrates washed downstream.

Salvador Creek, which runs through the eastern side of the Study Area, is a tributary of the Napa River which flows to San Pablo Bay. Steelhead have previously been identified in Salvador Creek. A survey conducted in 2007 on Salvador Creek revealed very little suitable habitat for steelhead, as a significant portion of Salvador Creek is channelized and contained in culverts. However, Salvador Creek provides intermittent aquatic habitat which is often present when smaller headwater streams within the Napa River are no longer passable or accessible to steelhead. As a result, steelhead may use Salvador Creek during these low flow periods, when access to more suitable habitat upstream is not available. Considering these conditions, returning adult steelhead may hold in Salvador Creek when migrating upstream to spawning grounds (outside of Salvador Creek) and would have a moderate potential to occur at these times of year.

Pallid bat

The pallid bat is broadly distributed throughout much of western North America and typically occurs in association with open, rocky areas. Occupied habitats are highly variable and range from deserts to forests in lowland areas, and include higher-elevation forests. Roosting may occur singly or in groups of up to hundreds of individuals. Roosts must offer protection from high temperatures and are typically in rock crevices, mines, caves, or tree hollows; manmade structures are also used, including buildings (both vacant and occupied) and bridges. Pallid bats are primarily insectivorous, feeding on large prey that is usually taken on the ground but sometimes in flight.

The existing structure on the south side of the Study Area (proposed Heritage House Site) may provide suitable roosting habitat for this species. During the site visit, the existing structure was observed to have multiple egress points, although the majority of the windows and doors had been boarded shut. Some of the larger oak trees within the Study Area may have cavities that also provide suitable roosting habitat. This species may also forage for insects over Salvador Creek, the adjacent field in Salvador Creek Park, and vegetated portions of the Study Area. The nearest documented occurrence of this species is within 2.1 miles of the Study Area. Based on the proximity of documented occurrences, the presence of potential roost structures, as well as watering and foraging opportunities, there is a high potential for this species to occur within the Study Area.

Western red bat

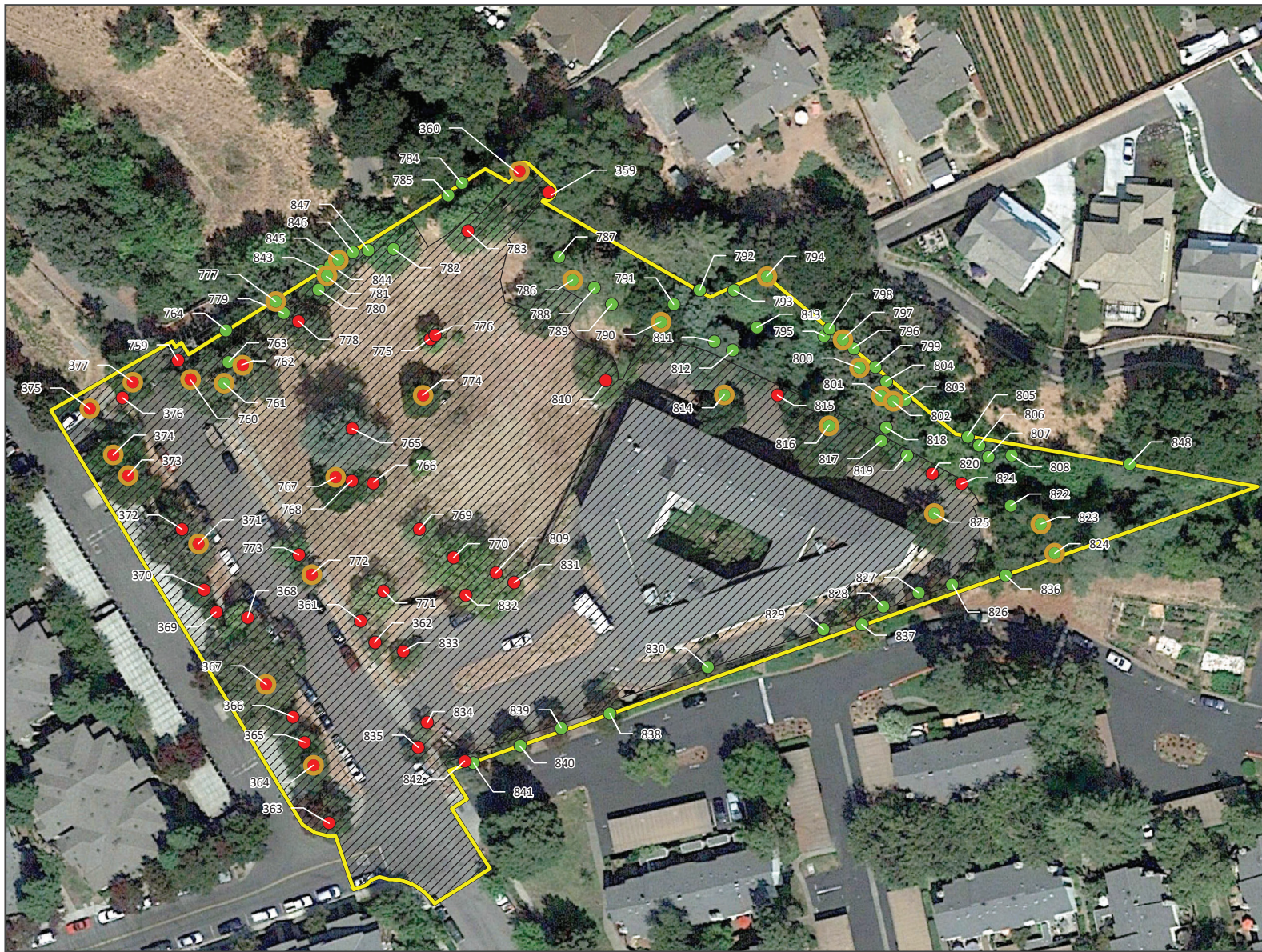
This species is highly migratory and broadly distributed, ranging from southern Canada through much of the western United States. Western red bats are believed to make seasonal shifts in their distribution, although there is no evidence of mass migrations. They are typically solitary, roosting primarily in the foliage of broad-leafed trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas possibly and association with riparian trees.






The riparian vegetation on either side of Salvador creek may contain potential roosting habitat for this species. The nearest documented occurrence of this species is within 7.5 miles of the Study Area. Western red bats may also forage over Salvador Creek, as well as over the adjacent field in Salvador Creek Park. Due to the potential presence of roosting trees, water and foraging grounds, but considering the distance from known occurrences, there is a moderate potential for this species to occur within the Study Area.

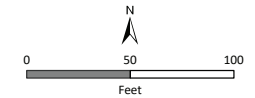
Protected Trees

A total of 109 trees were documented within the Study Area, as summarized in Table 3.4-3 and shown in Figure 3.4-2. Protected trees appeared to be naturally occurring and were present along the northern, eastern, and western boundaries of the Study Area. Species that met the definition of “protected native tree” on private property within the Study Area include coast live oak, valley oak, and black walnut.

Table 3.4-3: Tree Survey Results				
Species	Quantity	City of Napa Protected Tree	Average DBH (inches)	Average Height (feet)
Silver Wattle	10	No	16.32	28.5
Valley Oak	11	Yes	28.1	29.3
	8	No	8.9	17.8
Coast live oak	18	Yes	19.9	32.3
	13	No	9.2	21.4
Cherry plum	3	No	14.1	12.7
Deodar cedar	1	No	34.0	40.0
Juniper	1	No	15.1	8.0
White mulberry	2	No	12.9	23.5
Oregon ash	15	No	18.6	32
Red willow	4	No	25.9	22.5
Arroyo willow	2	No	14.7	20.0
Lombardy poplar	2	No	37.2	50.0
California black walnut	1	No	10.0	30.0
Crape Myrtle	5	No	7.5	15.6
Callery Pear	5	No	6.8	14.2
Raywood ash	5	No	8.9	24.2
Chinese pistache	1	No	11.0	25
Red iron bark	1	No	12.8	25
Monterey pine	1	No	16.6	25
Total	109	--	--	--



-  Study Area - 3.27 ac.
-  Limit of Work - 2.71 ac.
-  Tree to Remain
-  Tree to be Removed
-  Protected Tree



Source: WRA Environmental Consultants.

TREE SURVEY

FIGURE 3.4-2

3.4.2 Biological Resources Impacts

3.4.2.1 *Thresholds of Significance*

For the purposes of this EIR, a biological resource impact is considered significant if the Project would:

- 1) 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 (CDFW) or United States Fish and Wildlife Service (USFWS);
- 2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- 3) 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;
- 4) 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;
- 5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- 6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.4.2.2 *Project Impacts*

Impact BIO-1: The Project would have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

Special-Status Birds

Project construction activities may affect the special-status bird Nuttall's woodpecker. No other candidate, sensitive, or special-status bird species were determined to have a moderate or high potential to occur within the Study Area. Project construction could also affect a wide variety of birds that may be present in or near the Study Area that are protected by the MBTA.

Impact BIO-1.1: Vegetation removal, ground disturbing activities, and other construction activities could result in the direct removal or destruction of active nests or may create audible, vibratory, and/or visual disturbances that cause birds to abandon active nests. **(Significant Impact)**

Mitigation Measure:

MM BIO-1.1: A survey for active bird nests shall be conducted by a qualified biologist no more than 14 days prior to the start of Project activities (vegetation removal, grading, or other initial ground-disturbing activities) if ground disturbing activities commence during the nesting season (February 1 through August 31). The survey shall be conducted in a sufficient area around the Study Area to identify the location and status of any nests that could potentially be directly or indirectly affected by vegetation removal, or grading activities. Based on the results of the pre-construction breeding bird survey, the following measure shall apply.

- If active nests of protected species are found within the Study Area or close enough to the area for construction activity to affect nesting success, a work exclusion zone shall be established around each nest. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g. due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers, ambient sound levels, and other factors. An exclusion zone radius may be as small as 25 feet (for common, disturbance-adapted species) or as large as 250 feet or more for raptors. Exclusion zone size may also be reduced from established levels if supported with nest monitoring by a qualified biologist indicating that work activities are not significantly impacting the nest.

Implementation of MM BIO-1.1 would reduce potential impacts to candidate, sensitive, or special-status birds (including Nuttall’s woodpecker) as well as all birds protected by the MBTA to a less-than-significant level. **(Less-than-Significant with Mitigation)**

Western Red Bat and Pallid Bat

There is potential for two special-status bat species to occur within the Study Area. Direct impacts to special-status bat species could occur due to the removal or modification of trees, snags, and/or buildings. The destruction or injury of special-status bats, or loss of a maternity roost would constitute a potentially significant impact under CEQA and a violation of the California Fish and Game Code. Indirect impacts to roosting bat species may include roost abandonment due to noise, increased nighttime lighting and/or other human disturbances during construction and would constitute a potentially significant impact.

Impact BIO-1.2: The Project could result in direct or indirect impacts to special-status bats during construction activities. **(Significant Impact)**

Mitigation Measure:

MM BIO-1.2: A pre-construction survey shall be conducted of the existing structures, bridge, and trees within 100 feet of the work areas to determine if any suitable

roost habitat is present and the potential for occupancy. Based on the results of the pre-construction survey, the following measure shall apply.

- If an active maternity roost is located within features scheduled for removal, then consultation with CDFW would be required.
- If any large trees are identified during the preconstruction survey which contain potential roosting features, the tree shall be felled outside of the maternity season (September 1 through April 30) and shall be allowed to lay on the ground for one night to allow any undetected bats to leave the tree before it is processed.
- If no roosts or potential bat roosting substrates are located, then work may proceed without further measure.

Implementation of MM BIO-1.2 would reduce potential impacts to special-status bats to a less-than-significant level. (**Less-than-Significant with Mitigation**)

Steelhead

Bridge Removal

There is a moderate potential for steelhead to occur in the portion of Salvador Creek within the Study Area. The Project, as a condition of approval, may be required to remove a portion of the existing private concrete and steel bridge located to the east of the Project Site. Demolition of the bridge would include removal of the bridge decking and tops of piers. Proposed work related to the existing bridge spanning Salvador Creek has the potential to impact steelhead.

If work occurs within the stream channel, consultation with the National Marine Fisheries Service and permits from the USACE, RWQCB, and CDFW would be required. Though the Project would result in an improvement of existing conditions by restoring Salvador Creek to a more natural condition, there is the potential for impacts to steelhead to occur during construction activities as a result of sedimentation, material spills, and erosion.

Impact BIO-1.3: Steelhead within Salvador Creek could be harmed during bridge removal activities. (**Significant Impact**)

Mitigation Measure:

MM BIO-1.3: The following avoidance and minimization measures shall be implemented during bridge removal activities:

- A debris containment device (e.g. net, or tarp) shall be installed prior to work in order to prevent material from entering Salvador Creek.
- Riparian vegetation removed within the Study Area shall be the minimum amount needed for work to occur.
- The extent of disturbance shall be delineated with construction fencing or other high visibility marker to prevent disturbance to areas below top of bank or outside of the construction footprint.

In addition, the Project would implement the following best management practices to further reduce impacts to sensitive habitats within Salvador Creek.

Best Management Practices:

- 1) Erosion control measures shall be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter aquatic natural communities. At no time shall silt laden runoff be allowed to enter Salvador Creek or its riparian corridor or directed to where it may enter these areas. Erosion control structures shall be monitored for effectiveness and repaired or replaced as needed. Appropriate erosion control measures shall be installed around any stockpiles of soil or other materials which could be mobilized by rainfall or runoff.
- 2) No fueling, cleaning, or maintenance of vehicles or equipment shall take place within any areas where an accidental discharge to Salvador Creek may occur.
- 3) All equipment including excavators, trucks, hand tools, etc., that may have come into contact with invasive plants or the seeds of these plants, shall be carefully cleaned before arriving on the site and also carefully cleaned before removal from the site to prevent spread of these plants.
- 4) Construction disturbance or removal of riparian vegetation shall be restricted to the minimum footprint necessary to complete the work. The work area shall be delineated where necessary with construction fencing to minimize impacts to habitat beyond the work limit.
- 5) Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream channel banks.
- 6) Stationary equipment such as motors, pumps, and generators, located adjacent to aquatic features shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a spill or leak. All activities performed near aquatic features shall have absorbent materials designated for spill containment and cleanup activities onsite for use in an accidental spill.
- 7) Any equipment or vehicles operated adjacent to aquatic features shall be checked and maintained daily to prevent leaks of materials that could be deleterious to wildlife or habitat.
- 8) Stockpiles of soil or other materials that can be blown by wind shall be covered when not in active use. All trucks hauling soil, sand, and other loose materials shall be covered.
- 9) No other debris, rubbish, creosote-treated wood, soil, silt, sand, cement, concrete or washings thereof, or other construction-related materials or wastes shall be allowed to enter into or be placed where they may be washed by rainfall or runoff into the aquatic features. All such waste shall be picked-up daily and properly disposed of at an appropriate facility.
- 10) An environmental awareness training program shall be conducted for all crews working on the site to include education on sensitive resources such as protected wildlife with the potential to occur within the Study Area, water quality, and environmental protection measures.
- 11) All temporary flagging, fencing, and/or barriers shall be removed upon completion of Project construction.

- 12) Areas of temporary ground disturbance shall be revegetated using an appropriate erosion control seed mix or covered with rock, wood chips, or other suitable erosion control materials as appropriate.

Implementation of MM BIO-1.3 and the best management practices described above, as well as compliance with USACE, CDFW, and RWQCB requirements, would reduce potential impacts to steelhead to a less-than-significant level. **(Less-than-Significant with Mitigation)**

Impact BIO-2: The Project would have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

Aquatic Natural Communities

The Project would construct a stitch pier retaining structure to address the active erosion occurring behind the proposed Heritage House parking lot. The stitch pier would be located at the existing asphalt curb and would be constructed outside of the creek channel. The pier would extend approximately 28 feet below grade and would be approximately 85 feet alongside Salvador Creek. The retaining wall would be constructed outside of the creek channel; however, installation would temporarily impact 0.12 acres of riparian woodland associated with Salvador Creek due to the presence of construction equipment and workers (refer to Table 3.4-4). With the implementation of the best management practices described above, which would include erosion control measures, restricting riparian vegetation removal to the minimum footprint necessary, locating equipment outside of the creek channel, and revegetating temporarily disturbed areas, these impacts would be less than significant.

Bridge Removal

The Project may be required as a condition of approval to remove the existing private concrete and steel bridge located to the east of the Project Site. As previously noted, demolition of the bridge would include removal of the bridge decking and tops of piers. Removal of the bridge would result in direct impacts to the creek and associated riparian vegetation. Removal of the bridge would temporarily impact approximately 23 linear feet and 0.01 acre of USACE jurisdictional intermittent stream (refer to Table 3.4-4). The CDFW and RWQCB would also take jurisdiction over the intermittent stream and approximately 0.13 acre of riparian habitat. Impacts to waters of the U.S. and waters of the state as a result of bridge removal would be a significant impact.

Mitigation Measure:

MM BIO-2.1: Prior to initiating any Project activities within these areas, the Applicant shall obtain any required permits for impacts to jurisdictional areas. Permanent impacts to all jurisdictional resources would be compensated at 1:1 replacement ratio, or as required by the USACE, CDFW, and RWQCB.

Implementation of MM BIO-2.1, as well as the best management practices described above, would reduce impacts from bridge removal activities to jurisdictional waters and riparian habitats to a less-than-significant level. **(Less-than-Significant Impact with Mitigation)**

Table 3.4-4: Impacts to Aquatic Natural Communities		
Feature Type	Project (acres/linear feet)	Project plus Bridge Removal (acres/linear feet)
<i>Potential Corps Jurisdiction</i>		
Intermittent Stream	--	0.01 acre 23 linear feet
Total	--	0.01 acre 23 linear feet
<i>Potential RWQCB and CDFW Jurisdiction</i>		
Intermittent Stream	--	0.02 acre 23 linear feet
Riparian	0.12 acre	0.13 acre
Total	0.12 acre	0.15 acre 23 linear feet

Impact BIO-3: The Project would have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(Less than Significant Impact with Mitigation Incorporated)**

Only intermittent, non-wetland waters would be impacted by the proposed Project. As discussed under Impact BIO-2, Project activities may result in direct impacts to approximately 23 linear feet and 0.01 acre of USACE jurisdictional intermittent stream. The CDFW and RWQCB would also take jurisdiction over the intermittent stream and approximately 0.13 acre of riparian habitat. Implementation of MM BIO-2.1, as well as the best management practices described above and compliance with USACE, CDFW, and RWQCB requirements, would reduce impacts to jurisdictional (non-wetland) waters to a less-than-significant level. **(Less-than-Significant Impact with Mitigation)**

Impact BIO-4: The Project would interfere substantially with the movement of 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. **(Less than Significant Impact with Mitigation Incorporated)**

The Study Area is not located within areas previously identified as an essential connectivity area, core reserve or corridor, landscape block, or general wildlife corridors. There is an identified

essential connectivity area²⁰ approximately 2 miles to the east of the Study Area; however, the Study Area is isolated from this essential connectivity area by highly developed urban infrastructure, limiting the possibility for wildlife to treat it as a corridor for movement. Although the Study Area and surrounding lands are highly developed, there is the potential for common, urban adapted wildlife to pass through the riparian portion of the Study Area along Salvador Creek, essentially using it as a local corridor.

Impact BIO-4.1: Project construction activities may affect migration through adjacent habitats used by various species of common wildlife by creating disturbance, light pollution, and general disruption during periods when wildlife may be present. **(Significant Impact)**

Mitigation Measures:

MM BIO-4.1: The following measures shall be implemented:

- Hours for initial phases of work shall be limited to 30 minutes after sunrise to 30 minutes before sunset in order to avoid causing disturbance when wildlife are most likely to migrate through surrounding habitats.
- Any lighting used for the Project shall be kept to the minimum necessary to safely operate. Those lights shall also be directed inward toward the Study Area, and not into surrounding habitats.
- All work shall occur only within designated work areas.

Implementation of MM BIO-4.1 would reduce the Project's impacts on wildlife corridors to a less-than-significant level.

In addition, while the portion of Salvador Creek within the Study Area does not represent suitable spawning habitat for steelhead, and there is no suitable spawning habitat upstream, Salvador Creek has the potential to be utilized as a holding area for adult steelhead during low flow periods.

Impact BIO-4.2: Migrating steelhead within Salvador Creek could be impacted during bridge removal activities. **(Significant Impact)**

Implementation of MM BIO-1.3 and MM BIO-2.1 as well as the best management practices described above, would reduce impacts from bridge removal activities to migrating steelhead to a less-than-significant level. **(Less-than-Significant Impact with Mitigation)**

²⁰ The CDFW and the California Department of Transportation commissioned a team of consultants to produce a statewide assessment of essential habitat connectivity, using the best available science, data sets, spatial analyses and modeling techniques. The goal was to identify large remaining blocks of intact habitat or natural landscape and model linkages between them that need to be maintained, particularly as corridors for wildlife.

Impact BIO-5: The Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact with Mitigation Incorporated)**

City of Napa Municipal Code – Native Tree Protection

Chapter 12.45 of the City of Napa Municipal Code specifies when a tree permit is required for tree removal or impacts, tree replacement ratios for removed trees, and tree protection measures for retained trees.

The Project proposes to remove 12 protected native trees, as defined by Section 12.45.020 of the City's Municipal Code. Of the 12 protected native trees to be removed, seven are associated with the proposed improvements to an existing sidewalk on a parcel west of the Project boundary.

Bridge Removal

Removal of the bridge would require removal of one additional protected native tree.

The Project (including bridge removal) would replace these trees consistent with the City's Municipal Code and would implement the following Standard Permit Condition:

Standard Permit Condition:

- In order to satisfy the requirements of the Chapter 12.45 of the City of Napa Municipal Code, a protected native tree pruning and removal permit application shall be submitted to the City of Napa for any protected native trees. Protected native trees that will be removed or damaged as a result of the Project shall be replaced as required pursuant to Chapter 12.45.
 - For each 6 inches or fraction thereof of the protected tree, two trees of the same species as the protected tree (or any other species with approval) and a minimum 15-gallon container or larger size as determined by the Director of Parks and Recreation shall be planted on the Site.
 - If the Site is inadequate in size to accommodate the replacement trees, with the recommendation of the Director of Parks and Recreation, the trees shall be planted on public property. The Director of Parks and Recreation may accept an in-lieu fee, per 15-gallon replacement tree with the moneys to be used for tree-related educational projects and/or planting programs. In-lieu fees shall be set by the City Council resolution and adjusted on an annual basis as necessary and include the cost of planting.
 - Each protected native tree approved for removal shall be replaced within 60 days or at a reasonable time approved by the Director of Parks and Recreation or according to the conditions of any discretionary permit allowing removal of a protected native tree.
- In order to avoid and minimize damage to existing protected native trees which are not proposed for direct impact by Project activities, the following measures should be implemented during Project construction.

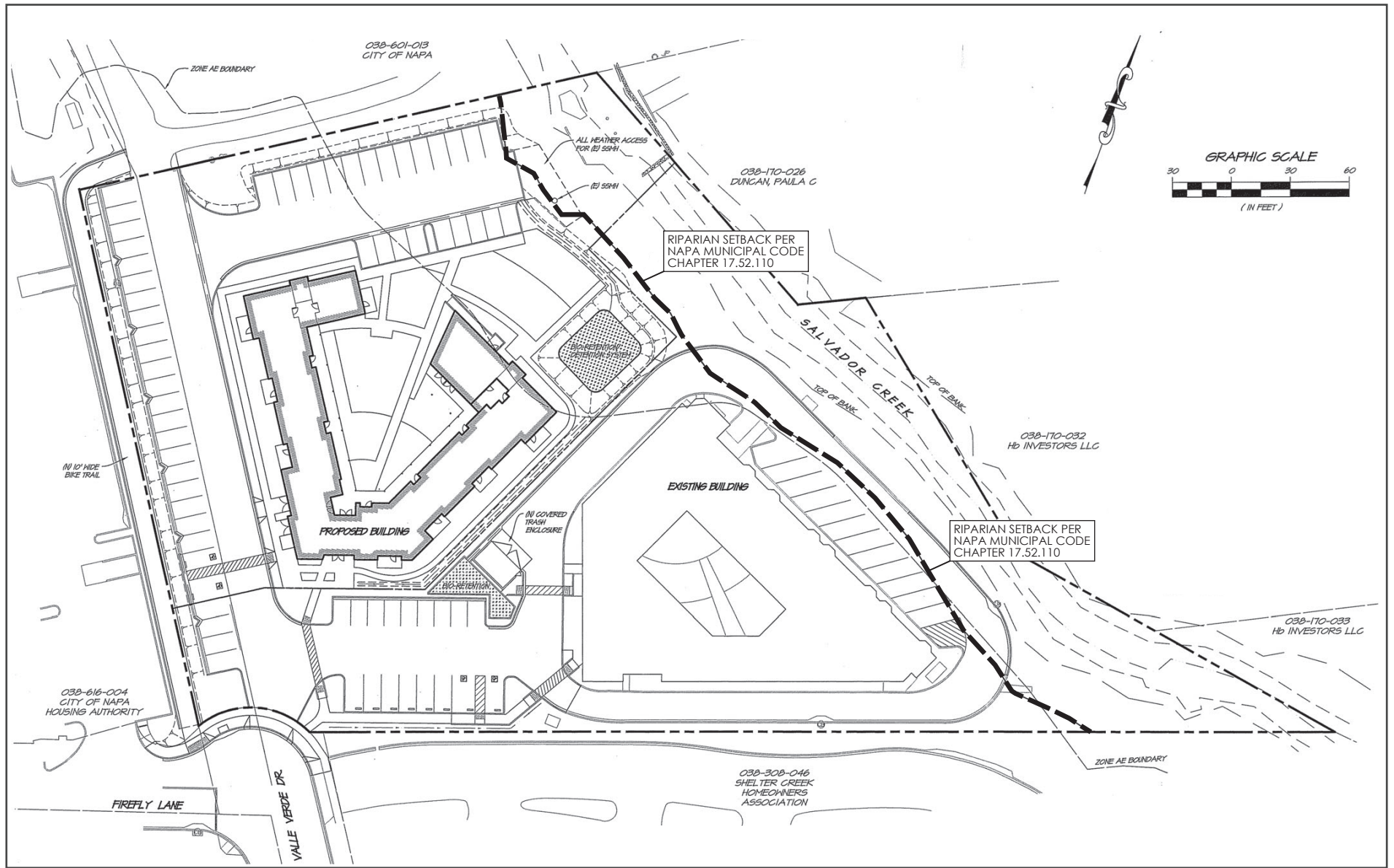
- All construction activity (grading, filling, paving, landscaping, etc.) should respect the root protection zone (RPZ) around all trees within the vicinity of the Study Area that are to be preserved. The RPZ should be a distance of 1.0 times the dripline radius measured from the trunk of the tree. Exception to this standard could be considered on a case-by-case basis, provided that it is demonstrated that an encroachment into the RPZ will not affect the root system or the health of the tree, and is authorized by an ISA-Certified Arborist or comparable specialist.
- Temporary protective fencing should be installed around the dripline of protected native trees prior to commencement of any construction activity conducted within 25 feet of the tree canopy. The fence should be clearly marked to prevent inadvertent encroachment by heavy machinery.
- Drainage should not be allowed to pond around the base of any tree.
- An ISA-Certified Arborist or tree specialist should be retained to perform any necessary pruning of trees during construction activity.
- Should any utility lines encroach within the tree protection zone, a single, shared utility conduit should be used where possible to avoid negative impact to trees.
- Roots exposed as a result of construction activities should be covered with wet burlap to avoid desiccation, and should be buried as soon as practicable.
- Construction materials or heavy equipment should not be stored within the RPZ of preserved trees.
- Following construction, a protected native tree pruning and removal permit must be obtained by the property owner, or person authorized by the property owner, from the Director of Parks and Recreation prior to doing any of the following to a protected native tree on private property
 - Prune any branch or limb of a protected native tree greater than 4 inches in diameter or remove more than 10 percent of any live foliage in any 1-year period;
 - Cut any root over 2 inches in diameter within the drip line area of a protected native tree;
 - Change, by more than 2 feet, grade elevations within the drip line area of a protected native tree; or
 - Place or allow to flow into or over the drip line area of any protected native tree any oil, fuel, concrete mix or other substance that could injure the tree

Implementation of the Standard Permit Condition would reduce potential impacts to protected native trees to a less-than-significant level.

City of Napa Municipal Code – Streambed and Creek Protection

The City of Napa Municipal Code requires that development comply with public works streambank stabilization requirements for setbacks from banks of watercourses and riparian habitat. For a waterbody with the dimensions of Salvador Creek (i.e. a channel less than 8 feet deep), a 20-foot setback from top of bank is required.

The proposed Valle Verde apartments would be located outside of the riparian setback (see Figure 3.4-3). A portion of the existing parking lot for the proposed Heritage House is located within the riparian setback. To address active erosion at the Site, the Project would construct a stitch pier



RIPARIAN SETBACK

FIGURE 3.4-3

retaining structure. The stitch pier would be located at the existing asphalt curb and would be constructed outside of the creek channel. The pier would extend approximately 28 feet below grade and would be approximately 85 feet alongside Salvador Creek. The stitch pier retaining wall would not only repair current erosion, but also prevent future erosion from occurring as a result of project implementation. As discussed under Impact BIO-2, installation of the retaining wall may temporarily impact riparian areas and/or Salvador Creek due to the presence of construction equipment and workers. However, the Project would implement best management practices to reduce impacts to riparian areas.

Bridge Removal

The Project, as a condition of approval, may be required to remove a portion of the existing private concrete and steel bridge located to the east of the Project Site. Demolition of the bridge would include removal of the bridge decking and tops of piers. This work would result in a direct impact to approximately 0.13 acre of riparian habitat. As a result, if partial bridge removal is required by the City, the Project would implement MM BIO-2.1, which would require compensatory mitigation for any Permanent impacts to jurisdictional resources, and would be subject to compliance with permit conditions and requirements of the USACE, CDFW, and RWQCB.

Implementation of MM BIO-2.1, as well as the best management practices described above and compliance with USACE, CDFW, and RWQCB requirements, would reduce impacts to riparian habitats to a less-than-significant level. For these reasons, the Project (including bridge removal) would comply with the City's Streambed and Creek Protection Ordinance. **(Less-than-Significant Impact with Mitigation)**

Impact BIO-6: The Project would not 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 Site is not located within an adopted Habitat Conservation Plan or a Natural Community Conservation. **(No Impact)**

3.4.2.3 *Cumulative Impacts*

Impact BIO-C: The Project would not result in a cumulatively considerable contribution to a significant biological resources impact. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative biological resources impacts includes the Site and adjacent parcels. The Project has the potential to impact special-status species, including Nuttall's woodpecker, steelhead, pallid bat and Western red bat. In addition, implementation of the Project could result in direct impacts to Salvador Creek and associated riparian vegetation. The Project will mitigate for impacts to biological resources through the CEQA process (as part of MM BIO-1 through MM BIO-3), as well as the USACE, RWQCB, and CDFW permitting process. The Project

will also implement best management practices during construction activities to further reduce impacts to sensitive communities and special-status species.

All cumulative projects within the immediate vicinity of the Project would be required to implement conditions of approval or mitigation measures that would avoid and/or reduces impacts to sensitive habitats and special-status species to a less than significant level consistent with CEQA. Further, cumulative projects that would result in direct impacts to waters of the U.S. and riparian habitat would be required to obtain permits from the USACE, RWQCB and CDFW. For these reasons, the proposed Project would not make a cumulatively considerable contribution to biological resource impacts.

3.5 CULTURAL RESOURCES

The following discussion is based, in part, on an Archaeological Literature Search prepared by *Holman & Associates* in November 2018, and a Section 106 of the National Historic Preservation Act (NHPA) Technical Report prepared by *Page & Turnbull* in April 2019. A copy of the Archaeological Literature Search is only available for public viewing by qualified professionals, as it contains sensitive materials not suitable for public disclosure. A copy of the Section 106 report is attached as Appendix E to this EIR/EA.

3.5.1 Environmental Setting

3.5.1.1 *Regulatory Framework*

Federal

National Historic Preservation Act

Federal protection is legislated by the NHPA of 1966 and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

The NRHP is the National Park Service’s official list of historic places worthy of preservation, and is part of a national program to identify, evaluate, and protect historic and archaeological resources. National Register Bulletin Number 15, *How to Apply the National Register Criteria for Evaluation*, describes the Criteria for Evaluation as being composed of two factors. First, the property must be “associated with an important historic context,” and second the property must retain integrity of those features necessary to convey its significance.

The National Register identifies four possible context types or criteria, at least one of which must be applicable at the National, State, or local level. As listed under Section 8, “Statement of Significance,” of the NRHP Registration Form, these are:

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important to prehistory or history.

Code of Federal Regulations Title 36, Part 800.5(a)

CFR Title 36, Part 800.5(a) describes procedures for evaluating a project's adverse effects on cultural resources for federal undertakings. An adverse effect is found when a federal undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Examples of adverse effects are provided in CFR Title 36, Part 800.5(a)(2) and include, but are not limited to, the following:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property—including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access—that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use, or of physical features within the property's setting, that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to a Native American tribe or native Hawaiian organization; and
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

State and Regional

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The CRHR aids government agencies in identifying, evaluating, and protecting California's historical resources, and indicates which properties are to be protected from substantial adverse impacts. The CRHR is administered through the State Office of Historic Preservation, which is part of the California State Parks system. A historic resource listed in, or formally determined to be eligible for listing in, the NRHP is, by definition, included in the CRHR.²¹

Archaeological Resources and Human Remains

Archaeological sites are protected by a number of state policies and regulations under the California Public Resources Code, California Code of Regulations (Title 14 Section 1427), and California Health and Safety Code. California Public Resources Code Sections 5097.9-5097.991 require

²¹ Refer to Public Resources Code Section 5024.1(d)(1)

notification of discoveries of Native American remains and provides for the treatment and disposition of human remains and associated grave goods.

California Health and Safety Code (Section 7050.5 and 7052) require that the Napa County Coroner be notified if cultural remains are found on a site. If the Coroner determines the remains are those of Native Americans, the Native American Heritage Commission and a “most likely descendant” must also be notified.

Pursuant to Assembly Bill 52 (AB 52), approved by the Governor in September 2014, prior to the release of an EIR for the Project, the City must, upon request, consult with Native American Tribes traditionally and/or culturally affiliated with the Project’s geographic area. On January 28, 2019, the City of Napa sent an AB 52 Consultation notification to a list of Native American individuals and organizations provided by the NAHC who may have knowledge of tribal cultural resources on the Site. The Yocha Dehe Wintun Nation was the only tribe to respond in a letter dated February 19, 2019 and indicated that the Site is within the aboriginal territory of the Yocha Dehe and requested a formal consultation meeting. City of Napa staff met with representatives of the Yocha Dehe on April 8, 2019 and via conference call May 23, 2019. At the meeting, the Yocha Dehe suggested mitigation measures for the Project to the City which are discussed in Section 3.17 Tribal Cultural Resources.

Local

Envision Napa 2020

General Plan policies related to cultural resources that are applicable to the Project include the following.

Policy	Description
HR-6.1	The City shall enforce current federal and state procedures for identifying, preserving and protecting prehistoric sites.
HR-6.2	The City shall require investigation during the planning process for all proposed developments in archaeologically sensitive areas in order to determine whether prehistoric resources may be affected by the project and, if so, require that appropriate mitigation measures be incorporated into the project design.
HR-6.3	Recognizing that Native American burials or archaeological artifacts may be encountered at unexpected locations, the City shall continue to enforce state mandates with its current mitigation requirement, applied to all development permits and tentative subdivision maps, that upon discovery of remains during construction, all activity will cease until qualified professional archaeological examination and reburial in an appropriate manner is accomplished.

City of Napa Municipal Code

The City’s Historic Preservation Ordinance, Napa Municipal Code Chapter 15.52, includes regulations pertaining to the identification, evaluation and preservation of historic resources. The Ordinance implements General Plan policies and important preservation and conservation concepts. In addition, the Ordinance defines the roles of the Cultural Heritage Commission, the City Council

and City staff, and establishes the procedures, for designating historic resources and for approving proposed work on historic resources.

City of Napa Historic Resources Inventory

The Historic Resources Inventory (HRI) is the City of Napa's official list of locally designated historic resources. The current HRI was adopted by the Napa City Council in 2016; it is regulated by the City's Historic Preservation Ordinance (Chapter 15.52 of the Napa Municipal Code), and is maintained by the City Staff. The first historic resource inventory was conducted within the City of Napa in 1969. Subsequent surveys of varying scopes and methodologies were conducted in 1978, 1988, 1994, 1995, 1998 and as recently as 2016.

Over 2,500 individual properties are currently listed on the HRI in the City of Napa. Properties listed on the HRI may be designated as local landmarks, listed Resources and/or include in a local Landmark or Potential Historic District. Properties listed on the HRI are subject to varying levels of design review by the CHC and staff depending on their designation.

3.5.1.2 Existing Conditions

The Project Site is located in an archaeologically sensitive area, according to the City of Napa archeological sensitivity map.

Prehistoric Overview

The prehistory of the Napa District encompasses a time period from more than 5,000 years before present (YBP) to Euro-American expansion. Bennyhoff identified and named a provisional series of eleven temporal phases (Moratto 1984). The earliest of these was termed the Hultman Phase (ca. 5,000-3,000 YBP or later), first identified by Fredrickson at a site listed as NAP-131 in the upper Napa Valley (Fredrickson 1973). The assemblage was marked by millingstones, concave-base and lanceolate projectile points, and a variety of other flaked stone tool forms. Among others, archaeological site NAP-15, the Suscol site, is identified as a long-used ethnographic village situated on the east bank of the Napa River south of the city of Napa (approximately three miles from the Site). The Suscol site yielded basalt core tools from the lowest layers associated with three radiocarbon dates between 3,340±75 and 3,605±100 YBP (Stradford and Schwaderer 1981). The Hultman Phase has since been redefined as an aspect of the regional Mendocino Pattern.

Temporal phases associated with the Berkeley Pattern (2,000-1,200 YBP) have been identified at several sites in the Napa District. These assemblages are typically composed of mortars and pestles, obsidian shouldered lanceolate projectile points, flexed internments, an array of bone artifacts, several types of Olivella beads, and often distinctive charmstones. These assemblages could represent use of the area by populations ancestral to the ethnographic Miwok people.

The Augustine Pattern is thought to represent the arrival of the ethnographic Wappo into the region. Assemblages associated with temporal phases within this pattern contain small serrated and non-serrated obsidian corner-notched arrow points, mortars and pestles, rectangular Olivella beads, circular Haliotis pendants, steatite ear spools, collared stone pipes, incised bird bone whistles, and in the later phases, clam disk and magnesite beads, and the hopper mortar. Flexed internments remain the normative burial treatment but cremation and preinternment burning became increasingly common as time progressed. Sites containing Augustine Pattern assemblages are fairly widespread throughout

the region representing a greater expansion of local populations than occurred in earlier times. Augustine Pattern traits continue throughout the region until the time of Euro-American contact.

Historic Era Period

Initial Euroamerican contact with the local Native Americans probably began shortly after the establishment of Mission Dolores in San Francisco in 1776. The missions' goals of colonizing the local Native American community were accomplished by using them to provide the labor for building, construction and daily operations of the missions. At first, the missions' labor force was a mixture of local Native Americans from the nearby area, but as these died off in alarming numbers from introduced diseases from which they had no immunity, groups from further away like the Patwin and Wappo were used. In 1823, the last Spanish mission, Mission San Francisco de Solano, was established in the town of Sonoma to reduce Russian expansion into the interior of California (Hoover et al. 1990).

After secularization of the missions, large areas of land were opened for land grants. In 1838, approximately 21,917 acres were granted to Salvador Vallejo (Mariano Vallejo's brother) and his wife Marie de la Cruz Carrillo and was known as Rancho Napa (Chavez and Hupman 1991b:8-14). Their home was situated west of the Napa River at 1006 Monticello Road near the Trancas Bridge and it was destroyed by fire in 1970. A few other buildings were constructed, although none near the Project Area of Potential Effect (APE).²² Most of these lands were used for cattle grazing and some crops, presumably including the Project APE. The family sold lands further afield from the river until Vallejo filed a claim in 1853 with the U.S. government for approximately 3,000 acres, with lawyer fees and squatters further reducing his lands. Within a few years, his land had been reduced to 700 acres.

In 1847, the town of Napa was created on the Napa River. The discovery of gold and the annexation of California into the United States a year later changed the dynamics and encouraged more people to settle in the Napa Valley. By 1852, Napa had a population of 300 and the county had 2,100 people including 1,333 Native Americans. Napa County continued to see an influx of people after easy-to-mine placer deposits were played out.

The County flourished with lands that once supported cattle planted with wheat and orchards (mainly apples, peaches, and walnuts). The cattle industry was severely impacted in the first six years of the 1860s, and wheat prices fell with the arrival of the transcontinental railroad and its shipments of cheaper wheat from the Midwest. The demand for California grapes grew as a result of phylloxera invading vineyards in France. The town of Napa continued to thrive surrounded by these agricultural pursuits. Napa was incorporated in 1872 and while the city continued to grow and to spread, the general area of Trancas remained mainly agricultural-based until the 1950s. Vineyards and winemaking played a major role in the development of the county. After the Queen of the Valley hospital was built in 1958, the surrounding western lands were developed with housing tracks. By the

²² The Architectural Area of Potential Effect (APE) is the geographic area within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The project's APE contains or intersects a total of 30 parcels.

early 1980s, a hospital addition tripled the numbers of beds with additional housing developments continuing to be built.

An Archaeological Literature Search was prepared to determine the likelihood of uncovering unknown archaeological resources on the Site during Project construction activities. The Archaeological Literature Search included a records search at the Northwest Information Center of the California Historical Resources Information System (CHRIS), Sonoma State University. The results of the database search indicate that there are no archaeological sites identified within a 2.9-acre boundary that includes the Site, nor are any sites listed in any state or federal inventory, including the National Register of Historic Places, the California Register of Historical Resources, and the Historic Property Datafile. Additionally, an archaeological survey on the entire Project APE was taken and did not identify Native American artifacts, nor any indication of a buried paleosol.²³ The Project Site is located in an archaeologically sensitive area, according to the City of Napa archeological sensitivity map; however the potential to discover specific historic-era archaeological deposits on the site is considered low. Due the Project's location adjacent to Salvador Creek, there is nonetheless potential to discover unknown pre-historic resources.

Historic Resources

The Site is situated within an area that was historically agricultural with a few scattered farmsteads. Salvador Creek ran through the vineyards and orchards that dominated the historic landscape. At around the 1950s, with the increase of population and suburbanization in the City, the area around the Site was developed with single-family residences near existing farmsteads. Some of the houses were constructed in small clusters and others were constructed as a part of large suburban development. Housing clusters included those built in 1954 at 2123 to 2129 Big Ranch Road across Salvador Creek, northeast of the Site. Farm bridges spanning Salvador Creek, including the bridge located within the Site (Zerba bridge), and the Queen of the Valley Medical Center were constructed by 1958.

The area continued to develop with single-family residences in the 1960s and 1970s. A single-family residence was built in 1961 on part of the Valle Verde Site and was addressed as 2119 Big Ranch Road. In 1990, the Sunrise Napa Assisted Living Facility was constructed at the Heritage House Site. The facility closed in 2005. The Queen of the Valley Medical Center expanded, and more commercial centers were constructed in the area in the 1990s. Residential development continued into the 2000s with the most recent subdivision constructed in 2015-2016. The single-family residence on the Valle Verde Site was demolished in 2017.

None of the existing residential and other buildings on or adjacent to the Site appear to have exemplary design characteristics and are not associated with any patterns of development or significant events in the history of the City that would make the buildings eligible for the NRHP, CRHR, City of Napa Historic Resources Inventory, or Napa County Heritage Resource Inventory.

²³ A paleosol is a stratum or soil horizon that was formed as a soil in a past geological period.

3.5.2 Cultural Resources Impacts

3.5.2.1 *Thresholds of Significance*

For the purposes of this EIR, a cultural resources impact is considered significant if the Project would:

- 1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5;
- 2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5; or
- 3) Disturb any human remains, including those interred outside of dedicated cemeteries.

3.5.2.2 *Project Impacts*

Impact CUL-1: The Project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

A Historic Resources Survey and Report was prepared for the Project to evaluate the potential architectural historical resources located within an APE.²⁴ The report found that none of the properties within the boundaries of the APE appear on any local, state, or federal lists of historically or architecturally significant structures and/or sites, landmarks, or points of interest. The existing buildings nearby have been modified over time, do not have distinctive architectural features, and are located within a setting that is no longer consistent with the era in which they were built. Further, the single-family residence built in the 1960s on the Valle Verde Site that was demolished in 2017 was not historically significant. Therefore, the buildings and structures (e.g. Zerba Bridge) are not eligible for listing on the NRHP, CRHR, or the City of Napa Historic Resources Inventory. The proposed Project would not have an effect on significant or potentially significant historic resources.

Impact CUL-2: The Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

Given that the Site and greater Project vicinity has been the subject of multiple archaeological studies and no resources have been identified, it is unlikely that archaeological resources would be discovered during Project construction. Nevertheless, ground disturbing activities, including the removal of trees, associated with the Project could uncover previously unknown resources. If this were to occur, it would be considered a potentially significant impact. The Project would implement the following mitigation in the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed.

²⁴ An Architectural Area of Potential Effect (APE) is the “geographic area within which (the) undertaking may cause changes in the character of or use of historic properties” (36CFW 8002 (c)).

Impact CUL-2.1: Ground disturbing activities, including the removal of trees, associated with the Project could uncover previously unknown resources. **(Significant Impact)**

Mitigation Measure:

MM CUL-2.1: In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, work within 50 ft. of the find shall cease until a qualified archaeologist can assess the find and provide recommendations for further treatment, if warranted. Construction and potential impacts to the area(s) within a radius determined by the archaeologist shall not recommence until the assessment is complete. Implementation of this mitigation measure would reduce potential impacts to archaeological resources to a less than significant level.

Implementation of MM CUL-2.1 would reduce potential impacts to unknown archaeological resources to a less than significant level.

Impact CUL-3: While the Project is not expected to disturb any human remains, including those interred outside of dedicated cemeteries, the potential exists that unknown resources could be uncovered during subsurface construction activities. **(Less than Significant Impact with Mitigation Incorporated)**

The Site is not located on or near a known archaeological site or cemetery. The Project would implement the following mitigation measure in the event that human remains are inadvertently discovered during Project construction.

Impact CUL-3.1: The Project has the potential to disturb unknown resources during subsurface construction activities. **(Significant Impact)**

Mitigation Measure:

MM CUL-3.1: Human Remains: Native American coordination shall follow the protocols established under Assembly Bill 52, State of California Code, and applicable City of Napa procedures. In addition, the following measures shall be implemented with regard to human remains:

- The treatment of any human remains and associated, or unassociated funerary objects discovered during soil disturbing activities shall comply with applicable state laws. Such treatment would include immediate notification of the Napa County Coroner. In the event of the coroner's determination that the human remains are Native American, the coroner shall notify of the Native American Heritage Commission, which would appoint a Most Likely Descendant (MLD) (PRC § 5097.98). The archaeological consultant, the City of Napa, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects (CEQA Guidelines § 15064.5[d]). The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and

associated or unassociated funerary objects. The PRC allows 48 hours to reach agreement on these matters. If the MLD and the other parties could not agree on the reburial method, the Event Authority shall follow Section 5097.98(b) of the PRC, which states that “the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.”

Implementation of MM CUL-3.1 would reduce potential impacts to human remains to a less than significant level.

3.5.2.3 *Cumulative Impacts*

Impact CUL-C: The Project would not result in a cumulatively considerable contribution to a significant cultural resources impact. **(Less than Significant Cumulative Impact)**

3.5.2.4 *Prehistoric Resources*

The geographic area for prehistoric resources is the Site and adjacent parcels. Cumulative impacts to unknown prehistoric cultural resources could occur as a result of ground-disturbing activities from construction of projects within the vicinity of the proposed Site. All cumulative projects occurring within the City of Napa, would be required to implement conditions of approval or mitigation measures that would avoid impacts and/or reduce them to a less than significant level consistent with CEQA requirements. These projects would also be subject to federal, state, and county laws regulating cultural and paleontological resources. For these reasons, the proposed Project would not make a cumulatively considerable contribution to prehistoric cultural resources.

Impact C-CUL-1: Implementation of the Project would result in a less than significant cumulative impact on cultural resources.

3.5.2.5 *Historic Resources*

The geographic area for cumulative impacts to historic resources for the Project is the APE, as defined by the Historic Resources Survey and Report prepared for the Project. None of the properties within the boundaries of the APE appear on any local, state, or federal lists of historically or architecturally significant structures and/or sites, landmarks, or points of interest. The existing buildings nearby have been modified over time, do not have distinctive architectural features, and are located within a setting that is no longer consistent with the era in which they were built. Therefore, the buildings and structures (e.g. Zerba Bridge) on the Site are not eligible for listing on the NRHP, CRHR, or the City of Napa Historic Resources Inventory. For this reason, the proposed Project would not make a considerable contribution to a cumulative historic resources impact.

3.6 ENERGY

The following discussion is based, in part, on the Air Quality and Greenhouse Gas Assessment prepared by *Illingworth & Rodkin, Inc.* in October 2018. A copy of the report is attached as Appendix B to this EIR/EA.

3.6.1 Environmental Setting

3.6.1.1 *Regulatory Framework*

Federal

At the federal level, energy standards set by the U.S. Environmental Protection Agency (EPA) apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

State

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard (RPS) Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2006, California's 20 percent by 2010 RPS goal was codified under Senate Bill (SB) 107. In 2008, Executive Order S-14-08 was signed into law requiring retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. Pacific Gas and Electric Company (PG&E's) is the electricity provider for the Site. PG&E's 2016 electricity mix was 33 percent renewable; thus, it has already met the requirements of Executive Order S-14-08.²⁵

Building Codes

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (Title 24), were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years, and the 2016 Title 24 updates went into effect on January 1, 2017.²⁶ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.²⁷

The California Green Building Standards Code (CALGreen) establishes mandatory green building standards for buildings in California. The most recent updates to CALGreen went in to effect on

²⁵ PG&E. "Exploring Clean Energy Solutions". Accessed April 30, 2019. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.

²⁶ California Building Standards Commission. "Welcome to the California Building Standards Commission". Accessed February 6, 2018. <http://www.bsc.ca.gov/>.

²⁷ California Energy Commission (CEC). "2016 Building Energy Efficiency Standards". Accessed February 6, 2018. <http://www.energy.ca.gov/title24/2016standards/index.html>.

January 1, 2017, and cover five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Local

City of Napa High-Performance Building Regulations

The City of Napa has adopted high performance building regulations for new development that address planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. While based on CALGreen, these regulations also include some more stringent local amendments as summarized in Napa Municipal Code Chapter 15.04.

General Plan policies related to energy that are applicable to the Project include the following.

Policy	Description
LU- 11.1	The City shall create Green Building Initiatives to encourage or require new development and rehabilitation projects to incorporate sustainable practices, green building techniques, energy conservation and recycling measures, alternate and renewable energy producing systems.
LU- 11.2	The City shall incorporate green building practices into City facilities, and integrate energy efficiency and conservation into City functions.

3.6.1.2 Existing Conditions

Total energy usage in California was approximately 7,322 trillion Btu in the year 2015, the most recent year for which this data was available. The breakdown by sector was approximately 18 percent (1,357 trillion Btu) for residential uses, 19 percent (1,465 trillion Btu) for commercial uses, 24 percent (1,837 trillion Btu) for industrial uses, and 39 percent (3,017 trillion Btu) for transportation.²⁸ This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electrical energy is expressed in units of kilowatts (kW) and kilowatt-hours (kWh). If run for one hour, a 1,000-watt (1 kW) hair dryer would use one kilowatt-hour of electrical energy. Other measurements of electrical energy include the megawatt (1,000 kW) and the gigawatt (1,000,000 kW).

In 2016, California produced approximately 93 percent of the electricity it consumed and the rest was imported. California’s non carbon dioxide-emitting electric generation (from nuclear, large hydroelectric, solar, wind, and other renewable sources) accounted for 50 percent of total in-state generation for 2016, compared to 40 percent in 2015.²⁹ Electricity supplied from out-of-state, coal-fired power plants has continued to decrease since 2006, following the enactment of a state law

²⁸ United States Energy Information Administration. *State Profile and Energy Estimates, 2015*. Accessed August 1, 2018. <https://www.eia.gov/state/?sid=CA#tabs-2>.

²⁹ CEC. “Total System Electric Generation”. Accessed August 1, 2018. http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.

requiring California utilities to limit new long-term financial investments only to power plants that meet California emissions standards.³⁰

California's total system electric generation in 2016 was 290,567 gigawatt-hours (GWh), which was down 1.6 percent from 2015's total generation of 295,405 GWh. California's in-state electric generation was up by approximately one percent at 198,227 GWh compared to 196,195 GWh in 2015, and energy imports were down by 6,869 GWh to 92,341 GWh.³¹ In 2016, total in-state solar generation increased 31.5 percent from 2015 levels and wind generation increased 10.8 percent.

Growth in annual electricity consumption declined between 2015 and 2016 reflecting increased energy efficiency and higher self-generation from solar photovoltaic power systems. Per capita drops in electrical consumption are predicted through 2027 as a result of energy efficiency gains and increased self-generation (particularly from photovoltaic systems).³² Due to population increases, however, it is estimated that future demand in California for electricity would grow at approximately one percent each year through 2027, and that 319,256 GWh of electricity would be utilized in the state in 2027.³³

Electricity in Napa County in 2016 was consumed primarily by the commercial sector (66 percent), followed by the residential sector consuming 34 percent. In 2016, a total of approximately 1,058 GWh of electricity was consumed in Napa County.³⁴

PG&E is the City of Napa energy utility, providing both natural gas and electricity for residential, commercial, industrial, and municipal uses. PG&E generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. In 2016, natural gas facilities provided 17 percent of PG&E's electricity delivered to retail customers; nuclear plants provided 24 percent; hydroelectric operations provided 12 percent; renewable energy facilities including solar, geothermal, and biomass provided 33 percent; and 13 percent was unspecified.³⁵

Natural Gas

Energy usage is typically quantified using the British thermal unit (Btu). As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWh) of electricity are 123,000 Btu, 1,000 Btu, and 3,400 Btu, respectively. Utility providers measure natural gas usage in Btu.

³⁰ EIA. "California State Profile and Energy Estimates Profile Analysis". Accessed August 1, 2018. <https://www.eia.gov/state/analysis.php?sid=CA#40>.

³¹ CEC. "Total System Electric Generation". Accessed August 1, 2018. http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.

³² CEC. *California Energy Demand Updated Forecast, 2017-2027*. Accessed August 1, 2018. http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-05/TN214635_20161205T142341_California_Energy_Demand_Updated_Forecast.pdf.

³³ Ibid.

³⁴ CEC. Energy Consumption Data Management System. "Electricity Consumption by County". Accessed August 1, 2016. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

³⁵ PG&E. "Exploring Clean Energy Solutions". Accessed August 1, 2018. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page?WT.mc_id=Vanity_cleanenergy.

PG&E provides natural gas services within the City of Napa. In 2016, approximately three percent of California's natural gas supply came from in-state production, while 97 percent was imported from other western states and Canada.³⁶ California's natural gas is supplied by interstate pipelines, including the Mojave Pipeline, Transwestern Pipeline, Questar Southern Trails Pipeline, Tuscarora Pipeline, and the Baja Norte/North Baja Pipeline. As a result of improved access to supply basins, as well as pipeline expansion and new projects, these pipelines currently have excess capacity.³⁷

In 2016, residential and commercial customers in California used 29 percent, power plants used 32 percent, and the industrial sector used 37 percent. Transportation accounted for one percent of natural gas use in California. Utility providers measure natural gas usage in Btu. In 2016, California consumed approximately 2,236,258,609 million btu (MMBtu)³⁸ of natural gas; a slight decrease from 2015 when 2,363,349,859 MMBtu³⁹ were consumed.⁴⁰ In Napa County, a total of 3,648,111 MMBtu of natural gas were consumed in 2016, which is about 0.2 percent of the state's total.⁴¹

Overall natural gas demand in California is anticipated to decrease slightly through 2028. This decline is due to on-site residential, commercial, and industrial electricity generation; aggressive energy efficiency programs; and a decrease in demand for electrical power generation as a result of state-mandated RPS targets (as the state moves to power generation resources that result in less GHG emissions than natural gas).⁴²

Fuel for Motor Vehicles

California accounts for more than one-tenth of the United States' crude oil production and petroleum refining capacity.⁴³ In 2017, 15 billion gallons of gasoline were sold in California.⁴⁴ The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 13.1 miles-per-gallon (mpg) in the mid-1970's to 22 mpg in 2015.⁴⁵ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act

³⁶ California Gas and Electric Utilities. 2016 California Gas Report. Accessed August 1, 2018.

http://docketpublic.energy.ca.gov/PublicDocuments/16-BSTD-06/TN212364_20160720T111050_2016_California_Gas_Report.pdf.

³⁷ Ibid.

³⁸ $2,177,467 \text{ million cubic feet} = 2,177,467,000,000 \text{ cubic feet} * 1,027 = 2,236,258,609,000,000 / 1,000,000 = 2,236,258,609 \text{ MMBtu}$

³⁹ $2,301,217 \text{ million cubic feet} = 2,301,217,000,000 * 1,027 = 2,363,349,859,000,000 / 1,000,000 = 2,363,349,859 \text{ MMBtu}$

⁴⁰ EIA. "Natural Gas Delivered to Consumers in California". Accessed August 1, 2018.

http://www.eia.gov/dnav/ng/ng_sum_lsum_dcua_sca_a.htm.

⁴¹ CEC. "Natural Gas Consumption by County". Accessed August 1, 2018.

<http://ecdms.energy.ca.gov/gasbycounty.aspx>.

⁴² California Gas and Electric Utilities. 2017 Natural Gas Market Trends and Outlook. Accessed August 1, 2018.

http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-04/TN222400_20180131T074538_STAFF_FINAL_REPORT_2017_Natural_Gas_Market_Trends_and_Outlook.pdf.

⁴³ U.S. EIA. *California State Profile and Energy Estimates: Profile Analysis*. Accessed August 1, 2018.

<http://www.eia.gov/beta/state/analysis.cfm?sid=CA>

⁴⁴ California Department of Tax and Fee Administration. Net Taxable Gasoline Gallons. Accessed August 1, 2018.

http://www.cdtfa.ca.gov/taxes-and-fees/MVF_10_Year_Report.pdf.

⁴⁵ U.S. EPA. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Accessed August 1, 2018.

http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_statistics/html/table_04_23.html.

was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was subsequently revised to apply to cars and light trucks Model Years 2011 through 2020.^{46,47} In 2012, the federal government raised the fuel economy standard to 54.5 miles per gallon for cars and light-duty trucks by Model Year 2025.⁴⁸

3.6.2 Energy Impacts

3.6.2.1 *Thresholds of Significance*

Based on Appendix F of the CEQA Guidelines, and for the purposes of this EIR, a project will result in a significant energy impact if the Project will:

- 1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation; or
- 2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.6.2.2 *Project Impacts*

Impact EN-1: The Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during Project construction or operation.
(Less than Significant Impact)

Development of the Site with the Project and associated infrastructure would consume energy during both the construction and operational phases of the Project. The construction phase would require energy for the actual manufacture and transportation of building materials, preparation of the site (e.g., importing fill and grading), and the actual construction of the building. Adherence to existing regulations and programs would reduce energy loss resulting from the disposal of construction and demolition materials through diversion and recycling. Additionally, the existing Napa Sunrise Senior Living Facility would be rehabilitated with interior and exterior modifications to accommodate the proposed Heritage House units, which would meet the new higher efficiency Title 24 standards, which further reduces the Project's construction related energy impacts. Examples would include installation of low flow showers, fixtures, and toilets and energy efficient lighting among other measures.

The operational phase of the Project would consume energy for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Operational energy would also be consumed during each vehicle trip associated with the proposed uses. Operational energy use is shown in Table 3.6-1.

⁴⁶ U.S. Department of Energy. Energy Independence & Security Act of 2007. Accessed August 1, 2018.

<http://www.afdc.energy.gov/laws/eisa>.

⁴⁷ Public Law 110-140—December 19, 2007. Energy Independence & Security Act of 2007. Accessed August 1, 2018. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>

⁴⁸ National Highway Traffic Safety Administration. *Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards*. August 28, 2012. Accessed August 1, 2018. <http://www.nhtsa.gov/About+NHTSA/Press+Releases/2012/Obama+Administration+Finalizes+Historic+54.5+mpg+Fuel+Efficiency+Standards>.

Table 3.6-1: Estimated Annual Operational Energy Use of Proposed Development¹			
Development	Electricity Use (kWh)	Natural Gas Use (kBtu)	Gasoline (gal/yr)
Project	383,831.5	777,551	26,780
Source: Illingworth & Rodkin, Inc. <i>Air Quality Assessment</i> . kWh = kilowatt hours kBtu = thousand Btu 589,148 vehicle miles traveled (VMT) / 22.0 mpg = 26,780 gallons of gasoline <u>Notes:</u> ¹ Project emissions represent mitigated conditions of project operations.			

Implementation of the Project would use approximately 383,831.5 kWh of electricity and approximately 777,551 kBtu of natural gas per year.⁴⁹ Annual gasoline consumption as a result of the Project would increase by approximately 26,780 gallons. The Valle Verde Apartments and renovated Heritage House would include the following green building features:

- Recycled materials for building construction;
- Water-efficient plumbing fixtures;
- Low-VOC paints, sealants, adhesives, and finishes;
- Energy-efficient windows, lighting, water heaters, and appliances;
- Low-emitting flooring;
- Water-conserving fixtures; and
- Drip-irrigated native and low-water landscaping with bioswale stormwater retention

Although the Project would use energy, the consumption would not be wasteful, inefficient, or unnecessary. The Project would comply with the CALGreen Building Code, City of Napa General Plan and City of Napa Municipal Code, and the City’s High-Performance Building Regulations. As noted above, CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to State environmental directives. The most recent update to CALGreen went into effect on January 1, 2017, and covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

By complying with the mandatory provisions of CALGreen that pertain to energy consumption and energy efficiency, and implementation of the proposed green building features, the Project would not result in wasteful, inefficient, or unnecessary consumption or wasteful use of energy resources.

⁴⁹ These estimates do not include deductions of the existing electricity, natural gas, and gasoline consumption associated with the current development on the site. Net increases in energy uses on the site would be lower.

Impact EN-2: The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

As discussed above, although the Project would use energy, the Project would comply with the CALGreen Building Code, the Napa 2020 General Plan and the City of Napa Municipal Code, and the City's High-Performance Building Regulations. The Project is required to comply with these codes and policies, but many of the details are to be determined during the Building Permit process as the design and operation details of the residential building's electrical, mechanical, and plumbing systems are further refined. Compliance with CALGreen and the City's High-Performance Building Regulations would be verified at the time of Building Permit. As currently proposed, the Project includes energy-efficient windows, lighting, water heaters, and appliances, water-conserving fixtures, and the site is located within a half mile of a public transit stop, thereby serving to reduce the consumption of fossil fuels from automobile travel to and from the site. For these various reasons, the Project would not conflict with a State or local plan for renewable energy or energy efficiency.

3.6.2.3 *Cumulative Impacts*

Impact EN-C: The Project would not result in a cumulatively considerable contribution to a significant energy impact. **(Less than Significant Cumulative Impact)**

Energy is a cumulative resource. The geographic area for cumulative energy impacts is the State of California. Past, present, and future development projects contribute to the state's energy impacts. If the Project is determined to have a significant energy impact, it is concluded that the impact is cumulatively considerable. As discussed under Impact EN-1 and EN-2, the Project would not result in significant energy impacts. Therefore, the Project would not have a cumulatively considerable contribution to a significant cumulative energy impact.

3.7 GEOLOGY AND SOILS

The following discussion is based, in part, on a Geotechnical Investigation prepared for the Project by *Miller Pacific Engineering Group* in January 2019. A copy of the report is attached as Appendix F to this EIR/EA.

3.7.1 Environmental Setting

3.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act ensures public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction.

Seismic Hazards Mapping Act

Following the 1989 Loma Prieta earthquake, the Seismic Hazards Mapping Act (SHMA) was passed. The SHMA directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. It also requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the identified hazard is present and requires the inclusion of measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC contains the regulations that govern the construction of buildings in California and prescribes standards for constructing safer buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared by a licensed professional for proposed developments to evaluate seismic and geologic conditions that may affect a project, such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years; the current version is the 2016 CBC.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Paleontological Resources Regulations

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. These resources are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code (Section 5097.5) specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it will disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Envision Napa 2020

General Plan policies related to geology and soils that are applicable to the Project include the following.

Policy	Description
HS-1.1	The City shall require that all new buildings be designed and constructed to resist stresses produced by earthquakes. To this end, the City shall require all new buildings to conform to the structural requirements of the most recently adopted edition of the Uniform Building Code.
HS-1.3	The City shall require soils and geologic studies for proposed development with large client populations (such as schools and convalescent centers) within areas subject to very strong, violent, or very violent ground shaking, as indicated in the ABAG Shaking Intensity Map. Such studies should determine the actual extent of the seismic hazards, optimum location for structures, the advisability of special structural requirements, and the feasibility and desirability of a proposed facility in a specified location. Mitigation measures shall be incorporated as conditions of any project approval.
HS-1.4	The City shall require special construction features in the design of structures where site investigations confirm potential seismic hazards.
HS-1.6	The City shall encourage the study and rehabilitation of high occupancy structures (such as multi-family residences and large public assembly facilities) susceptible to collapse or failure in an earthquake.
HS-2.1	The City shall seek to minimize grading and impermeable surfaces in high-erosion areas. If grading or impermeable surfaces are necessary, they shall be properly engineered and drained to reduce runoff and erosion.
HS-2.2	The City shall consider natural landform contours and geologic conditions in the development of roadways and individual project design.

City of Napa Policy Resolution No. 27

The City of Napa adopted Policy Resolution 27 originally in August 1992 and has most recently amended the Resolution in December 2002. The Resolution includes the City's standard mitigation measures that are imposed on all development projects, unless otherwise authorized by the City. Any or all of the mitigation measures listed in Resolution 27 may be imposed as conditions of project

approval. The mitigation measures are periodically updated, as needed. The following measures are applicable to the Project:

- All Project-related grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Napa Public Works Department Standard Specifications.
- All construction activities shall meet the Uniform Building Code regulations for seismic safety (e.g., reinforcing perimeter and/or load bearing walls, bracing parapets).
- Developer shall provide an erosion and sediment control plan and a schedule for implementation of approved measures to the Public Works Director for approval prior to the issuance of any grading permits. No grading and excavation shall be performed except in accordance with the approved plan and schedule.
- Hydroseeding of all disturbed slopes shall be completed by October 1. Developer shall provide sufficient maintenance and irrigation of the slopes such that growth is established by November 1.

3.7.1.2 Existing Conditions

Regional Geology

Napa County lies within the Coast Ranges geomorphic province of California, a region characterized by active seismicity, steep, young topography, and abundant landsliding and erosion owing partly to its relatively high annual rainfall. The regional base rock consists of sedimentary, igneous, and metamorphic rock of the Jurassic-Cretaceous age (65-190 million years ago) Franciscan Complex and marine sedimentary strata of the Great Valley Sequence, which is of similar age. Within central and northern California, the Franciscan and Great Valley rocks are locally overlain by a variety of late Cretaceous and Tertiary-age sedimentary and volcanic rocks which have been deformed by episodes of folding and faulting. The youngest geologic units in the region are Quaternary-age (last 1.8 million years) sedimentary deposits. These unconsolidated deposits partially fill many of the valleys of the region.

Project Site

A subsurface exploration, including eight soil borings was completed in October 2018. Results of the subsurface exploration are included in Appendix F. The Site is underlain by alluvial deposits variously composed of medium stiff to very stiff clay with silt, sand, and gravel interbedded with occasional lenses of clayey and sandy gravel.

Groundwater was measured between 12 and 22 feet below grade.

Seismicity and Seismic Hazards

The Site is located within the seismically active San Francisco Bay region which includes the Central and Northern Coast Mountain Ranges. Several active faults are present in the area both east and west of the site, including the West Napa, Green Valley, Great Valley, and Cordelia Faults. During an earthquake, strong ground shaking could occur at the Site.

Liquefaction and Lateral Spreading

Liquefaction is a seismic hazard and is characterized as the temporary transformation of soils to a liquid state during ground shaking. Lateral spreading, typically associated with liquefaction, is horizontal ground movement of flat-lying soil deposits toward a free face such as an excavation, channel, or open body of water.

The Site is adjacent to the border of a zone of high liquefaction susceptibility. Based on the project-specific liquefaction analysis, there is a relatively low risk for liquefaction and related settlement to occur on-site.⁵⁰

Landslides

The Site is located on the valley floor and is not located within a known earthquake fault zone or landslide hazard zone.

Paleontological Resources

The General Plan does not identify paleontological resources in the surrounding area and no known paleontological resources have been uncovered on the Site.

3.7.2 Geology and Soils Impacts

3.7.2.1 *Thresholds of Significance*

For the purposes of this EIR, a geology and soils impact is considered significant if the Project would:

- 1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)
 - Strong seismic ground shaking
 - Seismic-related ground failure, including liquefaction
 - Landslides
- 2) Result in substantial soil erosion or the loss of topsoil;
- 3) 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;
- 4) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property;
- 5) 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; or

⁵⁰ Miller Pacific Engineering Group. *Updated Geotechnical Investigation*. January 29, 2019.

- 6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

3.7.2.2 *Project Impacts*

Impact GEO-1: The Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides.
(Less than Significant Impact)

Fault Rupture

The Site is not located within an Alquist-Priolo Special Studies Zone or the City's General Plan Fault Rupture Hazard Zone. The nearest active fault to the Site is the West Napa Fault, located approximately 1.9 mile west of the Site. The potential for fault surface rupture on the Site is low and considered less than significant.

Seismic Ground Shaking

The potential for strong seismic shaking at the Site is high. Due to its close proximity, the West Napa Fault presents the highest potential for severe ground shaking. Therefore, the Project shall incorporate the following standard permit conditions; which will further minimize the risks associated with potential ground shaking.

Standard Permit Conditions:

To avoid or minimize potential damage from seismic shaking, the Project shall be built using standard engineering and seismic safety design techniques. Building design and construction at the Site shall be completed in conformance with the recommendations of an approved geotechnical investigation. The buildings shall meet the requirements of applicable Building and Fire Codes, including the 2016 California Building Code Chapter 16, Section 1613, as adopted or updated by the City.

All Project-related grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Napa Public Works Department Standard Specifications.

All construction activities shall meet the Uniform Building Code regulations for seismic safety (e.g., reinforcing perimeter and/or load bearing walls, bracing parapets).

Applicant shall provide an erosion and sediment control plan and a schedule for implementation of approved measures to the Public Works Director for approval prior to the issuance of any grading permits. No grading and excavation shall be performed except in accordance with the approved plan and schedule.

With implementation of the above standard permit conditions, the proposed Project would not expose people or structures to substantial adverse effects; nor would the Project exacerbate existing geological hazards on the Site such that it would impact (or worsen) off-site geological and soil conditions.

Landslides

The Site is not located within a landslide hazard zone. The Site is relatively flat and is not located in the vicinity of any slope that could be affected by a landslide.

Liquefaction

Analyses completed for the *Geotechnical Investigation* indicated that the saturated granular layers that were observed on the site during the geotechnical investigation could experience liquefaction, resulting in up to 2.5 inches of post liquefaction settlement and one inch of differential settlement following a major earthquake. The geotechnical investigation found that the anticipated post liquefaction and differential settlement may cause damage to brittle surfaces, door and window operation, and other issues, but would be unlikely to result in building collapse.

With implementation of the Standard Permit Condition, the proposed Project would not expose people or structures to substantial adverse effects due to liquefaction.

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying soil toward an open or “free” face such as an open body of water, channel, or excavation. This movement is often associated with liquefaction. Based on the underlying site soils, despite being adjacent to Salvador Creek, the Site is not expected to experience lateral spreading.

Impact GEO-2: The Project would result in substantial erosion or the loss of topsoil. **(Less than Significant Impact with Mitigation Incorporated)**

Erosion

Salvador Creek borders the northeast portion of the Site. There are currently two active areas of erosion on the Site (see Figure 2.7-7). Erosion of the creek channel slope adjacent to portions of the Site has resulted in over-steepened slope inclinations. In these areas, lateral creep or yielding of the channel slope has resulted in cracking, settlement, and lateral creep of the asphalt paved driveway areas located near the top of the creek channel. Cracking and distress of the existing pavement surface extends back approximately 25 to 30 feet from the top of the slope. Unless remediated, these areas of erosions would result in additional settlement and cracking of the adjacent paved asphalt driveway.

As described in Section 2.7.2.10 and per recommendations of the geotechnical investigation, the Project would construct a stitch pier retaining structure to address the active erosion at the southern portion of the Site. The stitch pier would be located at the existing asphalt curb and would be

constructed outside of the creek channel. The pier would extend approximately 28 feet below grade and would be installed for approximately 85 feet alongside Salvador Creek.

Installation of the stitch pier retaining structure would stabilize the areas of active erosion such that the Project would not exacerbate erosion. For these reasons, the Project would not result in significant erosion.

Loss of Topsoil

Development of the Site would disturb the ground and expose soils, thereby increasing the potential for wind- or water-related erosion and sedimentation at the site until the completion of construction. Additionally, the Site may experience localized erosion due to concentrated surface water flows at the site. Implementation of the Standard Permit Conditions listed in Impact GEO-1 would reduce potential impacts related to loss of topsoil to a less than significant level. Additionally, the Project would implement the following mitigation measure.

Mitigation Measure:

MM GEO-2.1: The Project Civil Engineer shall design and implement a site drainage system to collect surface water and direct towards an established storm drainage system. The Civil Engineer shall also design an erosion control plan prior to Project construction, per the current guidelines of the *California Stormwater Quality Association's Best Management Practice Handbook* (2003). The erosion control plan shall be submitted and approved by the City prior to issuance of a grading permit.

With implementation of MM GEO-2.1, the Project would reduce potential impacts related to loss of topsoil to a less than significant level.

Impact GEO-3: The Project would not 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. **(Less than Significant Impact)**

As described in Impact GEO-1, the Site is not located within a landslide hazard zone and is not in the vicinity of a slope that could be affected by a landslide. The Site is located within a liquefaction hazard zone. With implementation of the standard permit conditions listed under Impact GEO-1, the Project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Impact GEO-4: The Project would not be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

Expansive soils will shrink and swell with fluctuations in moisture content and are capable of exerting significant expansion pressures on building foundations, interior floor slabs, and exterior flatwork. Distress from expansive soil movement can include cracking of brittle wall coverings (stucco, plaster, drywall, etc.), racked door and/or window frames, and uneven floors and cracked slabs. Flatwork, pavements, and concrete slabs-on-grade are particularly vulnerable to distress due to their low bearing pressures.

As part of the Geotechnical Investigation, a Plasticity Index test was completed on a representative sample from soil borings. PI test results indicated low to medium plasticity and low to moderate expansive potential of the on-site soils. The Project would implement MM GEO-1, which would require that the Project's building design and construction shall be completed in conformance with the recommendations of an approved geotechnical investigation.

Implementation of MM GEO-1 and the Standard Permit Condition listed under Impact GEO-1 above would ensure that development of the Site would not exacerbate existing soil conditions on the Site, and that expansive soils on-site would not exacerbate risks to life and property.

Impact GEO-5: The Project would not use septic tanks or alternative waste water disposal systems. **(No Impact)**

The Site is located within an urbanized area of Napa, and sewers are available to dispose of wastewater from the Site. Therefore, redevelopment of the Site would not require septic tanks or alternative wastewater disposal systems.

Impact GEO-6: The Project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact)**

Although it is not anticipated that paleontological resources would be uncovered on the Site based on the findings of the General Plan EIR, construction activities associated with the Project could significantly impact paleontological resources, if they are encountered. The Project shall implement the following standard permit condition.

Standard Permit Condition: The following measure shall be applied to development of the Site to reduce and/or avoid impacts to paleontological resources:

- If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds. The Applicant will be responsible for implementing the recommendations of the paleontological monitor.

Implementation of the above Standard Permit Condition would ensure that the proposed Project would not significantly impact paleontological resources.

3.7.2.3 *Cumulative Impacts*

Impact GEO-C: The Project would not result in a cumulatively considerable contribution to a significant geology and soils impact. **(No Cumulative Impact)**

The geographic area for cumulative impacts to geology and soils is the Site and adjacent parcels. The cumulative projects in the Project vicinity would be subject to similar geology, soils, and seismicity conditions as the proposed Project. The Site is not located in an area where unstable geological conditions would be likely to result in a cumulatively considerable impact. Further the proposed Project and all cumulative projects would be subject to conditions of approval, mitigation measures, and CBC requirements to avoid impacts from geology and soils hazards, and/or reduce them to a less than significant level. These projects would also be subject to federal, state, city, or county laws for building and construction in seismic hazard areas. For these reasons, the proposed Project would not contribute considerably to a significant cumulative geology and soils impact.

3.8 GREENHOUSE GAS EMISSIONS

The following discussion is based, in part, on the GreenPoint Rated Checklist prepared for the Project and Appendix B: Air Quality and Greenhouse Gas Assessment. A copy of the checklist is included as Appendix G to this EIR/EA.

3.8.1 Environmental Setting

3.8.1.1 *Regulatory Framework*

State

Global Warming Solutions Act

Under the California Global Warming Solution Act, also known as Assembly Bill (AB) 32, the California Air Resources Board (CARB) established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHG, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent (MMTCO_{2e}). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO_{2e}.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035, as compared to 2005 emissions levels. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission partnered with the Association of Bay Area Governments, BAAQMD, and Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area. Plan Bay Area establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). The Site is not located within a PDA.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for

model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.⁵¹

Regional

Bay Area 2017 Clean Air Plan

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards would be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The City of Napa and other jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Napa County Climate Action Plan

Napa County adopted a Climate Action Plan (CAP) in March 2012 to establish baseline emissions for development in the County and achieve GHG emissions 15 percent less than the County's 2005 level. The CAP requires discretionary projects to reduce project emissions 38 percent below "business as usual" (BAU) in 2020 by applying a combination of State, local, and project-specific measures. The CAP also assumes that the County will achieve the goals set forth in the Emission Reduction Plan for County operations.

City of Napa – High Performance Building Regulations

The City of Napa has adopted high performance building regulations for new development that address planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality based on the California Green Building Standards Code (CALGreen).

3.8.1.2 Existing Conditions

The Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility and the Valle Verde Site is vacant. Therefore, the Site does not currently generate GHG emissions.

⁵¹ CARB. "The Advanced Clean Cars Program". Accessed April 6, 2018. <https://www.arb.ca.gov/msprog/acc/acc.htm>.

3.8.2 Greenhouse Gas Emissions Impacts

3.8.2.1 *Thresholds of Significance*

For the purposes of this EIR, a greenhouse gas emissions impact is considered significant if the Project would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact GHG-1: The Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

Construction Emissions

Short-term GHG emissions from the construction phase of the Project would consist of primarily heavy equipment exhaust, worker travel, materials delivery, and solid waste disposal. Neither the City of Napa nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions; however, BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. The construction phases of the Project would generate approximately 191 metric tons (MT) of CO₂e.

Because construction would be temporary (approximately nine months) and would not result in a permanent increase in emissions, the Project would not interfere with the implementation of AB 32 or SB 32.

Operational Emissions

Once construction of the Project is completed, long-term GHG emissions sources would be resident, employee, and visitor vehicle travel, energy and water use, and solid waste disposal. It is estimated that the Project would emit 398 MT CO₂e/year for the year 2021 and 343 MT of CO₂e/year for the year 2030 (see Appendix B). Based on the number of future residents (149) (see *Section 3.13, Population and Housing*) that would be located at the Site, the service population emissions for the Project in 2021 would be 2.7 MT CO₂e/year/service population and would be 2.3 MT CO₂e/year/service population in 2030 (see Table 3.8-1).

The 2030 emissions would not exceed the “Substantial Progress” threshold of 2.6 MT of CO₂e/year per service population and would therefore, have a less than significant impact.

Additionally, the proposed Heritage House would comply with measures listed in the GreenPoint Rated Checklist for multifamily and affordable housing projects. For a list of the applicable measures, refer to Appendix G.

Table 3.8-1: Annual Project GHG Emissions (CO₂e) in Metric Tons		
Source Category	Proposed Project in 2021	Proposed Project in 2030
Area	5	5
Energy Consumption	92	92
Mobile	255	200
Solid Waste Generation	36	36
Water Usage	10	10
Total	398	343
Service Population Emissions	2.7	2.3
<i>Significance Threshold</i>		2.6 MT CO ₂ e/year/service population
Significant?		No

Impact GHG-2: The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

As described in Impact GHG-1, the Project’s operational GHG emissions would be below the BAAQMD’s service population significance threshold. The Project, therefore, would not conflict with the BAAQMD Air Quality Guidelines and would have a less than significant impact. The City does not have an adopted Climate Action Plan.

3.8.2.2 Cumulative Impacts

Impact GHG-C: The Project would not result in a cumulatively considerable contribution to a GHG emissions impact. **(Less than Significant Cumulative Impact)**

The preceding discussion of the Project’s GHG impacts is in essence a cumulative impact discussion, as no one project alone could result in climate change impacts, rather it is the combined GHG contributions of all global sources that leads to global climate change. Project-level emissions are below BAAQMD’s service population significance threshold. According to BAAQMD Air Quality Guidelines, if emissions of operational-related GHGs do not exceed the threshold, the proposed Project would not result in a cumulatively considerable contribution of GHG emissions or a cumulatively significant impact to global climate change.

3.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part on a Phase I Environmental Site Assessment (ESA) prepared by *Basics Environmental, Inc.* in January 2011, and a HUD Explosive and Fire Hazards Review prepared by *Running Moose Environmental Consulting, LLC* in July 2018. Copies of the Phase I ESA and HUD Explosive and Fire Hazards Review are attached as Appendix H and Appendix I, respectively.

3.9.1 Environmental Setting

3.9.1.1 *Regulatory Framework*

Federal and State

Hazardous Materials Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies are responsible for implementation and enforcement. The City of Napa Fire Department is responsible for inspecting facilities containing toxic and/or hazardous materials.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Cortese List (Government Code Section 65962.5)

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by the state, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and CalRecycle. The Site is not on the Cortese List.⁵²

Asbestos-Containing Material and Lead Paint Regulations

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common

⁵² DTSC. "Hazardous Waste and Substances Site List (Cortese)". Accessed August 1, 2018. [http://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=cortese&site_type=csites,open,fuds,close&status=act,bklg,com,colur&reporttitle=hazardous+waste+and+substances+site+list+\(cortese\)](http://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=cortese&site_type=csites,open,fuds,close&status=act,bklg,com,colur&reporttitle=hazardous+waste+and+substances+site+list+(cortese)).

examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl asbestos floor tiles, and transite siding made with cement. Use of friable asbestos products was banned in 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodel that may disturb the ACMs.

The U.S. Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

California Accidental Release Prevention Program (CalARP)

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of property. Facilities that are required to participate in the CalARP program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Napa County Division of Environmental Health (NCDEH) reviews CalARP risk management plans as the Certified Unified Program Agency (CUPA).

Local

Envision Napa 2020

General Plan policies related to hazards and hazardous materials that are applicable to the Project include the following.

Policy	Description
HS-5.1	The City shall require that development in wildland urban interface areas provides adequate access roads, onsite fire protection systems, signage, ignition resistant building materials, and defensible space.

City of Napa Policy Resolution No. 27

The City of Napa adopted Policy Resolution 27 originally in August 1992 and has most recently amended the Resolution in December 2002. The Resolution includes the City’s standard mitigation measures that are imposed on all development projects, unless otherwise authorized by the City. Any or all of the mitigation measures listed in Resolution 27 may be imposed as conditions of project approval. The mitigation measures are periodically updated, as needed.

3.9.1.2 Existing Conditions

The Heritage House Site is developed with a vacant three-story 72-room Sunrise Napa Assisted Living Facility and associated surface parking lot. the Valle Verde Site, formerly the location of a single-family home, is undeveloped land.

3.9.2 Hazards and Hazardous Materials Impacts

3.9.2.1 Thresholds of Significance

For the purposes of this EIR, a hazards and hazardous materials impact is considered significant if the Project would:

- 1) Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials;
- 2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- 3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 4) 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;
- 5) 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, result in a safety hazard or excessive noise for people residing or working in the project area;
- 6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- 7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

3.9.2.2 Project Impacts

Impact HAZ-1: The Project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

The Project would include the use and storage on-site of cleaning supplies and maintenance chemicals in small quantities. No other hazardous materials would be used or stored on-site. The small quantities of cleaning supplies and materials would not pose a risk to site users or adjacent land uses.

Impact HAZ-2: The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact)**

The Project Site is not included on any lists compiled pursuant to Government Code Section 65962.5. The site visit did not reveal any obvious signs of hazardous materials or spills, other than oil stains from vehicles common to all parking lots. No obvious evidence of underground storage tanks,

distressed vegetation, or surface impoundments were observed throughout the Site during the inspection. The results of the Phase I ESA indicate that pesticides and herbicides may have been used on-site as part of the past agricultural operations on-site between the 1940s to 1960s. Information from the County Agricultural Department revealed these chemicals do not persist in the soil and ground water and will break down over time.⁵³ Given the substantial time (over 50 years) since the Site was used for agricultural purposes and the nature of the chemical degradation, the Phase I ESA concluded the probability of pesticides or herbicides within the soil and/or groundwater is low and would not pose a risk for construction workers.

The existing Sunrise Assisted Living Facility building was constructed in 1990, following the Lead-Based Paint ban in 1978 and after the prohibition of the use of asbestos containing materials; therefore, the existing building does not pose a lead-based paint or asbestos risk to future Site occupants. For these reasons, development of the Project would not result in a significant hazard to the public or the environment involving the release of hazardous materials.

Impact HAZ-3: The Project would not 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)**

The Site is not located within one-quarter mile of an existing or proposed school, and the Project would not emit hazardous emissions or handle hazardous materials.

Impact HAZ-4: The Project Site is not 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 not create a significant hazard to the public or the environment. **(Less than Significant Impact)**

The Site is not located on the California Environmental Protection Agency (CalEPA) Cortese List, compiled pursuant to Government Code Section 65962.5. The Phase I ESA determined that there are no hazardous materials located on-site; therefore, construction workers and future Site users would not be exposed to hazardous materials.

Impact HAZ-5: The Site is not 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. The Project would not result in a safety hazard or excessive noise for people residing or working in the Project area. **(Less than Significant Impact)**

The Site is located approximately 7.5 miles north of the Napa County Airport and is outside of the Airport Influence Area. As proposed, the Project building height would not require Federal Aviation Administration review. The Project, therefore, would not result in a safety hazard.

⁵³ Basics Environmental. Phase I Environmental Site Assessment. December 9, 2014.

Impact HAZ-6: The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

Development of the Site under the proposed Project would not physically interfere with an adopted emergency response or evacuation plan.

Impact HAZ-7: The Project would not 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 Site is not located in an area designated as a wildland fire hazard and there are no wildlands adjacent to the Site. Therefore, the Project would not expose future residents to a significant risk of loss, injury or death related to wildland fires.

3.9.2.3 *Cumulative Impacts*

Impact HAZ-C: The Project would not result in a cumulatively considerable contribution to a significant hazards and hazardous materials impact. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative hazards and hazardous materials impacts is the Site and adjacent parcels. As described in Section 3.9.2.2, the Phase I ESA determined that there are no hazardous materials located on-site; therefore, construction workers and future site users would not be exposed to hazardous materials. Pesticides and herbicides may have been used on-site as part of the past agricultural operations on-site; however, the probability of pesticides or herbicides within the soil and/or groundwater is low and would not pose a risk for construction workers. The Phase I ESA concluded that adjacent properties did not reveal any obvious business activities indicative to the use, storage and/or treatment of hazardous materials. The Phase I ESA also determined that the potential release of vapors from contaminated soil or groundwater either on or near the Site was low. For these reasons, the Project would not result in hazards and hazardous materials impacts that would contribute considerably to cumulative hazards and hazardous materials impacts.

3.9.2.4 *Existing Hazardous Materials Conditions Affecting the Project*

The California Supreme Court, in a December 2015 opinion (CBIA vs. BAAQMD), confirmed that CEQA is concerned with the impacts of a Project on the environment, not the effects the existing environment may have on a Project. As described in Impact HAZ-1 to Impact HAZ-7 above, the Phase I ESA prepared for the Project did not identify any contaminants on or near the Site that would pose a significant health risk to construction workers or future residents or employees of the Site. The results of the Phase I ESA indicate that pesticides and herbicides may have been used on-site as part of the past agricultural operations on-site between the 1940s to 1960s. Information from the County Agricultural Department revealed these chemicals do not persist in the soil and ground water and will break down over time. Given the substantial time (over 50 years) since the Site was used for agricultural purposes and the nature of the chemical degradation, the Phase I ESA concluded the

probability of pesticides or herbicides within the soil and/or groundwater is low and would not pose a risk for construction workers of future residents.

The results of the HUD Explosives and Flammables Review, prepared by *Running Moose Environmental, LLC* indicate that there is one identified facility reported by the Napa County Environmental Health Department as storing Specific Hazards Substances (per 24 CFR Part 51 C, Appendix I) at quantities determined to warrant calculations of acceptable separation distance (ASD). The identified facility, the Queen of the Valley Medical Center, located approximately 912 feet from the Site, has 30 gallons of xylene stored on-site. The facility has an ASD that satisfies the respective specific hazardous substance stored on-site and the storage of this substance; therefore, would not pose a risk to future site residents and employees of the proposed Project.

3.10 HYDROLOGY AND WATER QUALITY

The following discussion is based, in part, on a hydraulic analysis prepared by *Schaaf & Wheeler* in June 2019. A copy of the report is attached as Appendix J to this EIR/EA.

3.10.1 Environmental Setting

3.10.1.1 *Regulatory Framework*

Federal, State, and Regional

Executive Order 11988 – Floodplain Management

Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions:

- acquiring, managing, and disposing of federal lands and facilities;
- providing federally-undertaken, financed, or assisted construction and improvements;
- conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

Water Quality Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws that regulate water quality. Regulations set forth by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the water quality control boards (RWQCB). The Site is within the jurisdiction of the San Francisco Bay RWQCB.

Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan or "Basin Plan". The Basin Plan lists the beneficial uses that the RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a city's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and for projects of certain risk levels, monitoring. The general purpose of the requirements are to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Phase II Small Municipal Separate Storm Sewer Systems General Permit

The SWRCB issued a General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4s) (Order 2003-0005-DWQ) to provide permit coverage for smaller municipalities. The City of Napa is permitted under the state's Phase II Small MS4 General Permit. Under provisions of the NPDES Municipal Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. The permit requires regulated projects to include Low Impact Development (LID) practices, such as pollutant source control measures and stormwater treatment features aimed to maintain or restore the site's natural hydrologic functions. The permit also requires that stormwater treatment measures are properly installed, operated and maintained.

In addition to water quality controls, the permit requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in subwatersheds or catchments areas that are greater than or equal to 65 percent impervious.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) in order to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRM) that identify Special Flood Hazard Areas (SFHA). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Dam Safety

Dam failure is the uncontrolled release of impounded water behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and

terrorism can all cause a dam to fail.⁵⁴ Because dam failure that results in downstream flooding may affect life and property, dam safety is regulated at both the federal and state level. In accordance with the state Dam Safety Act, dams are inspected regularly and detailed evacuation procedures have been prepared for each dam.

As part of its comprehensive dam safety program, the Napa County Flood Control and Water Conservation District routinely monitors and studies the condition of each of its four dams.

Local

County of Napa

The Napa Countywide Stormwater Pollution Prevention Program (NCSPPP) is the principal policy, guidance and reporting document for the Napa County NPDES Stormwater Program and is designed to achieve compliance with Basin Plan standards through Best Management Practices (BMPs). BMPs are procedures designed to minimize the release of pollutants. Relative to the proposed Project, the NCSPPP describes programs that will serve to:

- Prevent storm water pollution
- Protect and enhance water quality in creeks and wetlands
- Preserve beneficial uses of local waterways
- Comply with State and Federal regulations

Envision Napa 2020

The City’s General Plan policies related to hydrology and water quality materials and are applicable to the Project include the following.

Policy	Description
NR-1.4	The City shall review all future waterway improvement projects (e.g., flood control, dredging, private development), as well as all projects that are within 100 feet of the waterway, to ensure that they protect and minimize effects on the riparian and aquatic habitats. The City shall also encourage native plantings along the river and creek banks to stabilize the banks, reduce sedimentation, reduce stormwater runoff volumes, and enhance aquatic habitats.
NR-4.7	Encourage design of projects to avoid covering creeks and drainageways whenever possible.
HS-2.1	The City shall seek to minimize grading and impermeable surfaces in high-erosion areas. If grading or impermeable surfaces are necessary, they shall be properly engineered and drained to reduce runoff and erosion.
HS-3.2	The City shall continue to apply flood plain management regulations for development in the floodplain and floodway.

⁵⁴ State of California. 2013. *2013 State Hazards Mitigation Plan*. Accessed April 23, 2018. http://hazardmitigation.calema.ca.gov/plan/state_multi-hazard_mitigation_plan_shmp.

City of Napa Policy Resolution No. 27

The City of Napa adopted Policy Resolution 27 originally in August 1992 and has most recently amended the Resolution in December 2002. The Resolution includes the City's standard mitigation measures that are imposed on all development projects, unless otherwise authorized by the City. Any or all of the mitigation measures listed in Resolution 27 may be imposed as conditions of project approval. The mitigation measures are periodically updated, as needed. The following measures listed in Resolution No. 27 are applicable to the proposed Project:

- To ensure adequate drainage control, the Developer of any project that introduces new impervious surfaces (roof, driveways, patios) that will change the rate of absorption of drainage or surface run-off shall submit a drainage and grading plan designed in accordance with Policy Resolution No. 17 and the City of Napa Public Works Department Standard Specifications to the Public Works Department for its approval.
- For any construction activity that results in the disturbance of 5 acres or greater total land area, or that is part of a larger common plan of development that disturbs 5 acres or greater total land area, Developer shall file a Notice of Intent with the California Regional Water Quality Control Board (SWRCB) prior to any grading or construction activity. In the event construction activity for the Project occurs after the SWRCB has changed its General Permit for construction activity to cover disturbance(s) of 1 acre or more, this measure shall apply to any construction activity for this Project which results in the disturbance of 1 acre or greater total/and area, or is part of a larger common plan of development that disturbs 1 acre or greater total land area.
- The Developer shall ensure that no construction materials (e.g., cleaning fresh concrete from equipment) are conveyed into the storm drain system. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.
- All materials that could cause water pollution (e.g., motor oil, fuels, paints) shall be stored and used in a manner that will not cause any pollution. All discarded material and any accidental spills shall be removed and disposed of at an approved disposal site.
- All construction activities shall be performed in a manner that minimizes, to the maximum extent practicable, any pollutants entering directly or indirectly the storm water system or ground water. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.
- Developer shall meet the requirements of discharging to a public storm drainage system as required to ensure compliance by the City with all state and federal laws and regulations related to storm water as stipulated in the Clean Water Act. Developer shall meet the requirements of the National Pollutant Discharge Elimination System (NPDES) permit in effect prior to completion of Project construction for storm water discharges from the municipal storm water system operated by the City of Napa. Developer shall comply with the Storm Water Pollution Mitigation Plan (SWPMP) submitted by Developer as part of its application as (modified and) approved by the Director of Public Works.
- Developer shall mark all new storm drain inlets with permanent markings, which state "No Dumping-Flows to River." This work shall be shown on improvement plans.

- Developer shall record a plan for long-term private maintenance acceptable to the Director of Public Works and the City Attorney for any structural storm water pollution removal devices or treatment control BMP incorporated as part of the Project. The plan shall comply with City and SWRCB requirements including, but not limited to, a detailed description of responsible parties, inspections, maintenance procedures for the detention system, including monitoring and documentation of annual report to the Public Works Department and procedures for enforcement. Appropriate easements or other arrangements satisfactory to the Public Works Director and City Attorney necessary or convenient to ensure the feasibility of the scheme and fulfillment of maintenance responsibilities shall be secured and recorded prior to approval of the final/parcel map or issuance of a building permit, whichever comes first.

3.10.1.2 Existing Conditions

Surface Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction-sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. Insufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

Surface water in the Napa Valley Subbasin is dominated by the Napa River, fed by its many ephemeral, intermittent, and more notable perennial surface water tributaries. The nearest waterway to the Site is Salvador Creek, located along the edge of the Site.

Groundwater

The Site is located within the Napa Valley Groundwater Basin (Napa Valley Subbasin). In the Napa Valley Subbasin, groundwater recharge primarily occurs via infiltration and deep percolation of rainfall and applied irrigation water (i.e., the volume of total water applied to the land surface (naturally or otherwise) minus the amount evaporated and/or transpired by native vegetation, crops, bare ground, or hardscape areas. Precipitation falling on upland areas adjacent to the Napa Valley can also contribute groundwater to the Napa Valley Subbasin via percolation and lateral movement. Recharge of groundwater also occurs through surface water infiltration of water flowing within stream and river channels, occurring during times and at locations where groundwater levels are below the stream stage.

Depth to groundwater fluctuates seasonally with changes in rainfall. Groundwater in the Project area has been encountered between 25 to 27 feet below the ground surface (bgs).⁵⁵

Stormwater Drainage

The City of Napa's storm drainage system consists of a network of open ditches, culverts, and underground pipes of various sizes and capacities, many of which are maintained by the Public

⁵⁵ Basics Environmental. *Phase I Environmental Site Assessment*. December 9, 2014.

Works Department. The City's primary objective in relation to the drainage system is to reduce the risk of flooding, and potential loss of life and property damage from flooding.

The City's existing storm drainage system service area covers approximately 22 square miles.⁵⁶ Drainage collection in the City's sub basins operates on a gravity system, facilitating storm-water runoff from low-lying or poorly graded areas into natural drainage channels. Runoff water enters the system through ditches or from street storm drains. The runoff is channeled through ditches, culverts, and buried pipes until it is discharged into a natural channel (i.e., the Napa River or one of its tributaries). Stormwater runoff from the Site is collected via on-site inlets/catch basins and is conveyed to existing storm drains in Valle Verde Drive and a 60-inch storm drain along the northern property boundary. The runoff then flows from storm drains and into Salvador Creek.

Flooding

The Project is located partially in a FEMA Special Flood Hazard Area (Zone AE floodplain) and partially in a 500- year Zone X associated with Salvador Creek (see Figure 3.10-1). The Site is also mapped within the City of Napa's Floodplain Overlay Zoning District Map.

Dam Failure

The City's dams are located at the Lake Hennessey (Conn Creek Dam), Milliken and Eastside Reservoirs; another dam is located at the State-owned Rector Reservoir. Failure of any one of these dams would subject the city of Napa to flood water inundation. The Site is mapped within the Conn Creek Dam and Rector Creek inundation area.⁵⁷

Seiche, Tsunami, and Mudflows

A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. There are no landlocked bodies of water near the Site that in the event of a seiche will affect the site.

A tsunami or tidal wave is a series of water waves caused by the displacement of a large volume of a body of water, such as an ocean or a large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. The Site does not lie within a tsunami inundation hazard area.⁵⁸

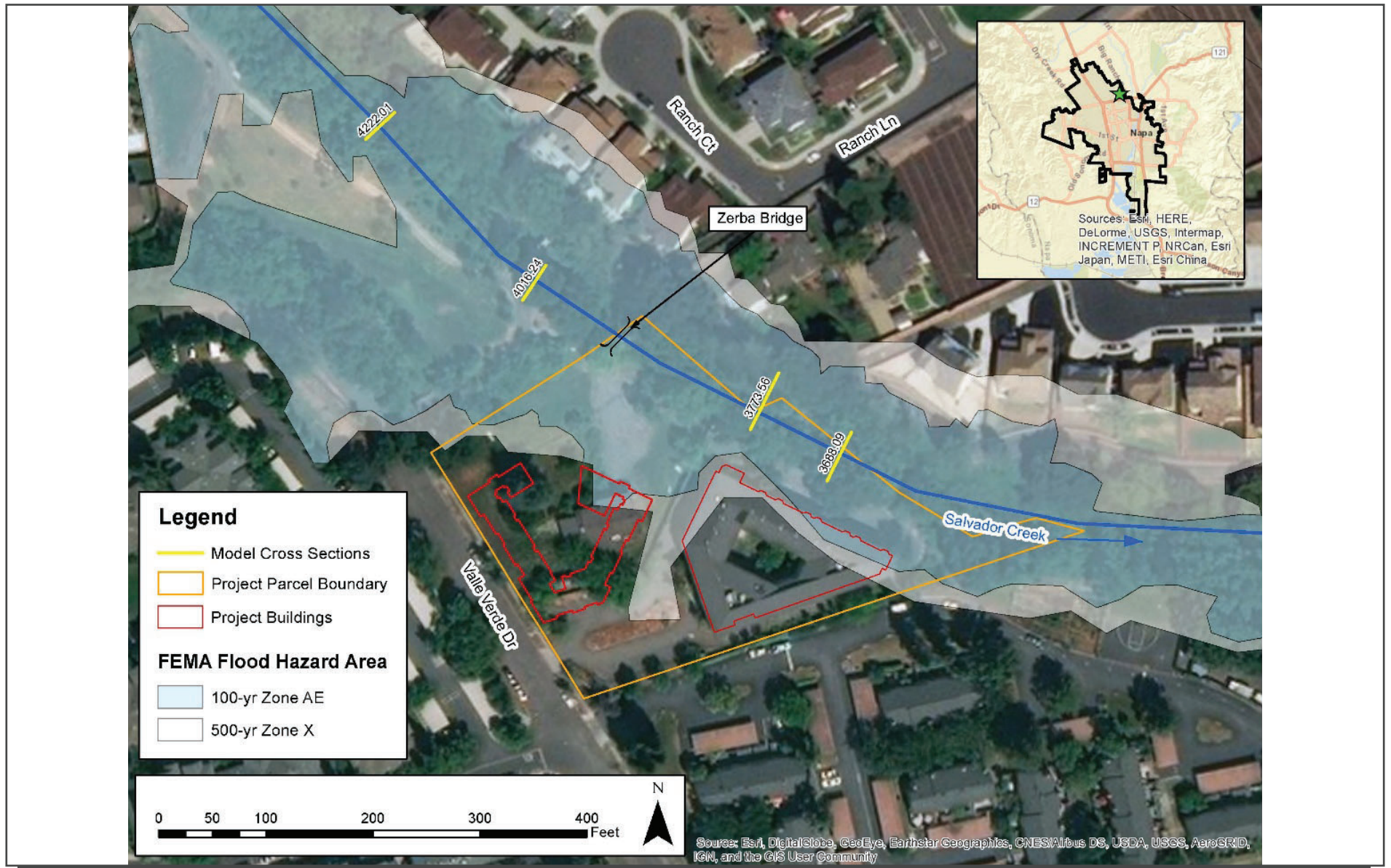
A mudflow is the rapid movement of a large mass of mud formed from loose soil and water. The Site is not susceptible to mudflows.⁵⁹

⁵⁶ City of Napa. *Envision Napa 2020, City of Napa General Plan*. December 1998.

⁵⁷ City of Napa. *Envision Napa 2020, City of Napa General Plan*. Figure 8-7 Flood Water Inundation from Dam Failure. December 1998.

⁵⁸ Association of Bay Area Governments. *Tsunami Inundation Map for Emergency Planning San Francisco Bay Area*. Site accessed August 8, 2018. <http://gis.abag.ca.gov/website/Hazards/?hlyr=femaZones>.

⁵⁹ Association of Bay Area Governments. *Rainfall-Induced Landslides*. Accessed August 8, 2018. <http://gis.abag.ca.gov/website/Hazards/?hlyr=existingLndslid#nogol>.



PROJECT LOCATION AND EFFECTIVE FEMA FLOOD HAZARD AREAS

FIGURE 3.10-1

3.10.2 Hydrology and Water Quality Impacts

3.10.2.1 *Thresholds of Significance*

For the purposes of this EIR, a hydrology and water quality impact is considered significant if the Project would:

- 1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- 2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede groundwater management of the basin;
- 3) 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:
 - result in substantial erosion or siltation on- or off-site;
 - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - 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
 - impede or redirect flood flows;
- 4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation; or
- 5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.10.2.2 *Project Impacts*

Impact HYD-1: The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

The Site is partially developed with the vacant Sunrise Napa Assisted Living Facility and associated paved surface parking lot. Runoff from the Site contains sediment and any litter, and currently flows directly into the City's storm drainage system or as sheet flow into the adjacent Salvador Creek.

Construction-Related Water Quality Impacts

Construction activities (e.g., grading and excavation) on the Site may result in temporary impacts to surface water quality. When disturbance to underlying soils occurs, the surface runoff that flows across the Site may contain sediments that are ultimately discharged into the storm drainage system. Construction of the proposed Project would net export approximately 1,000 cubic yards of soil. In total, the Project would disturb approximately 1.7-acres of soil and, therefore, would be required to comply with the NPDES General Permit for Construction Activities and the State's Phase II Small MS4 Permit.

Consistent with Napa Policy Resolution 27, the Project would be required to implement the following standard permit conditions during Project construction:⁶⁰

Standard Measures: Measures to prevent stormwater pollution and minimize potential sedimentation shall be applied to Project construction, including but not limited to the following:

- To ensure adequate drainage control, the Developer of any project that introduces new impervious surfaces (roof, driveways, patios) that will change the rate of absorption of drainage or surface run-off shall submit a drainage and grading plan designed in accordance with Policy Resolution No. 17 and the City of Napa Public Works Department Standard Specifications to the Public Works Department for its approval.
- For any construction activity that results in the disturbance of 1 acre or greater total land area, or that is part of a larger common plan of development that disturbs 1 acre or greater total land area, Developer shall file a Notice of Intent with the California Regional Water Quality Control Board (SWRCB) prior to any grading or construction activity.
- The Developer shall ensure that no construction materials (e.g., cleaning fresh concrete from equipment) are conveyed into the storm drain system. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system.
- All materials that could cause water pollution (e.g., motor oil, fuels, paints) shall be stored and used in a manner that will not cause any pollution. All discarded material and any accidental spills shall be removed and disposed of at an approved disposal site.
- All construction activities shall be performed in a manner that minimizes, to the maximum extent practicable, any pollutants entering directly or indirectly the storm water system or ground water. The Developer shall pay for any required cleanup, testing and City administrative costs resulting from consequence of construction materials into the storm water drainage system. Construction of the proposed Project, with the implementation of the above measures in accordance with the NPDES General Permit and the City's General Plan, would not result in significant construction-related water quality impacts.

Post-Construction Water Quality Impacts

The proposed Project would comply with Napa Policy Resolution No. 27 and Provision E.12 of the State's Phase II Small MS4 Permit, as applicable. Consistent with Policy Resolution No. 27, the Project shall implement the following standard permit conditions to address post-construction water quality:

Standard Permit Conditions: The following conditions shall be incorporated into the Project:

- Developer shall meet the requirements of discharging to a public storm drainage system as required to ensure compliance by the City with all state and federal laws and regulations related to storm water as stipulated in the Clean Water Act. Developer shall meet the requirements of the National Pollutant Discharge Elimination System (NPDES) permit in

⁶⁰ City of Napa. Policy Resolution No. 27. *A Policy Resolution of the City Council of the City of Napa, State of California, Amending Standard Mitigation Measures and Conditions of Approval for All Development Projects within the City of Napa.* Adopted 08/04/92. Amended 12/03/02.

effect prior to completion of Project construction for storm water discharges from the municipal storm water system operated by the City of Napa. Developer shall comply with the Storm Water Pollution Mitigation Plan (SWPMP) submitted by Developer as part of its application as (modified and) approved by the Director of Public Works.

- Developer shall mark all new storm drain inlets with permanent markings, which state “No Dumping-Flows to River.” This work shall be shown on improvement plans.
- Developer shall record a plan for long-term private maintenance acceptable to the Director of Public Works and the City Attorney for any structural storm water pollution removal devices or treatment control BMP incorporated as part of the Project. The plan shall comply with City and SWRCB requirements including, but not limited to, a detailed description of responsible parties, inspections, maintenance procedures for the detention system, including monitoring and documentation of annual report to the Public Works Department and procedures for enforcement. Appropriate easements or other arrangements satisfactory to the Public Works Director and City Attorney necessary or convenient to ensure the feasibility of the scheme and fulfillment of maintenance responsibilities shall be secured and recorded prior to approval of the final/parcel map or issuance of a building permit, whichever comes first.

The Site is currently partially developed with the vacant Sunrise Napa Assisted Living Facility and associated parking lot. The proposed Project would result in a total of 36,369 square feet of new impervious surfaces on-site. Treatment facilities would have sufficient capacity to treat the runoff prior entering the storm drainage system consistent with the NPDES requirements.

With implementation of a stormwater control plan consistent with SWRCB requirements and compliance with the City’s Policy Resolution No. 27 pertaining to stormwater runoff, the proposed Project would have a less than significant water quality impact.

Impact HYD-2: The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede groundwater management of the basin. **(Less than Significant Impact)**

The Site is located in a developed residential area and is not within a designated groundwater recharge zone for the groundwater basin. The depth to groundwater in the Project area is expected to be approximately 25 to 27 feet, and the Project excavation would extend no more than 10 feet below grade for construction of the residential buildings. Installation of the stich pier retaining wall would extend approximately 29 feet below grade and would be installed via drill pier. Development of the Site would not require dewatering or result in the need to pump groundwater from the Site and would not interfere with groundwater recharge.

Impact HYD-3: The Project would not substantially alter the existing drainage pattern of the Site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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 impede or redirect flood flows. **(Less than Significant Impact)**

Project Construction

Stormwater Runoff

The Site is partially developed with the vacant Sunrise Napa Assisted Living Facility and associated surface parking lot. Runoff from the Site currently flows overland and directly enters the storm drainage system untreated and unimpeded. Portions of the Site adjacent to Salvador Creek sheet flow into the creek.

Construction of the proposed Project would not substantially alter the drainage pattern of the Site or surrounding area. The Project would convey runoff water to four stormwater treatment areas on-site. The Project would conform to the City's Policy Resolution No. 27 and Napa Countywide Stormwater Pollution Prevention Program, which would remove pollutants and reduce the rate and volume of runoff from the Site, reducing the potential for erosion or siltation on and off the Site. For these reasons, redevelopment of the Site would improve the water quality of runoff from the Site and would not exceed the capacity of the existing storm drainage system serving the Site.

The Project is subject to Provision E.12 of the State's Phase II Small MS4 Permit, as the Site would increase impervious surfaces by more than 10,000 square feet. Consistent with Provision E.12, the Project proposes to reduce the flowrate of stormwater and remove stormwater pollutants from the Site by installing stormwater site design and treatment control measures. The Project proposes to install two bio-retention facilities that would temporarily detain and release stormwater. Therefore, the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

Flooding Elevations

The Site is located in a FEMA designated special flood hazard area. A hydraulic analysis was prepared by *Schaaf & Wheeler* in June 2019 to determine whether introduction of the proposed Valle Verde Apartment building, site grading, and other site improvements would result in flooding on- or off-site.

The existing base flood elevation (BFE) during a 100-year flood event at the Valle Verde Site is 39.2 feet (refer to Table 3.10-1). The existing BFE for the Heritage House Site is 39 feet. The introduction of the Valle Verde Apartments would increase the BFE from 39.2 feet to 40.2 feet at the Valle Verde Site due to the proposed grading. The BFE at the Heritage House Site would decrease from 39.0 to 38.3 feet due to the proposed grading and redirection of flood flows.

Table 3.10-1: Base Flood Elevations		
Scenario	Existing Sunrise Napa Assisted Living Facility	Proposed Valle Verde Apartments
Existing Conditions	39.0	39.2
Project	38.3	40.2
Project plus Bridge Removal	38.0	39.5

Pursuant to CFR Part 55, in order to get flood insurance, new construction or improvements within a FEMA flood hazard zone must be elevated to the BFE of the floodplain. The lowest adjacent grade for the proposed Valle Verde Apartment building is 41.2 feet. Therefore, the proposed Valle Verde Apartment building could be removed from the special flood hazard area, as its lowest adjacent grade is equal to or greater than the BFE of 40.2 feet (refer to Table 3.10-2). In addition, consistent with the City of Napa Municipal Code, the finished floor elevations for the proposed Valle Verde Apartment building would be 43.7 feet, which is more than one foot above the 100-year BFE of 40.2 feet.

The lowest adjacent grade for the existing Sunrise Napa Assisted Living Facility is 37.2 feet (refer to Table 3.10-2). However, most of the building adjacent grade is above the 38.3 BFE that would exist with Project construction altering the Site. The lowest adjacent grade on the northeast corner of the existing building would need to be elevated at or above the BFE to be removed from the floodplain. This would likely involve the installation of an engineered structure (i.e. berm) to protect the existing structure from flood waters. The finished floor elevations for the existing Sunrise Napa Assisted Living Facility would be 41.7 feet, which is more than one foot above the 100-year BFE of 38.8 feet, consistent with the City of Napa Municipal Code.

The Project would result in a less than one-foot increase in floodplain elevations directly upstream of the proposed Valle Verde Apartment building due to overbank floodplain blockage (refer to Figure 3.10-2 and Figure 3.10-3). Pursuant to Section 17.38.040 of the Napa Municipal Code, any development that causes an increase in the water surface elevation of the base flood more than one foot at any point would constitute an “adverse affect.” The Project results in less than one-foot of cumulative impact in the floodplain and less than one-foot rise in the water surface profile of the creek (refer to Figure 3.10-4). For these reasons, the Project would not significantly impede or redirect flows.

Bridge Removal

As a potential condition of Project approval, the City may require the Applicant to remove a portion of the Zerba bridge that spans from the eastern portion of the Site across Salvador Creek and onto the west bank. The existing bridge acts as an impediment to the flow of water in Salvador Creek during storm events. Table 3.10-1 identifies existing Site conditions with floodwaters impeded by the existing bridge, as well as a scenario where the bridge removal has occurred.

Table 3.10-2: Structure Elevations			
Location	Elevation (ft NAVD)	Max BFE (ft NAVD)	Above BFE?
Lowest Adjacent Grade to Proposed Valle Verde Apartment	41.2	40.2	Yes
Finished Floor Elevation of Proposed Valle Verde Apartment	43.7	40.2	Yes
Lowest Adjacent Grade to Existing Sunrise Napa Assisting Living Facility	37.2	38.3	No
Finished Floor Elevation of Existing Sunrise Napa Assisted Living Facility	41.7	38.3	Yes

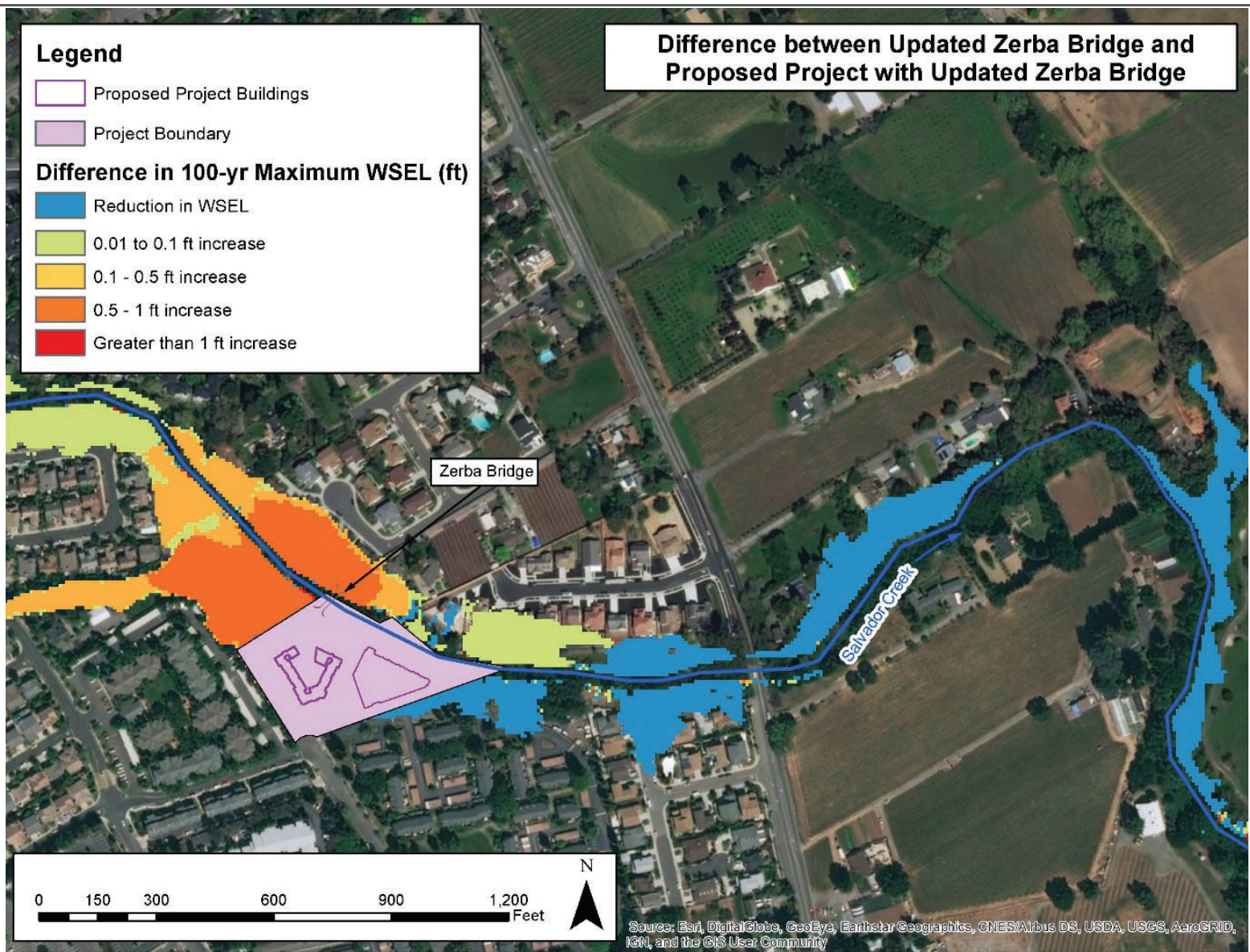
Under the Project plus Bridge Removal scenario, the BFE at the existing Sunrise Napa Assisted Living Facility and the proposed Valle Verde Apartments would be 38.0 and 39.5 feet, respectively. In the event the City requires partial removal of the bridge, the Valle Verde Apartments could be removed from the special flood hazard area, as its lowest adjacent grade is greater than the BFE of 39.5 feet. The existing Sunrise Napa Assisted Living Facility lowest adjacent grade on the northeast corner of the building would still be below the 38.0-foot BFE and would need to be elevated at or above the BFE to be removed from the floodplain.

Under the Project plus Bridge Removal scenario, there are slight increases in flood elevations downstream of the Project Site due to the removal of the bridge deck and piers (refer to Figure 3.10-5 and 3.10-6). However, partial removal of the bridge would lessen upstream Project development impacts resulting from blockage due to the proposed Valle Verde Apartment building. The Project plus Bridge Removal scenario would result in a less than one-foot increase in floodplain elevations, and therefore comply with Section 17.38.040 of the Napa Municipal Code. In addition, the Project plus Bridge Removal scenario would result in slight decreases in in-channel water surface elevation upstream of the Project whereas there are slight increases at the Project boundary.

In summary, the introduction of the proposed Valle Verde Apartments building, site-grading, and other site improvements would alter the existing floodplain, but would not cause significant off-site flooding impacts as defined by Section 17.38.040 of the Napa Municipal Code. Therefore, Project impacts on existing flooding conditions would be less than significant.

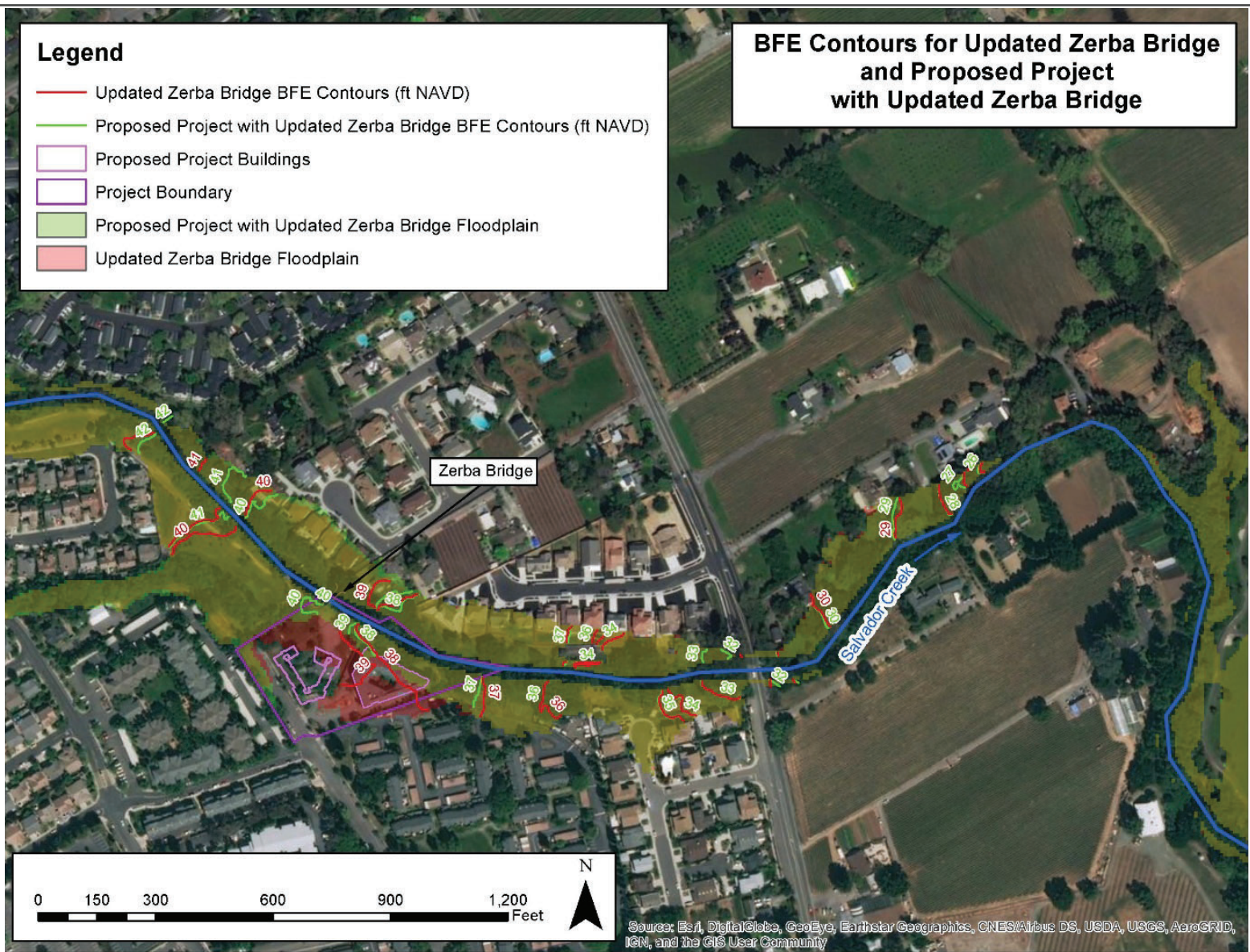
For the existing Sunrise Napa Assisted Living Facility to be removed from the floodplain, the lowest adjacent grade on the northeast corner of the existing building would need to be elevated at or above the BFE, likely involving the installation of an engineered structure (i.e. berm) to protect the existing structure from flood waters.

In the event the Project is required to partially remove the Zerba Bridge, flood elevations would be lessened compared to existing conditions upstream of the bridge and increased downstream of the



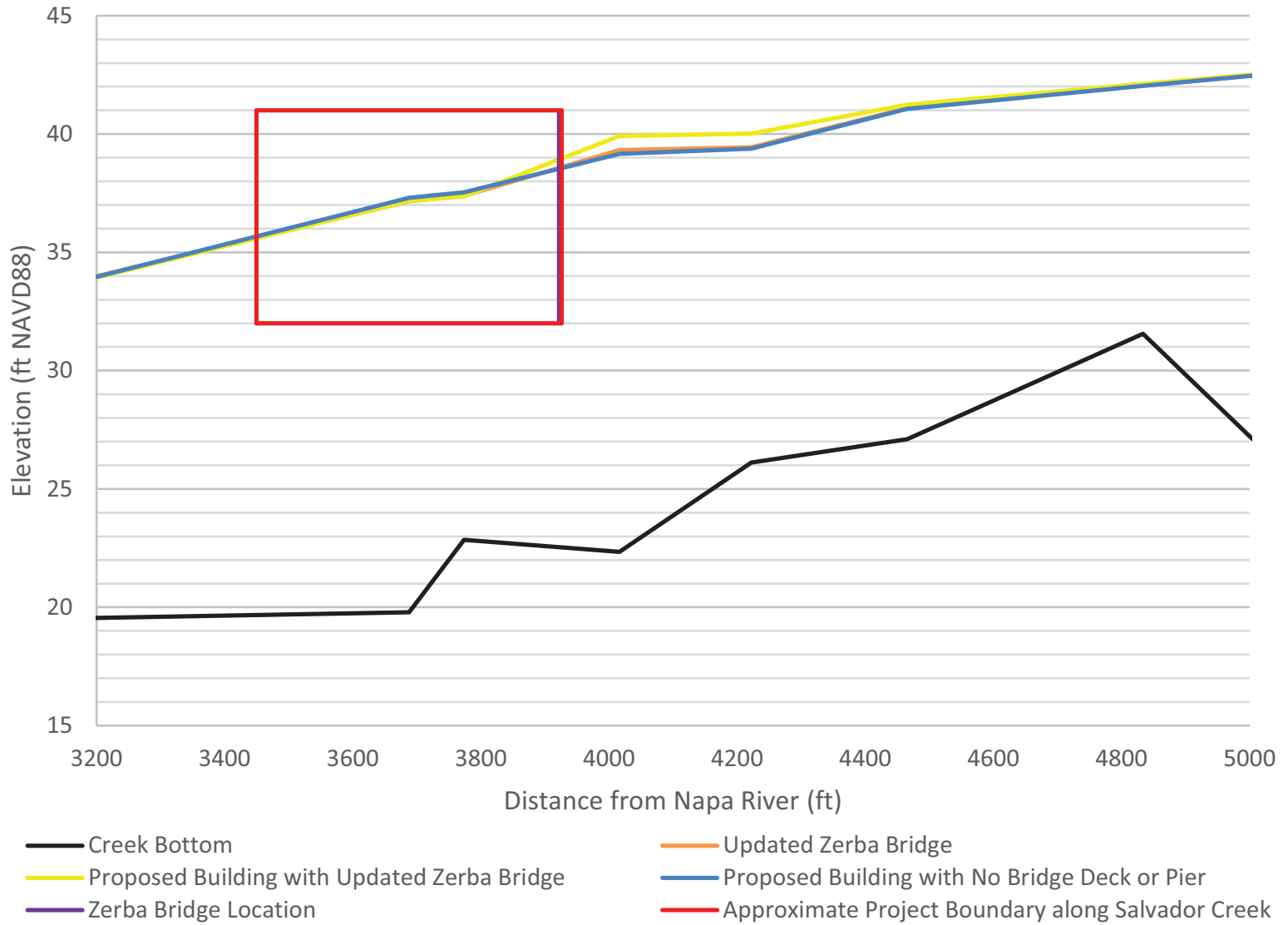
PROJECT FLOODPLAIN IMPACTS

FIGURE 3.10-2



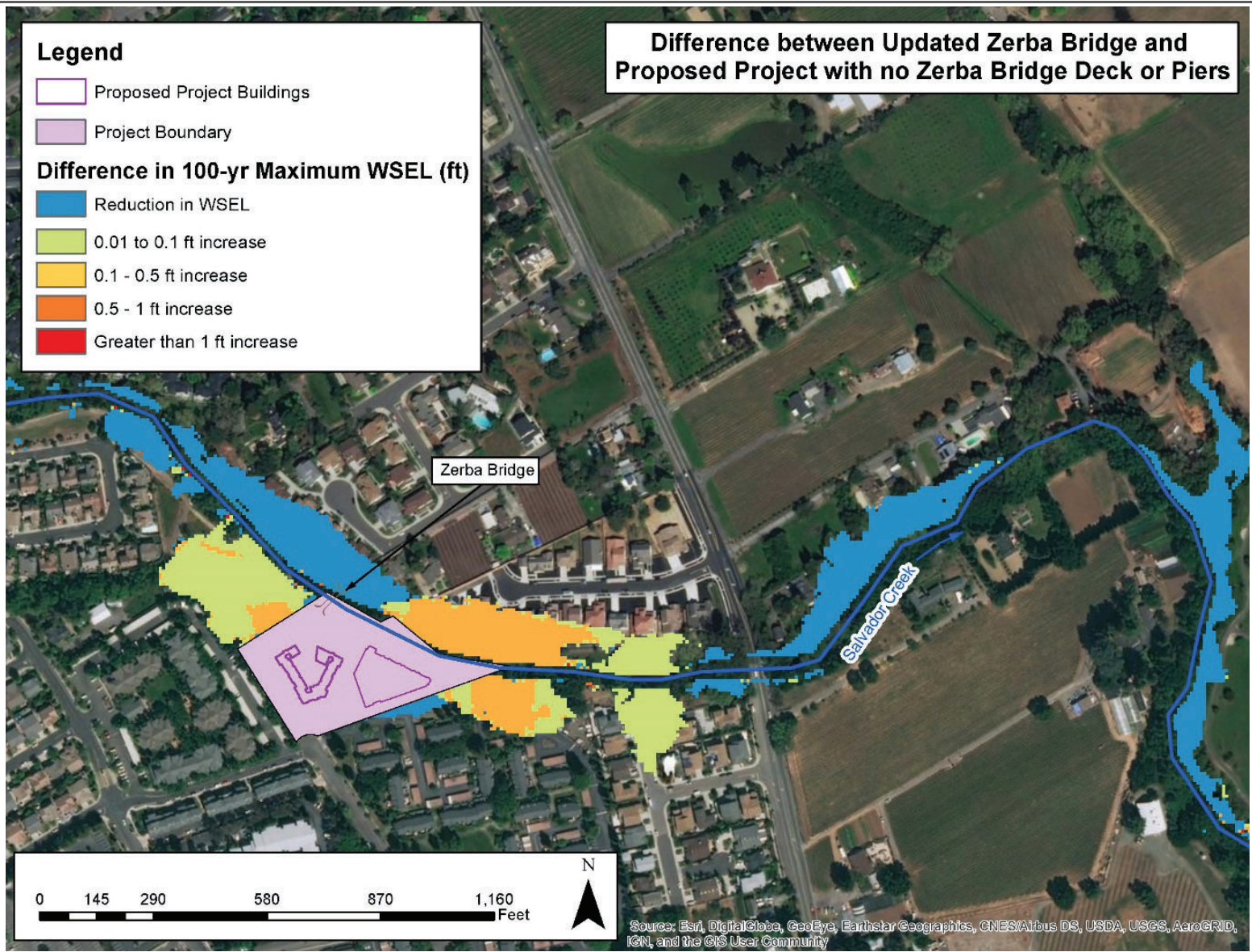
PROJECT BASE FLOOD ELEVATION CONTOUR IMPACTS

FIGURE 3.10-3



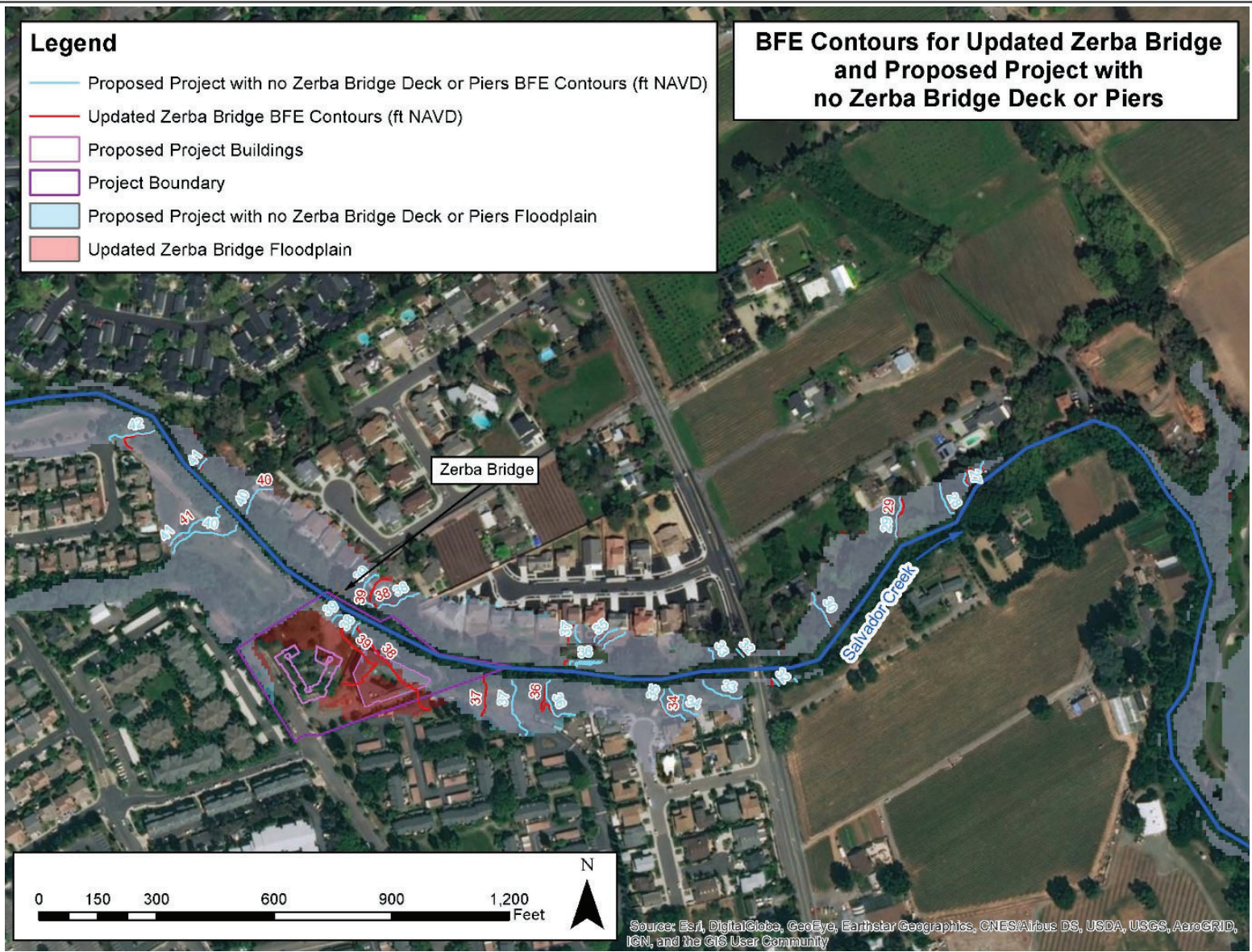
SALVADOR CREEK PROFILE

FIGURE 3.10-4



FLOODPLAIN IMPACTS (PROJECT PLUS BRIDGE REMOVAL)

FIGURE 3.10-5



BASE FLOOD ELEVATION CONTOUR IMPACTS (PROJECT PLUS BRIDGE REMOVAL)

FIGURE 3.10-6

bridge, although in all cases the change from existing would be less than a foot per Section 17.38.040 of the Napa Municipal Code.

Impact HYD-4: The Project would not risk release of pollutants due to Project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

As stated previously, the Site is located in the inundation area for the City-owned Conn Dam and state-owned Rector Dam. In the event of a complete dam failure, the City's comprehensive dam safety program and emergency action plan ensures public safety. The potential for the failure of this dam to pose a hazard to future residents of the Site is extremely remote, and reservoir levels have been lowered to maintain an additional level of safety. Additionally, the Site is not located within a designated tsunami inundation zone. The Project, therefore, would not be subject to inundation by seiche or tsunami.

Impact HYD-5: The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

As stated in Impact HYD-2, the Site is located in a developed residential area and is not within a designated groundwater recharge zone for the groundwater basin. The Project would not conflict with the implementation of a water quality control plan or sustainable groundwater management plan.

3.10.2.1 *Cumulative Impacts*

Impact HYD-C: The Project would not result in a cumulatively considerable contribution to a significant hydrology and water quality impact. **(Less than Significant Cumulative Impact)**

The geographic area for the Project's cumulative hydrology and water quality impacts would be the Napa River watershed (which flows to the San Francisco Bay). Cumulative developments near the Project would be subject to similar hydrological and urban runoff conditions. As a direct result of the regulations discussed in this section, all development Projects in the cumulative scenario (refer to Table 3.0-1), including the proposed Project, are required to implement plans to avoid, minimize, and/or mitigate water quality and other inundation-related impacts. For these reasons, the cumulative Projects would be in compliance with applicable regulations, which would result in less than significant cumulative hydrology and water quality impacts.

3.11 LAND USE AND PLANNING

3.11.1 Environmental Setting

3.11.1.1 *Regulatory Framework*

Local

Envision Napa 2020

The City of Napa General Plan Envision 2020 document was adopted December 1, 1998. The General Plan formalizes a long-term vision for the physical evolution of Napa and outlines policies, standards, and programs to guide day-to-day decisions concerning Napa’s development through the year 2020.

The Site is within the Vintage Planning Area, which extends from Trancas Street to the City's northern border, east of State Route 29. The most westerly portions of the Planning Area were developed in the 1950s and 1960s in single-family tract housing types. Trancas Street, at its southern edge, is the City's largest retail area, with several shopping centers. The City's only full-service hospital, Queen of the Valley, is also located along Trancas Street. The southeast portion of the Planning Area contains some of the City's largest remaining tracts of undeveloped land. The Big Ranch Specific Plan adopted for this area calls generally for a mix of single family and multi-family housing types.

The Site is currently designated *Multi-Family Residential* (MFR-33H) in the City of Napa General Plan, which is intended to develop or redevelop into a medium to high intensity predominantly attached unit development pattern. Allowable uses include multi-family units, attached and detached single family, SRO facilities, live-work housing, and similar compatible uses such as day care and larger group quarters (e.g., residential facilities and nursing homes). The MFR-33H designation allows for a minimum of 18.5 dwelling units per acre and up to 25 dwelling units per acre.

General Plan policies related to land use that are applicable to the Project include the following.

Policy	Description
LU-1.2	The City shall strive to preserve and enhance the integrity of existing neighborhoods and to develop new neighborhoods with similar qualities as the existing neighborhoods.
LU-4.1	The City shall encourage the development of housing for the elderly, disabled, and low-income households in every planning area with residential Pods, where the City determines the development is compatible with surrounding land uses and where site conditions and service capabilities permit. Sites considered especially appropriate for these uses are those accessible to transit, commercial, and medical services. Planned developments, condominiums, and mobile home parks are considered to have unique, self-contained development patterns that can be designed with little impact on the existing development pattern.
LU-4.2	The City shall allow for convenient supporting services and alternative residential types to meet special needs by permitting recreational uses, public and quasi-public uses, churches, day care and congregate living facilities, and single room occupancy units in

residentially designated areas, when they meet the standards for development that protect neighborhood character.

- LU-4.3 The City shall encourage the development of housing for the elderly, disabled, and low income households in every planning area with residential Pods, where the City determines the development is compatible with surrounding land uses and where site conditions and service capabilities permit. Sites considered especially appropriate for these uses are those accessible to transit, commercial, and medical services. Planned developments, condominiums, and mobile home parks are considered to have unique, self-contained development patterns that can be designed with little impact on the existing development pattern.
- LU-4.4 The City shall grant density bonuses and other incentives to encourage development of housing affordable to low-income households (as described in the Housing Element).
- H2.1 Support for Affordable Housing. The City shall continue to support and encourage new affordable housing projects.
- H2.2 Mix of Housing. The City shall encourage an increased mix of various types of housing throughout the City to meet community housing needs, provide greater housing choices, and improve transportation choices. In addition to single-family homes, housing choices and the mix of housing in the community should include such types as multi-family, mixed-use, affordable units, supportive housing, Single Room Occupancies (SRO), cohousing and similar types of housing that meet a wide variety of community housing needs.
- H2.14 Retain Affordable Units Long Term. The City shall assure that affordable housing provided through density bonuses, inclusionary programs and other incentives will stay low cost long-term consistent with State law.
- H-3.1 High Quality Design and Varied Housing Types. The City shall assure high quality, well designed housing that respects the surrounding neighborhood, and provide for a greater variety of housing options to meet community needs.
- H4.G Rehabilitate Existing Facilities for SRO's. The City Housing Authority shall support efforts to rehabilitate existing facilities to provide SRO housing for special needs persons and groups. There is a lack of SRO units in the City for individuals with support service needs related to mental illness, alcohol and drug abuse, AIDS and other related diseases and disabilities, as well as for other very low income persons (including but not limited to service workers, farmworkers, developmentally disabled, etc.).
- H4.E Capital Improvements for Non-Profit Facilities. The City shall continue to support the rehabilitation of non-profit facilities per the CDBG Consolidated Plan and its annual plans.
- H4.F Encourage Well Managed New SRO Permanent Housing. The City shall amend the SRO Ordinance to assure excellent management of new single room occupancy permanent housing for lower income households and the City will encourage new SRO developments that meet standards.

City of Napa Zoning Ordinance

As a long-range planning document, the General Plan outlines long-term visions, policies, and actions designed to shape future development within Napa. The Zoning Ordinance serves as an implementing tool for the General Plan by establishing detailed, parcel-specific development regulations and standards in each area of the City.

The Site is zoned *Multi-Family Residential* (RM). This district provides opportunities for a mix of predominantly attached residential development patterns. Allowable uses include medium and higher density multifamily apartments, single-family attached and detached units, group residential, live-work housing, larger residential care facilities, and similar compatible uses such as day care.

Pursuant to the City's Zoning Ordinance, SRO projects can apply a factor of two times the density range providing a minimum density of 37 rooms to a maximum density of 50 rooms per acre (17.52.460 B. 1). The proposed Heritage House project would have a density of 41.3 rooms per acre, which is within the permitted density range for SRO projects.

3.11.1.2 *Existing Conditions*

The approximately 2.9-acre Site (APNs 038-170-042, -043, and -046) is located at 3700, 3710, and 3720 Valle Verde Drive, just north of the intersection of Firefly Drive and Valle Verde Drive. The Site is bordered by a three-story multi-family residential development (Silverado Creek Apartments) to the west, Salvador Creek to the east, a two-story residential condominium development to the south, and a City of Napa-owned property that functions as a stormwater detention area and open space trail to the north. A private bridge (Zerba Bridge) is present on the Site and is not currently in use.

The Heritage House Site (approximately 1.6 acres) is currently developed with the vacant Sunrise Napa Assisted Living Facility. The Valle Verde Site (approximately 1.3 acres) is undeveloped. However, a portion of the Valle Verde Site (3710 Valle Verde Drive) was previously developed with a single-family residential home, which was demolished in 2017.

3.11.2 Land Use and Planning Impacts

3.11.2.1 *Thresholds of Significance*

For the purposes of this EIR, a land use and planning impact is considered significant if the Project would:

- 1) Physically divide an established community; or
- 2) 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.

3.11.2.2 *Project Impacts*

Impact LU-1:	The Project would not physically divide an established community. (Less than Significant Impact)
---------------------	---

Examples of projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. The Project, which proposes the rehabilitation of an existing building on the Heritage House Site and the construction of an apartment building on the Valle Verde Site under the existing *Multi-Family Residential* land use designation, would not include construction of dividing infrastructure. The Site is located in a neighborhood with similar uses and patterns of development, and, therefore, implementation of the Project would not physically divide an established community. The Project may be conditioned to partially remove the existing Zerba Bridge crossing Salvador Creek. The partial removal of this bridge would not sever community access on either side of the creek in that the bridge is private, not currently in use, and does not provide access for the public on either side of the creek. A pedestrian bridge north of the Zerba Bridge, immediately upstream of the Site, provides pedestrian and bicycle access across the creek and would be retained.

Impact LU-2: The Project would not 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. **(Less than Significant Impact)**

The Site's *Multi-Family Residential* General Plan land use designation is intended to develop or redevelop into a medium to high intensity predominantly attached unit development pattern. Higher density residential units (over 15 dwelling units/acre) are intended to be located nearest to thoroughfares, transit corridors, and community serving commercial and public/quasi-public uses. Allowable uses for this designation include multi-family units, attached and detached single-family, single room occupancy facilities, live-work housing, and similar compatible uses such as day care and larger group quarters.

Multi-Family Residential developments range in density from 10 to 40 units per acre. As proposed, the Project would be constructing 90 units on 2.93 acres. The Valle Verde Apartments building would have a density 18.5 dwelling units/acre and floor area ratio of 2.5. The Heritage House building would have a density of 41.3 rooms per acre.

The proposed buildings would reach a maximum height of three stories or 35-feet in height, consistent with the surrounding residential development. Construction of the proposed Project, in conformance with City and County land use policies, would not conflict with regulations adopted for avoiding or mitigating an environmental effect.

3.11.2.3 Cumulative Impacts

Impact LU-C: The cumulative projects, including the proposed Project, would not result in significant cumulative land use impacts. **(Less Than Significant Cumulative Impact)**

The geographic area for the Project's cumulative land use and planning impacts would be the Site and surrounding neighborhood. As discussed under Impact LU-1 and LU-2, the Project would not divide an established community, and is consistent with the General Plan land use and zoning

designation for the Site. For this reason, the Project would not contribute to a significant cumulative land use and planning impact.

3.12 MINERAL RESOURCES

3.12.1 Environmental Setting

3.12.1.1 *Regulatory Framework*

Federal

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California Legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board, after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

3.12.1.2 *Existing Conditions*

The entire City of Napa is classified as Mineral Resource Zone (MRZ) category MRZ-1 by the California Department of Conservation's Division of Mines and Geology.⁶¹ The MRZ-1 designation is assigned to areas where there is adequate information available to indicate that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

3.12.2 Mineral Resources Impacts

3.12.2.1 *Thresholds of Significance*

For the purposes of this EIR, a mineral resource impact is considered significant if the Project would:

- 1) Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state; or
- 2) Result in the loss of availability of locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

⁶¹ California Department of Conservation, Division of Mines and Geology. *Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area*. 1987. Accessed August 8, 2018. <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>

3.12.2.2 *Project Impacts*

Impact MIN-1: The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

There are no known areas within the City of Napa that are designated by the State Mining and Geology Board as containing mineral deposits of regional significance. Therefore, the Project would not result in the loss of availability of a known mineral resource.

Impact MIN-2: The Project would not result in the loss of availability of locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. **(No Impact)**

The Site is not located in an area of Napa or Napa County with known mineral resources. Therefore, the Project would not result in the loss of availability of a mineral resource recovery site.

3.12.2.3 *Cumulative Impacts*

Impact MIN-C: The Project would not result in a cumulatively considerable contribution to a significant mineral resources impact. **(No Impact)**

The proposed Project would not impact mineral resources; therefore, a cumulative impact would also not occur.

3.13 NOISE AND VIBRATION

The following discussion is based, in part, on a Noise & Vibration Assessment prepared by *Illingworth & Rodkin, Inc.* in September 2018. A copy of the report is attached as Appendix K to this EIR/EA.

3.13.1 Environmental Setting

3.13.1.1 *Background Information*

Several factors influence sound as it is perceived by the human ear, including the actual level of sound, the period of exposure to the sound, the frequencies involved, and the fluctuation in the noise level during exposure. Noise is measured on a “decibel” scale which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are almost always expressed using one of several noise averaging methods, such as L_{eq} , DNL, or CNEL.⁶² Using one of these descriptors is a way for a location’s overall noise exposure to be measured, given that there are specific moments when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

3.13.1.2 *Vibration Overview*

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the Peak Particle Velocity (PPV) and another is the Root Mean Square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. In this report, a PPV descriptor with units of millimeters per second (mm/sec) or inches per second (in/sec) is used to evaluate construction generated vibration for building damage and human complaints.

Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. Construction activities

⁶² L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 p.m. and 7:00 a.m. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 p.m. and 10:00 p.m. As a general rule of thumb where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq} .

can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure, and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. The threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level. For a list of human reactions and effects on buildings relative to vibratory levels, refer to Table 3.13-1, below.

Table 3.13-1: Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels		
Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Virtually no risk of damage to normal buildings
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to newer residential structures
Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, September 2013.		

3.13.1.3 Regulatory Background

U.S. Department of Housing & Urban Development

The U.S. Department of Housing and Urban Development (HUD) environmental noise regulations are set forth in 24CFR Part 51B (Code of Federal Regulations). The following exterior noise standards for new housing construction would be applicable to the Project:

- 65 dBA DNL or less – acceptable.
- Exceeding 65 dBA DNL but not exceeding 75 dBA DNL – normally unacceptable (appropriate sound attenuation measures must provide an additional 5 decibels of attenuation)

over that typically provided by standard construction in the 65 dBA DNL to 70 dBA DNL zone; 10 decibels additional attenuation in the 70 dBA DNL to 75 dBA DNL zone).

- Exceeding 75 dBA DNL – unacceptable.

These noise standards also apply, “... at a location 2 meters from the building housing noise sensitive activities in the direction of the predominant noise source...” and “...at other locations where it is determined that quiet outdoor space is required in an area ancillary to the principal use on the site.”

A goal of 45 dBA DNL is set forth for interior noise levels and attenuation requirements are geared toward achieving that goal. It is assumed that with standard construction any building will provide sufficient attenuation to achieve an interior level of 45 dBA DNL or less if the exterior level is 65 dBA DNL or less. Where exterior noise levels range from 65 dBA DNL to 70 dBA DNL, the Project must provide a minimum of 25 decibels of attenuation, and a minimum of 30 decibels of attenuation is required in the 70 dBA DNL to 75 dBA DNL zone. Where exterior noise levels range from 75 dBA DNL to 80 dBA DNL, the Project must provide a minimum of 35 decibels of attenuation to achieve an interior level of 45 dBA DNL or less.

Federal Transit Administration Vibration Limits

The U.S. Department of Transportation (DOT) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 3.13-2, below. Note that there are criteria for frequent events (more than 70 events of the same source per day), occasional events (30 to 70 vibration events of the same source per day), and infrequent events (less than 30 vibration events of the same source per day).

Federal requirements limit residential interior levels to 45 dB in sleeping areas and 50 dB in non-sleeping areas. A normally acceptable noise level does not require any special noise insulation requirements and conventional construction methods can be used.

State

California Building Standards Code

The California Building Standards Code (CBC) establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates that interior noise levels attributable to exterior sources not exceed 45 dBA DNL or CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA DNL noise contour for a freeway or expressway, railroad, industrial source or fixed-guideway noise source.

Table 3.13-2: Groundborne Vibration Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB re 1 μinch/sec, RMS)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1 Buildings where vibration would interfere with interior operations.	65 VdB ⁴	65 VdB ⁴	65 VdB ⁴
Category 2 Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3 Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB
1. “Frequent Events” is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category. 2. “Occasional Events” is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations. 3. “Infrequent Events” is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines. 4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research should always require detailed evaluation to define the acceptable vibration levels. Ensuring low vibration levels in a building requires special design of HVAC systems and stiffened floors.			

Local

Envision Napa 2020

The City of Napa’s Health and Safety Element of the General Plan sets forth goals and policies addressing exposure to current and projected noise sources in Napa. The following goals, policies, and actions are intended to reduce conflicts between noise and land use and to lessen noise sources that reduce the quality of life in the City.

Policy	Description
HS-9.1	The City shall require new development to meet the exterior noise level standards set out in Table 8-1 (not shown). For residential areas, these exterior noise guidelines apply to backyards; exceptions may be allowed for front yards where overriding design concerns are identified.
HS-9.2	The City shall use CEQA and the development review processes to ensure that new development does not exceed City standards.
HS-9.3	The City shall use traffic management techniques to reduce the level of noise in residential neighborhoods to "normally acceptable," as shown in Table 8-1.

- HS-9.4 The City shall support state and federal legislation regulating noise produced by motor vehicles.
- HS-9.5 The City shall continue to enforce state muffler and exhaust laws.
- HS-9.6 The City shall use the development and building permit review processes to site new construction in ways that reduce noise levels.
- HS-9.7 The City shall encourage the clustering, where appropriate, of residential development in order to provide open space that can be used to distance residences from noise sources.
- HS-9.8 The City shall respond to noise complaints by suggesting noise mitigation measures, and using code enforcement procedures when necessary.
- HS-9.9 When feasible and appropriate, the City shall limit construction activities to that portion of the day when the number of persons occupying a potential noise impact area is lowest.
- HS-9.10 The City shall encourage new development to maintain the ambient sound environment as much as possible. The City shall require new transportation-related noise sources that cause the ambient sound levels to exceed the compatibility standards in Table 8-1 (not shown) to incorporate conditions or design modifications to reduce the potential increase in the noise environment.
- HS-9.11 The City shall regulate construction in a manner that allows for efficient construction mobilization and activities, while also protecting noise sensitive land uses.
- HS-9.13 The City shall require new residential projects to provide for an interior CNEL of 45 db or less due to exterior noise sources. To accomplish this, the City shall review all residential and other noise sensitive land uses within the 60 dB contours defined in the Table 8-2 (not shown) and Figure 8-11 (not shown) to ensure that adequate noise attenuation has been incorporated into the design of the project, or that other measures are implemented to protect future sensitive receptors.
- HS-9.14 The City shall encourage new development to identify alternatives to the use of sound walls to attenuate noise impacts. Appropriate techniques include site planning such as incorporating setbacks, revisions to the architectural layout such as changing building orientation to provide noise attenuation for portions of outdoor yards, and construction modifications. In the event that sound walls are the only practicable alternative, such walls should be designed to be as visually pleasing as possible, incorporating landscaping, variations in color and patterns, and/or changes in texture or building materials.

For residential areas in the City, the upper limit of "normally acceptable" on-site exterior noise should be 60 dB.

A noise level above 70 dB is considered to be "normally unacceptable" (new development is discouraged and requires a detailed analysis of noise reduction requirements and provision of noise insulation design features). Between 60 dB and 70 dB, conventional construction can be used, but with closed windows and fresh air supply systems or air conditioning.

City of Napa Municipal Code

The City of Napa establishes noise standards in the City's Zoning Ordinance. The Zoning Ordinance requirements protect the community from exposure to excessive noise and also specify how noise is measured and regulated.

Section 17.52.310 of the Napa Municipal Code requires that proposed residential projects and other noise sensitive land uses (such as but not limited to schools and residential care facilities) within 60 dB CNEL contours of highways, arterials and some collectors listed in the General Plan Table 8-2 shall prepare a noise analysis as part of the project's CEQA review to identify how 60 dB CNEL noise standards will be met and incorporate needed noise attenuation measures.

Noise related to construction activities is regulated per Section 8.08.025 of Napa's Municipal Code. This Section restricts the hours of construction activity to 7:00 AM to 7:00 PM, Monday through Friday. This Section further restricts the following construction activities unless a permit is secured from the City Manager:

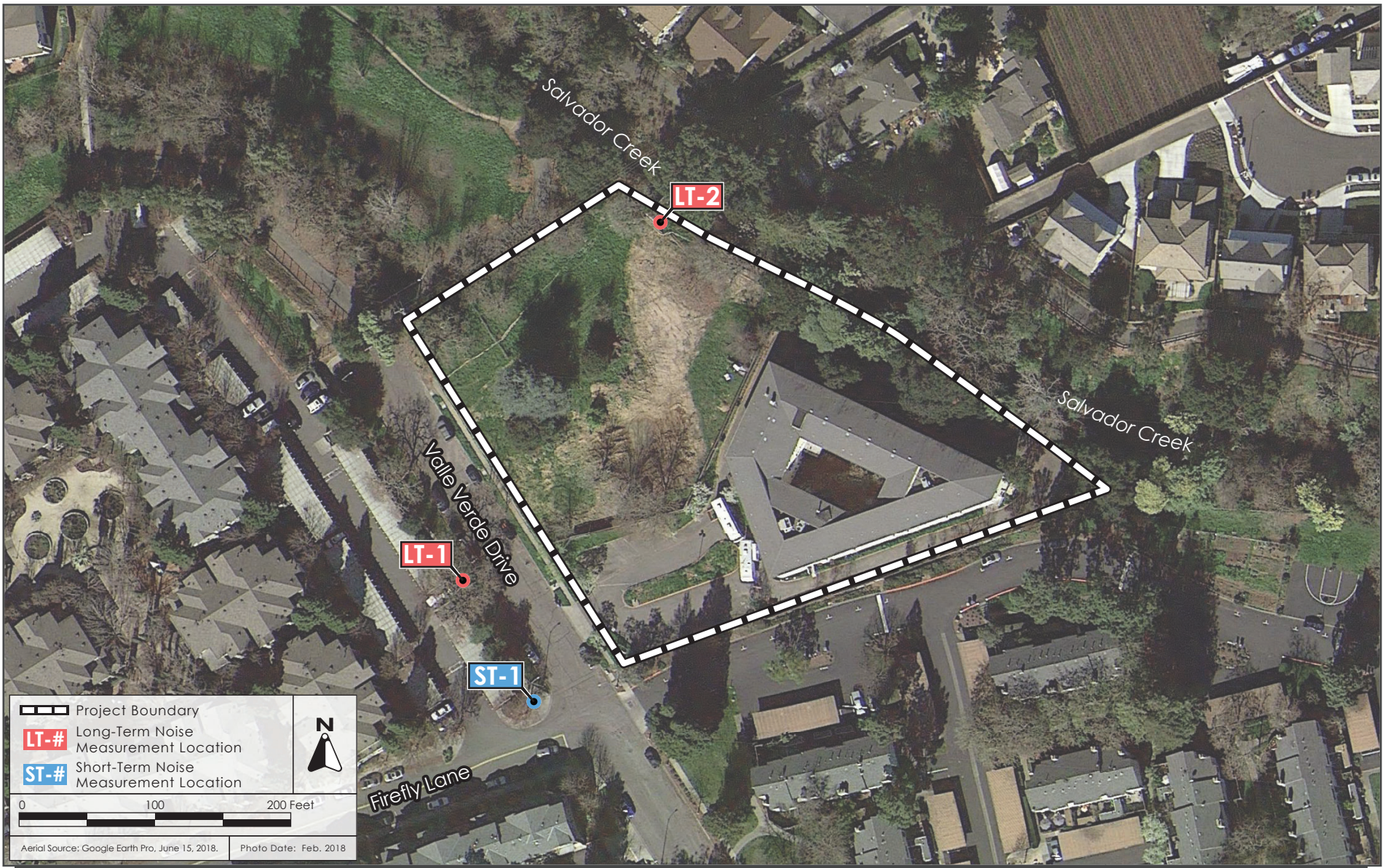
- start up of machines and equipment prior to 8:00 AM, Monday through Friday;
- delivery of materials nor equipment prior to 7:30 AM nor past 5:00 PM, Monday through Friday;
- cleaning of machines nor equipment past 6:00 PM, Monday through Friday;
- servicing of equipment past 6:45 PM, Monday through Friday; and
- construction on weekends or legal holidays shall be limited to the hours of 8:00 AM to 4:00 PM

The Napa Municipal Code also requires that all muffler systems on construction equipment shall be properly maintained; construction equipment shall not be placed adjacent to developed areas unless said equipment is provided with acoustical shielding; and construction and grading equipment shall be shut down when not actively in use.

3.13.1.4 *Existing Conditions*

The Site is located on the east-side of Valle Verde Drive, north of Firefly Lane. The Heritage House Site is currently developed with a vacant assisted living facility, while the Valle Verde Site is vacant. The Site is surrounded primarily with residential land uses, including a three-story multi-family development to the west, single-family residences across the creek channel to the east, and a multi-family development to the south. The Queen of the Valley Medical Center is located west of the Site on Firefly Lane. The existing noise environment at the Site results primarily from vehicular traffic along Valle Verde and Firefly Lane. Emergency vehicles and sirens accessing Queen of the Valley Medical Center frequently pass by the site, generating maximum instantaneous noise levels of 75 to 85 dBA L_{max} .

Two long-term noise measurements and one short-term measurement were taken in August 2018 to determine the existing ambient noise level on and around the Site. For a visual of the noise measurement locations, refer to Figure 3.13-1. Based on the noise measurements taken at long-term



NOISE MEASUREMENT LOCATIONS

FIGURE 3.13-1

measurement location LT-1, hourly average noise levels ranged from 46 to 61 dBA L_{eq} during the daytime hours and from 37 to 58 dBA L_{eq} at night. The day-night average noise level was measured at 58 dBA CNEL. Based on the noise measurements taken at long-term measurement location LT-2, the hourly average noise levels ranged from 39 to 46 dBA L_{eq} during the day and from 36 to 43 dBA L_{eq} at night.

For sites with exterior noise levels of 60 dBA DNL or more that are to be developed with residential uses, General Plan Policy EC-1.1 requires the preparation of a design-level acoustical analysis prior to the issuance of building permits. The purpose of the analysis is to determine appropriate noise attenuation measures to ensure interior noise levels of 45 dBA DNL or lower.

3.13.2 Noise and Vibration Impacts

3.13.2.1 *Thresholds of Significance*

For the purposes of this EIR, a noise and vibration impact is considered significant if the Project would result in:

- 1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- 2) Generation of excessive groundborne vibration or groundborne noise levels; or
- 3) 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.

3.13.2.2 *Project Impacts*

Impact NOI-1: The Project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. **(Less than Significant Impact)**

Operational Noise

Mechanical Equipment Noise Impacts Off-Site

The residential buildings on the Site would include mechanical equipment, such as heating and air conditioning systems. Typical air conditioning units and heat pumps for multi-family uses residences would be approximately 60 dBA L_{eq} at 50 feet. This would not represent a significant impact to nearby sensitive receptors due to the distance to those receptors and noise attenuation over that distance.

Project-Generated Traffic Noise

According to the City's General Plan, a significant permanent noise increase would occur if the Project would increase noise levels at noise-sensitive receptors by 5 dBA CNEL or greater, with a future noise level of less than 60 dBA CNEL, or when noise level increase by 3 dBA CNEL or greater, with a future noise level of 60 dBA CNEL or greater.

Based upon the analysis in the *Noise and Vibration Assessment* prepared for the Project, the traffic noise increase resulting from traffic volumes on local streets including Firefly Lane and Valle Verde Drive, would be less than 1 dBA at noise-sensitive receptors in the Project vicinity. Therefore, the Project would not result in a permanent noise increase of three dBA DNL or more.

Construction Noise

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time. Project construction is anticipated to occur over a period nine months.

Noise thresholds for temporary construction are not provided in the City's General Plan or Municipal Code. Temporary construction would be annoying to surrounding land uses if the ambient noise environment increased by at least 5 dBA L_{eq} for an extended period of time. The temporary construction noise impact would be considered significant if Project construction activities exceeded 60 dBA L_{eq} at nearby residences or exceeded 70 dBA L_{eq} at nearby commercial land uses and exceeded the ambient noise environment by 5 dBA L_{eq} or more for a period longer than one year.

Construction activities would be carried out in stages. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. Typical construction noise levels at 50 feet are shown in Table 3.13-3 and Table 3.13-4.

At 50 feet from the noise source, maximum instantaneous noise levels generated by Project construction equipment would range from 77 to 90 dBA L_{max} and hourly average noise levels would range from 74 to 85 dBA L_{eq} .

Noise sensitive uses surrounding the Site include residential buildings located 100 feet east and 160 feet west of the proposed Valle Verde Apartments. Residences to the east would be exposed to a maximum noise levels of 71 to 79 dBA L_{max} during other phases of construction. Noise levels at residences to the west would be about 4 dBA lower due to the increased distance.

The demolition phase of the Project would be limited, as the existing building on the Heritage House Site will be renovated and the single-family home that previously existed on the Valle Verde Site has already been demolished. If the City conditions the Project entitlements to require removal of the bridge deck and concrete piers, the noise from the removal would be temporary (likely several weeks or less). The noise generated from the removal of the bridge deck and concrete piers is included in the Project construction noise estimates.

Table 3.13-3: Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)								
	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84
I - All pertinent equipment present at site. II - Minimum required equipment present at site.								
Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.								

Table 3.13-4 shows the average noise level ranges, by construction phase. Most demolition and construction noise falls within the range of 80 to 90 dBA at 50 feet from the source.

Table 3.13-4: Calculated Construction Noise Levels for Each Phase of Construction		
Construction Phase	At Distance of 50 ft.	
	L_{eq}, dBA	L_{max}, dBA
Site Preparation	83	85
Grading/Excavation	84	85
Trenching	82	84
Building-Exterior	82	84
Building-Interior	74	77
Paving	83	84

Small construction projects, like the proposed Project, do not typically generate significant noise impacts when standard construction best management practices are enforced at the Site and when the duration of the noise generating construction period is limited to one year or less. Noise levels would exceed 60 dBA L_{eq} and ambient levels by more than 5 dBA at adjacent residences at times; however,

construction would occur for a period of less than one year. Construction activities would be completed in accordance with the provision of the City's General Plan and Section 8.08.025 of Napa's Municipal Code, and would incorporate the following best management practices to further reduce potential noise impacts:

Best Management Practices:

- 1) Construction activities throughout the entire duration of the Project shall be limited to the hours of 7:00 AM to 7:00 PM, Monday through Friday. There will be no startup of machines nor equipment prior to 8:00 AM., Monday through Friday; no delivery of materials nor equipment prior to 7:30 AM nor past 5:00 PM, Monday through Friday; no cleaning of machines nor equipment past 6:00 PM, Monday through Friday; no servicing of equipment past 6:45 PM, Monday through Friday; and construction on weekends or legal holidays shall be limited to the hours of 8:00 AM to 4:00 PM, unless a permit shall first have been secured from the City Manager, or designee, pursuant to Section 8.08.050 of the code.
- 2) All muffler systems on construction equipment shall be properly maintained.
- 3) All construction equipment shall not be placed adjacent to developed areas unless said equipment is provided with acoustical shielding.
- 4) All construction and grading equipment shall be shut down when not actively in use.
- 5) As a separate, distinct, and cumulative remedy established for a violation of this section, the Police and/or the Code Enforcement Officer may issue a stop work order for violation of this section. Such order shall become effective immediately upon posting of the notice. After service of the stop work order, no person shall perform any act with respect to the subject property in violation of any of the terms of the stop work order, except such actions the city determines are reasonably necessary to render the subject property safe and/or secure until the violation has been corrected.

Implementation of the above Best Management Practices would reduce construction noise levels emanating from the Site, limit construction hours, and minimize disruption and annoyance. With the inclusion of these practices and recognizing that noise and vibration generated by construction activities would occur over a temporary period, the temporary increase in ambient noise levels resulting from the Project would be less than significant.

Impact NOI-2: The Project would not result in generation of, excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

Operational Vibration

Operation of the proposed Project would not create substantial groundborne vibration. While the Project may include truck loading activities such as garbage collection during operation, the Project is not anticipated to have activities that would substantially create groundborne vibration or excessive noise.

Construction Vibration

The construction of the Project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include site preparation work, foundation work, and new building framing and finishing. According to the list of construction equipment expected to be used for the Project, pile driving equipment, which can cause excessive vibration, is not proposed.

For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 inch per second peak particle velocity for buildings structurally sound and designed to modern engineering standards, 0.2 inch per second PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.08 inch per second PPV for historic structures or buildings that are documented to be structurally weakened. No historic buildings or buildings that are documented to be structurally weakened adjoin the Site. Conservatively, groundborne vibration levels exceeding 0.2 inch per second PPV would have the potential to result in a significant vibration impact.

As previously described, the nearest sensitive receptors would be the residences in townhomes across the Site, approximately 100 feet to the west on Valle Verde Drive. The Napa Municipal Code limits construction hours to between the hours of 7:00 AM to 7:00 PM, Monday through Friday, with no startup of machines nor equipment prior to 8:00 AM, no delivery of materials nor equipment prior to 7:30 AM nor past 5:00 PM., no cleaning of machines nor equipment past 6:00 PM, and no servicing of equipment past 6:45 PM. Construction on weekends or legal holidays is limited to the hours of 8:00 AM to 4:00 PM. In addition, all muffler systems on construction equipment are required to be properly maintained, all construction equipment is prohibited from being placed adjacent to developed areas unless said equipment is provided with acoustical shielding, and all construction and grading equipment is required to be shut down when not actively in use.

Table 3.13-5 presents typical vibration levels that could be expected from construction equipment at 25 feet (reference distance). Construction activities, such as use of saws, excavators, scrapers and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity. Vibration levels would vary depending on soil conditions, construction methods, and equipment used.

Substantial exterior construction is not anticipated for the Heritage House building. The nearest existing structure to Valle Verde Apartments is located 100 feet east. Pile driving is not anticipated for this Project. At 100 feet, vibration levels from construction are anticipated to be 0.046 in/sec PPV or less. Vibration levels may be perceptible to occupants but would be below the 0.3 in/sec PPV vibration limit and would not be anticipated to cause architectural or structural damage. These projected vibration levels include construction activities associated with the bridge removal and the stitch pier installation. As construction moves away from the shared property lines, vibration levels would be even lower. Assuming all construction activities for the proposed Project are conducted in accordance with Section 8.08.025 of the Napa Municipal Code, noise and vibration generated by construction activities would not exceed the established standards.

Table 3.13-5: Vibration Source Levels for Construction Equipment		
Equipment		PPV at 25 ft. (in/sec)
Pile Driver (Impact)	upper range	1.158
	typical	0.644
Pile Driver (Sonic)	upper range	0.734
	typical	0.17
Clam shovel drop		0.202
Hydromill (slurry wall)	in soil	0.008
	in rock	0.017
Vibratory Roller		0.210
Hoe Ram		0.089
Large bulldozer		0.089
Caisson drilling		0.089
Loaded trucks		0.076
Jackhammer		0.035
Small bulldozer		0.003

Impact NOI-3: The Project would not be 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. The Project would not expose people residing or working in the Project area to excessive noise levels. **(No Impact)**

The Site is located approximately 7.5 miles north of the Napa County Airport and is outside of the Airport Influence Area. The Project is not located within the airport land use plan. Additionally, the Site is not located within the vicinity of a private airstrip. The Project, therefore, would not expose people in the Project vicinity to excessive noise levels.

Impact NOI-C: The Project would not result in a cumulatively considerable contribution to a significant noise impact. **(Less than Significant Cumulative Impact)**

3.13.2.3 *Construction*

The geographic area for cumulative noise impacts is the Site and adjacent parcels. There are three cumulative projects within 1,000 feet of the Site (see Table 3.0-1). While cumulative projects could be constructed at the same time as the proposed Project and result in a temporary construction noise increase, all projects in the City would be required to implement the construction noise standard

permit conditions identified in Impact NOI-1. Small construction projects like the proposed Project, do not typically generate significant noise impacts when standard construction best management practices are enforced at the Site and when the duration of the noise generating construction period is limited to one year or less. The three cumulative projects located within 1,000 feet of the Site are also small projects (ranging from one to 17 single family homes). These projects and the proposed Project would be completed in accordance with the provision of the City's General Plan and Section 8.08.025 of the Napa's Municipal Code and would incorporate the best management practices described in Impact NOI-1 to further reduce potential noise impacts. For these reasons, the proposed Project would not result in a cumulative construction noise impact.

3.13.2.4 *Operation*

Once operational, the proposed Project would not create substantial groundborne vibration (see Impact NOI-2). The primary noise sources at the Site would continue to be vehicular traffic on Valle Verde Drive and Firefly Lane. Based on future traffic volumes identified in the Transportation Impact Analysis prepared for the Project, future traffic noise levels along Valle Verde Drive and Firefly Lane are not anticipated to increase under future conditions due to increases in traffic volumes along these roadways. As a result, the Project does not contribute considerably to a cumulative operational noise impact.

3.13.3 Non-CEQA Effects

Future Exterior Noise Environment

The primary noise sources at the Site would continue to be vehicular traffic on Valle Verde Drive and Firefly Lane. Based on future traffic volumes identified in the Transportation Impact Analysis prepared for the Project, future traffic noise levels along Valle Verde Drive and Firefly Lane are not anticipated to increase under future conditions due to increases in traffic volumes along these roadways as a result of Project traffic, as documented in the traffic study.

Exterior use areas of the Heritage House would include the outdoor patio located in the central courtyard, which would be exposed to 49 dBA CNEL. Exterior use areas of the Valle Verde Apartments would include a courtyard patio and BBQ area, play area, shade garden, half basketball court, and picnic area, which would also be exposed to 49 dBA CNEL. Outdoor areas would be shielded by existing and proposed buildings. The private balconies of Valle Verde Apartments would be exposed to ambient noise levels of up to 54 dBA CNEL in balconies facing Valle Verde Drive, not including occasional emergency vehicle sirens, which would vary on a day-to-day basis and would not be anticipated to affect the usability of the outdoor spaces. Noise levels at the exterior use areas of Heritage House and Valle Verde Apartments would not exceed the City's acceptable exterior noise level criteria of 65 dBA CNEL for multi-family residential use.

Future Interior Noise Environment

The City of Napa requires that interior noise levels be maintained at 45 dBA CNEL or less inside residences. Due to the variability in timing and frequency of emergency vehicle sirens, the CNEL requirement is assessed with respect to interior noise levels that do not include the instantaneous maximum noise levels generated by emergency vehicle sirens. Additionally, to minimize the potential for activity interference and sleep disturbance (as recommended above), typical maximum

instantaneous noise levels from emergency vehicle sirens should be controlled to 55 dBA L_{max} or less inside bedrooms and other living spaces within proposed residences. The predicted exterior noise level would not exceed 65 dBA DNL and would be considered “normally acceptable” under HUD standards. Under HUD standards, it is assumed that with standard construction any building will provide sufficient attenuation to achieve an interior level of 45 dBA DNL or less if the exterior level is 65 dBA DNL or less.

The future exterior noise level exposures at building façades were calculated from results of the noise measurement survey and future increase in traffic. The south façade of Heritage House would be exposed to 59 dBA CNEL and the west façade would be exposed to maximum noise level of up to 56 dBA CNEL. The south façade of Valle Verde Apartment building would be exposed to up to 54 dBA CNEL. Maximum instantaneous noise levels from emergency vehicle sirens would range from 80 to 93 dBA L_{max} at the exterior of the south facing Heritage House façade and from 74 to 87 dBA L_{max} at the exterior of the south facing Valle Verde Apartments façade, with typical maximum instantaneous noise levels of 84 dBA L_{max} at Heritage House and 78 dBA L_{max} at Valle Verde.

Interior noise levels would vary depending upon the design of the buildings (relative window area to wall area) and the selected construction materials and methods. Standard residential construction provides approximately 15 dBA of exterior-to-interior noise reduction, assuming the windows are partially open for ventilation. Standard construction with the windows closed provides approximately 20 to 25 dBA of noise reduction in interior spaces. Where exterior noise levels range from 60 to 65 dBA CNEL, the inclusion of adequate forced-air mechanical ventilation can reduce interior noise levels to acceptable levels by allowing occupants the option of closing the windows to control noise.

Interior noise levels in the Valle Verde Apartments with standard construction and windows open would be up to 39 dBA CNEL inside units facing Firefly Lane. Interior noise levels of residential units in Heritage House were calculated to be 44 dBA CNEL for units facing Firefly Lane and 41 dBA CNEL for units facing Valle Verde Drive, assuming standard construction only and windows in the open position. Interior noise levels inside both Heritage House and Valle Verde would meet the City’s threshold for interior noise.

Typical maximum instantaneous noise levels from emergency vehicle sirens would be anticipated to be 65 dBA L_{max} inside south facing Valle Verde Apartment units and 71 dBA L_{max} inside south facing units in the Heritage House, with windows open. These levels exceed the recommended interior noise level of 55 dBA L_{max} within living spaces. The inclusion of forced air mechanical ventilation, to allow occupants the option of keeping windows closed to control noise, and windows with STC ratings of 28 or greater, would be sufficient to limit interior noise inside all Valle Verde units and of east, west, and north facing Heritage House units to acceptable maximum instantaneous levels (55 dBA L_{max}), assuming a window to wall ratio of 40% or less. Preliminary calculations indicate that the inclusion of forced air mechanical ventilation and windows with STC ratings of 30 or greater would achieve the 55 dBA L_{max} maximum instantaneous noise level threshold in south facing Heritage House units.

Nevertheless, the following Conditions of Approval would be applied to the Project:

Conditions of Approval:

For consistency with the General Plan, the following Conditions of Approval would be applied to the Project:

- Provide a suitable form of forced-air mechanical ventilation, as determined by the local building official, for all buildings so that windows can be kept closed to control noise from emergency vehicle sirens.
- Provide sound rated windows to proposed building residential façades to maintain interior maximum instantaneous noise levels due to emergency vehicle sirens at acceptable levels. Preliminary calculations show that sound-rated windows with minimum STC Ratings of 28 or higher would be satisfactory for all units in the Valle Verde Apartments and for east, west, and north facing Heritage House units to achieve acceptable interior noise levels, assuming a windows to wall ratio of 40% or less. Sound-rated windows with minimum STC Ratings of 30 or higher would be needed to reduce interior maximum levels in south facing Heritage House units to achieve acceptable interior noise levels. The specific determination of what noise insulation treatments are necessary shall be conducted on a room-by-room basis during final design of the Project.

3.14 POPULATION AND HOUSING

3.14.1 Environmental Setting

3.14.1.1 *Regulatory Framework*

State

In order to attain the state housing goal, cities must make sufficient suitable land available for residential development, as documented in an inventory, to accommodate their share of regional housing needs. California's Housing Element Law requires all cities to: 1) zone adequate lands to accommodate its Regional Housing Needs Allocation (RHNA); 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis. The City of Napa Housing Element and related land use policies were last updated in 2015.

Regional

The Association of Bay Area Governments (ABAG) allocates regional housing needs to each city and county within the nine-county Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, Metropolitan Transportation Commission, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population and Housing (upon which Plan Bay Area 2040 is based), which is an integrated land use and transportation plan looking out to the year 2040 for the nine-county San Francisco Bay Area.

Plan Bay Area 2040 is a state-mandated, integrated long-range transportation, land-use and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). The Site is not located within a PDA.⁶³

Local

Envision Napa 2020

The City's General Plan and Housing Element include goals and policies related to population, housing, and employment. The following General Plan policies are specific to population and housing and are applicable to the proposed Project.

Policy	Description
H1.1	Efficient Use of Land. The City shall promote creative and efficient use of vacant and built on land within its RUL to help maintain the City's preeminent agricultural environment and open space.

⁶³ ABAG. Plan Bay Area. Priority Development Area Showcase. <http://gis.abag.ca.gov/website/PDAShowcase/#nogo1>.

- H1.2 **Provide Adequate Sites.** The City shall maintain an adequate supply of land designated for all types of residential development to meet the quantified housing need of 835 City units and up to 57 County units for the state-mandated time frame of the Housing Element (2015 to January 2023). Within this total, the City shall maintain a sufficient supply of land zoned for multi-family housing to meet the quantitative housing need of 317 lower income and 151 moderate income housing units.
- H1.3 **Minimum Densities.** The City shall not approve development below minimum designated General Plan densities unless physical or environmental constraints preclude its achievement and findings as required per Government Code Section 65863 are adopted. If development on a site is to occur over time, the applicant must show that the proposed development does not prevent subsequent development of the site to its minimum density
- H1.4 **Efficient Use of Sites.** The City shall make every effort to approve well-designed projects at the mid to high range of General Plan densities.
- H1.5 **Lower Cost Homeownership.** The City will assist in creating new lower cost homeownership opportunities (such as first-time homebuyer programs).
- H1.6 **Innovative Housing Types.** The City will specifically provide opportunities in regulations for creative or innovative housing types such as co-housing or housing with shared common facilities.
- H1.9 **Housing and Jobs Balance.** The City shall continue to make it a priority to balance and promote housing opportunities to meet the needs of the workforce in Napa. The City shall continue to recognize Napa’s housing needs (i.e., population growth needs, employment needs and regional housing needs) when considering non-residential development proposals.
- H2.1 **Support for Affordable Housing.** The City shall continue to support and encourage new affordable housing projects.
- H2.2 **Mix of Housing.** The City shall encourage an increased mix of various types of housing throughout the City to meet community housing needs, provide greater housing choices, and improve transportation choices. In addition to single-family homes, housing choices and the mix of housing in the community should include such types as multi-family, mixed-use, affordable units, supportive housing, Single Room Occupancies (SRO), co-housing and similar types of housing that meet a wide variety of community housing needs.
- H2.7 **Adaptive Reuse.** The City will encourage adaptive reuse of vacant buildings in mixed use general plan categories with residential/mixed-use projects where feasible and appropriate.
- H2.14 **Retain Affordable Units Long-Term.** The City shall assure that affordable housing provided through density bonuses, and other programs or incentives remain affordable long-term consistent with State law.
- H3.1 **High Quality Design and Varied Housing Types.** The City shall assure high quality, well designed housing that respects the surrounding neighborhood, and provides for a greater variety of housing options to meet community needs.
- H3.3 **Livable Neighborhoods.** The City shall promote the concept of “whole livable neighborhoods” by prioritizing excellent pedestrian and bicycle access, and by encouraging — or seeking to retain or expand — daily services and recreation areas, parks, trails, gathering places, etc. near residential neighborhoods, particularly higher density residential neighborhoods.

- H3.4 **Fair Share.** The City shall continue to promote a “fair share” of well-designed affordable and varied housing in all neighborhoods throughout the City.
- H3.9 **Strengthen Sustainable Building.** Through its standards and guidelines, the City will require new residential development and rehabilitation projects to incorporate sustainable building design and siting, construction and operation. Sustainable green building means development, design, construction and operation that reduces energy consumption, particularly reduction in the use of fossil fuels and potable water; incorporates alternate and renewable energy sources and recycled water; provides more natural light; reduces storm runoff; uses renewable, local, salvage and nontoxic building materials; reduces use of non-recyclable materials and promotes recycling; and improves indoor air quality.
- H3.13 **Preservation of Assisted Rental Projects.** The City shall continue to strongly encourage retention of existing federally, State and locally subsidized affordable rental housing, and intervene when necessary and feasible to preserve such housing.
- H4.1 **Special Needs.** The City shall actively assist the development and rehabilitation of housing and support services to meet local population needs of special needs groups, in collaboration with other public and private service agencies.
- H4.2 **Homeless, Transitional and Supportive Housing.** The City shall continue to support and implement adopted Plans and actions to respond to needs of the homeless, including zoning approaches as required by State law.
- H4.3 **Support Services for Homeless.** The City shall encourage the provision of adequate support services to increase the percentage of homeless staying in permanent housing long term; and to increase the percentage of homeless persons moving from temporary to permanent housing.
- H4.4 **Single Room Occupancy (SRO) Units.** The City shall promote well managed Single Room Occupancy (SRO) projects and development of efficiency apartments as lower cost permanent housing. SRO projects involving special needs groups must be linked with social services and case management.
-

3.14.1.2 *Existing Conditions*

City of Napa

Population and Housing

Based on information from the Department of Finance E-5 report, the population of Napa was estimated to be approximately 80,403 in January 2018 with an average of 2.76 persons per household.^{64,65} The City currently has approximately 30,588 housing units as of January 1, 2018.

⁶⁴ State of California, Department of Finance. E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change – January 1, 2017 and 2018. May 2018. Accessed: August 7, 2018. Available at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-1/>.

⁶⁵ State of California, Department of Finance. Table 2: E-5 City/County Population and Housing Estimates, 1/1/2018. Accessed: August 7, 2018. Available at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

According to the City of Napa Housing Needs Allocation, 2015 to 2023 (see Table 2.10-1), the City of Napa should add 835 new units by 2023 (of which 185 would be very low, 106 would be low, and 141 would be moderate income units) in order to meet the needs for affordable housing.

Employment

Data from the California Employment Development Department (EDD) shows that as of 2012 Leisure and Hospitality surpassed all other employment sectors, becoming the single largest employment sector in Napa County.⁶⁶ A majority of jobs in the Leisure and Hospitality sector tend to be relatively low paid, which may in turn lead to increased demand for affordable workforce housing within the County. Table 3.14-1 identifies the total employment and unemployment rates for the Project area.

Table 3.14-1: Employment Figures and Unemployment Rate			
Jurisdiction	Total Employed	Total Unemployed	Approximate Unemployment Rate (Percent)
Napa County	71,900	2,300	3.1
City of Napa	40,800	1,400	3.2

Source: EDD. *Labor Force and Unemployment Rate for Cities and Census Designated Places*. June 2018.

3.14.2 Population and Housing Impacts

3.14.2.1 Thresholds of Significance

For the purposes of this EIR, a population and housing impact is considered significant if the Project would:

- 1) 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); or
- 2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

⁶⁶ County of Napa. *Napa County Housing Element Update Draft Housing Needs Assessment*. December 2014. Site accessed June 13, 2018. Available at: <https://www.countyofnapa.org/DocumentCenter/View/3282/Draft-Final-Housing-Element-Needs-AssessmentDecember-2014-PDF>.

3.14.2.2 *Project Impacts*

Impact POP-1: The Project would not 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).
(Less than Significant Impact)

Development of the Project would result in the conversion of a former assisted living facility into 66 affordable SRO housing units, including eight ADA accessible one-bedroom units, and the construction of 24 affordable housing units, equating to approximately 195 residents at the Site.⁶⁷

The Project would marginally increase the number of housing units in the City of Napa. The proposed Heritage House facility would employ approximately three to five full-time equivalent persons and Valle Verde would have up to two staff for onsite management, which would not be enough to create substantial unplanned population growth. The proposed Project's relatively low contribution to population growth would not be expected to substantially change the relatively balanced and steady regional job/housing ratio.

The Project is consistent with the land use assumptions of the buildout of the General Plan. The additional residents, therefore, were accounted for in the environmental impact analysis of buildout of the General Plan. The Project would not result in substantial unplanned population growth.

Impact POP-2: The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

The Heritage House Site is developed with the vacant Sunrise Living Facility, while the Valle Verde Site is undeveloped. The Sunrise Living Facility does not currently support residents. Implementation of the Project would result in the creation of 90 housing units. Therefore, the Project would not displace residents or housing.

3.14.2.3 *Cumulative Impacts*

Impact POP-C: The Project would not result in a cumulatively considerable contribution to a significant population and housing impact. **(Less than Significant Cumulative Impact)**

The Project would redevelop the vacant 72-room Sunrise Napa Assisted Living Facility with 66 SRO units, perhaps resulting in a slight reduction in population in that structure, although the residents in the Valle Verde Apartments would result in an overall increase in Site population compared to past conditions when the assisted living facility was in operation. While the Valle Verde Apartments

⁶⁷ The future population is based on a conservative estimate of two persons per SRO unit and the City's average household size of 2.61 persons (City of Napa. *Downtown Napa Specific Plan Draft PEIR*. January 2012).

would introduce 24 new units to the Site, it is not considered a substantial new use or otherwise indirectly induce unplanned population growth. The Site is zoned and has a General Plan designation of multi-family residential that is intended to accommodate such uses.

In addition, the Project would not displace residents or housing. For these reasons, the Project would not have a cumulatively considerable contribution to a significant cumulative unplanned population growth in the area.

3.15 PUBLIC SERVICES

3.15.1 Environmental Setting

3.15.1.1 *Regulatory Framework*

State

Quimby Act

The Quimby Act (California Government Code Sections 66477 *et seq.*) was approved by the California legislature to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two at the discretion of the City of Napa.

School Impact Fees

California Government Code Section 65996 specifies that an acceptable method of offsetting a Project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Sections 65995-65998 sets forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property)" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

In accordance with California Government Code Section 65996, developers pay a school impact fee to the school district to offset the increased demands on school facilities caused by their proposed residential development Project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Local

Fire and Paramedic Development Impact Fees

Section 15.78.040 of the Napa Municipal Code requires that development projects pay a fire and paramedic development impact fee prior to the issuance of a building permit. These fees are developed by the Fire Department and are updated annually.

Park Development Fees

Section 15.68.030 of the Napa Municipal Code requires that development projects pay a park development fee prior to the issuance of a building permit. Fees are calculated based upon the projected number of residents within a development.

3.15.1.2 Existing Conditions

Fire Protection Services

Fire protection to the Site is provided by the City of Napa Fire Department (Napa Fire Department), which serves a population of approximately 78,340 and an area of 18 square miles. The Napa Fire Department serves the community via five stations located throughout the City.

In 2016, out of 8,996 emergency calls made to the Napa Fire Department, 6,189 of the calls (69 percent) were for medical aid (rescue and EMS incident), and 173 were for fire (two percent).⁶⁸ The Napa Fire Department has an established response time goal of seven minutes (from dispatch) for the first fire apparatus to arrive on scene (90 percent of the time).⁶⁹ During 2016, the Napa Fire Department achieved this goal 86 percent of the time.⁷⁰

Each fire station provides an Advanced Life Support (Paramedic) Engine company. In addition, Fire Station 1 also provides an Advanced Life Support (Paramedic) Aerial Ladder Truck Company and a Heavy Rescue Unit for special operations and technical rescues. Each Engine and Truck company is staffed with a minimum of three personnel. The department staffing consists of 56 suppression, 5 fire prevention, 1 training officer, 1 EMS specialist and 3 full time administrative personnel.⁷¹

The City of Napa participates in a mutual aid program with CAL FIRE, Napa County Fire Department, and American Canyon Fire Protection District. The Napa Fire Department also participates in a State-wide Mutual Aid system as part of the California State Office of Emergency Services (OES) by housing and staffing a State fire engine (OES 365) as well as an OES USAR trailer that responds to large emergency incidents throughout the State.

Station Two is the closest fire station to the Site. Station Four is located at 1501 Park Avenue, approximately 1.2 mile southwest of the Site. The Napa Fire Department reviews applications for new projects to ensure that they comply with the City's current codes and standards.

Police Protection Services

Police protection services are provided to the Site by the Napa Police Department. The Napa Police Department consists of approximately 76 sworn personnel and 71 professional staff. Officers patrolling the area are dispatched from police headquarters, located at 1539 First Street, approximately 2.7 miles southwest of the Site.

Schools

The Napa Valley Unified School District (NVUSD) is the primary provider of kindergarten through twelfth grade education in Napa. Students in the Project area attend Bel Aire Park Magnet Elementary School located at 3580 Beckworth Drive (approximately 0.6 mile west of the Site), Redwood Middle School located at 3600 Oxford Street (approximately 1.2 miles southwest of the

⁶⁸ City of Napa Fire Department. *2016 Annual Report*. Accessed August 7, 2018.

<https://www.cityofnapa.org/DocumentCenter/View/2638/2016-Annual-Report>

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ City of Napa Fire Department. *2015 – 2020 Strategic Plan*. Accessed August 7, 2018.

<https://www.cityofnapa.org/DocumentCenter/View/2637/Napa-Fire-Department-Strategic-Plan>.

Site), and Vintage High School located at 1375 Trower Avenue (approximately 0.6 miles northwest of the Site).

Parks

The City of Napa currently owns or manages 870 acres of parks and open space facilities, including 55 urban parks.⁷² Within the Planning Area, there are seven citywide parks and open space areas; four community parks; 23 neighborhood parks; 11 mini parks; six special use parks and facilities; nine civic spaces; and four recreation facilities (Existing Conditions Report). The nearest parks to the Site are Garfield Park and Trancas Crossing Park, located approximately 0.35 miles east of the Site, respectively.

3.15.2 Public Services Impacts

3.15.2.1 *Thresholds of Significance*

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:

- 1) Fire protection?
- 2) Police protection?
- 3) Schools?
- 4) Parks?
- 5) Other public facilities?

3.15.3 Impact Discussion

3.15.3.1 *Project Impacts*

Impact PS-1: The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 fire protection services. **(Less than Significant Impact)**

The Project would result in new residential development with approximately 195 new residents, which would incrementally increase demand for fire protection services compared to existing conditions. The Project is consistent with the development assumptions in the General Plan, and there are currently adequate Napa Fire Department facilities to support the proposed development.

⁷² City of Napa. *Envision Napa 2020, City of Napa General Plan*. December 1998.

The Project would not preclude the Fire Department from meeting their service goals or require the construction of new or expanded fire facilities. The proposed development would be constructed in accordance with current building codes and would be required to be maintained in accordance with applicable City policies to promote public and property safety.

The Project shall implement the following Standard Permit Condition as a condition of approval for the Project.

Standard Permit Condition:

- In accordance with Section 15.78.040 of the Napa Municipal Code, the Applicant shall pay the applicable Fire and Paramedic Development Impact Fee to mitigate the impact of the Project on the City’s ability to provide Citywide fire and paramedic services.

For these reasons, the proposed Project would not result in a significant impact on fire protection services.

Impact PS-2: The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 police protection services. **(Less than Significant Impact)**

The proposed Project would develop the Site with residential uses and would increase the demand for police protection services compared to existing conditions. There are currently adequate Napa Police Department facilities to support the proposed development, and the Project would not preclude the Police Department from meeting their service goals or require the construction of new or expanded police facilities. The proposed development would be constructed in accordance with current building codes and would be required to be maintained in accordance with applicable City policies to promote public and property safety. Additionally, the proposed Heritage House would have one full-time resident manager on staff to ensure safe operation of the facility. For these reasons, the proposed Project would not result in a significant impact on police protection services.

Impact PS-3: The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 schools. **(Less than Significant Impact)**

The Project proposes to construct 24 multi-family affordable housing units and 66 affordable SROs (including eight ADA accessible one-bedroom units). Residents of the Valle Verde Apartments could include elementary, middle, and high school students. According to the NVUSD student generation

factors, affordable residential development generates 1.066 students per dwelling unit.⁷³ Based on this generation factor, the proposed 24 affordable units in the Valle Verde Apartments would increase the student population in the Project area by approximately 26 K-12 students. Note that due to the nature of the SRO and accessible one-bedroom units, it was assumed that these units in the Heritage House would not generate students.⁷⁴

The incremental increase of students attending local schools is not expected to require construction of a new school. The Project shall implement the following Standard Permit Condition as a condition of approval for the Project.

Standard Permit Condition:

- In accordance with California Government Code Section 65996, the Applicant shall pay a school impact fee to the School District, to offset the increased demands on school facilities caused by the proposed Project.

Although the Project could generate new students in the area, the Project would comply with Government Code Section 65996, which requires the Project to pay school impact fees and is considered adequate mitigation for increased demands upon school facilities created by the Project.

Impact PS-4: The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 parks. **(Less than Significant Impact)**

New residents of the Site would use existing recreational facilities in the area, including Garfield Park and Trancas Crossing Park, located approximately 0.35 mile east of the Site, respectively. The new residents would incrementally increase the use of existing recreational facilities in the Project area. The Applicant would comply with the City's Park Development Fee Ordinance⁷⁵, and would be required to pay park development fees to offset the increased demand for parks and recreational facilities. The Project shall implement the following Standard Permit Condition as a condition of approval for the Project.

Standard Permit Condition:

- The Applicant shall pay a park development fee in accordance with Napa Municipal Code Chapter 15.68.

With payment of a park development fee commensurate with the proposed Project, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically

⁷³ Jack Schreder & Associates. *School Facilities Needs Analysis for Napa Valley Unified School District*. 2015.

Table 1 – Student Generation Factors

⁷⁴ Personal Communication. Lark Ferrell, Housing Manager. City of Napa. Email correspondence on April 22, 2019.

⁷⁵ City of Napa Municipal Code. Title 15 Buildings and Construction. Chapter 15.68 Park Development Fees.

altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts to parks.

Impact PS-5: The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 other public facilities. **(Less than Significant Impact)**

The Napa Main Branch Library located at 580 Coombs Street serves the residents of the City of Napa. Development approved under the Napa General Plan is projected to increase the City's residential population to 90,288 by 2040. Although the proposed Project would incrementally increase residential development and population growth, and therefore increase the use of public facilities such as the Napa Main Branch Library, the proposed Project is consistent with the General Plan and would not substantially increase use of Napa facilities or otherwise require the construction of new library facilities.

3.15.3.2 *Cumulative Impacts*

Impact PS-C: The Project would not result in a cumulatively considerable contribution to a significant public services impact. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative public services impacts is generally the City of Napa. As described above, the Project would incrementally increase demand for fire and police protection services; however, the Project is consistent with the development assumptions in the General Plan, and there are currently adequate Napa Fire and Police Department facilities to support the proposed development. Additionally, the Project would pay the applicable Fire and Paramedic Development Impact Fee to mitigate the impact of the Project on the City's ability to provide Citywide fire and paramedic services. The Project would increase the student population in the Project area by approximately 26 K-12 students. This incremental increase is not expected require construction of a new school. As described in Impact PS-4, the Project would incrementally increase the use of nearby recreational facilities; however, the Project would be required to comply with the City's Park Development Fee Ordinance and would be required to pay park development fees to offset the increased demand for parks and recreational facilities. The Project would incrementally increase use of the Napa Main Library; however, the Project would not require the construction of new library facilities. Further, all cumulative projects would implement conditions of approval or mitigation measures that would reduce impacts to public services. These projects would also be subject to state, county, and City codes regulating public services (such as payment of school, fire and paramedic and park development fees). For these reasons, the Project would not contribute considerably to a significant cumulative public services impact.

3.16 RECREATION

3.16.1 Environmental Setting

3.16.1.1 *Regulatory Framework*

State

Quimby Act

The Quimby Act (California Government Code Sections 66477 *et seq.*) was approved by the California legislature to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees due in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two at the discretion of the City.

Local

Envision Napa 2020

The General Plan includes the following policies for the purpose of reducing or avoiding impacts associated with parks and recreation:

Policy	Description
PR-2.4	The City shall continue to collect development impact fees under the City's Park Dedication (Quimby) Ordinance. The City shall consider increasing the requirements for dedication or in-lieu fees under the Quimby Ordinance from three acres to five acres per 1,000 population.
PR-3.1	The City shall consider the Napa River and tributaries as a primary natural corridor that forms an organizing spine for the open space system within and extending beyond the City.
PR-3.10	The City shall address conservation of sensitive natural and cultural resources in specific and detailed development and implementation plans for parks and trails; ensure compliance at all times with the California Environmental Quality Act (CEQA) and other regulatory requirements.

3.16.1.2 *Existing Conditions*

The City of Napa currently owns or manages 800 acres of parks and open space facilities, including 55 urban parks.⁷⁶ The urban parks are divided among four community parks, 22 neighborhood parks, four civic areas, and four recreational facilities. The nearest parks to the Site are Garfield Park and Trancas Crossing Park, located approximately 0.35 miles east of the Site, respectively.

⁷⁶ City of Napa. *Envision Napa 2020, City of Napa General Plan*. December 1998.

3.16.2 Recreation Impacts

3.16.2.1 *Thresholds of Significance*

For the purposes of this EIR, a recreation impact is considered significant if the Project would:

- 1) 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 or
- 2) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

3.16.2.2 *Project Impacts*

Impact REC-1: The Project would not increase in 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)**

The Project would result in a maximum of 90 dwelling units and an estimated 195 residents on the Site, using the City's average of 2.61 persons per household for the affordable housing units and a conservative assumption of two persons per unit in the Heritage House. As described in *Section 4.15*, the Project would pay the applicable Park Development Fee to ensure that the Project would not significantly impact neighborhood and regional park facilities.

Impact REC-2: The Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact)**

The Project would pay the applicable Park Development Fee in accordance with Chapter 15.68 of the Napa Municipal Code. No new off-site recreational facilities would be constructed by the Applicant. The Project would include the construction of a children's playground on the Valle Verde Site. The construction of the playground on the Valle Verde Site has been included in the environmental analysis of this EIR/EA. As described in Sections 3.0 through 8.0, the Project would not result in significant impacts that could be not be reduced through incorporation of identified mitigation measures.

New residents would be adequately served by the recreational opportunities provided by the Project and those within the Project vicinity. The proposed Project would not require construction of new facilities that would have the potential to adversely affect the environment.

3.16.2.3 *Cumulative Impacts*

Impact REC-C: The Project would not result in a cumulatively considerable contribution to a significant recreation impact. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative recreation impacts is the City's boundaries. To minimize impacts of new residents on existing park and recreation facilities, cumulative projects generating new residents are required to comply with the City's Park Land Dedication Ordinance, which requires subdividers to dedicate land and/or pay a fee for parks and recreational purposes, and the City's Park Development Fee Ordinance, which requires residential projects to pay fees to pay for improvements to recreational facilities. As discussed in Impact PS-4, the Project would pay the applicable Park Development Fee to ensure that the Project would not significantly impact neighborhood and regional park facilities. New residents would be adequately served by the recreational opportunities provided by the Project and those within the Project vicinity. The Project would not require construction of new facilities that would have the potential to adversely affect the environment. For these reasons, the Project would not result in a considerable contribution to a significant cumulative recreation impact.

3.17 TRANSPORTATION/TRAFFIC

The following discussion is based, in part, on a Transportation Impact Analysis (TIA) prepared by *Hexagon Transportation Consultants, Inc.* in November 2018. The TIA is included as Appendix L of this EIR/EA and is incorporated by reference.

3.17.1 Environmental Setting

3.17.1.1 *Regulatory Framework*

State

Regional Transportation Planning

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Napa County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes the region's Sustainable Communities Strategy (integrating transportation, land use, and housing to meet GHG reduction targets set by CARB) and Regional Transportation Plan (including a regional transportation investment strategy for revenues from federal, state, regional and local sources over the next 24 years).

Congestion Management Program

The Napa Valley Transportation Authority (NVTA) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic level of service (LOS) standards, transit service standards, a trip reduction and transportation demand management, a land use impact analysis program, and a capital improvement element

Senate Bill 743

Senate Bill 743 (SB 743) was signed in 2013 and requires that vehicle miles traveled (VMT) per capita, employee, or net VMT be used to analyze transportation impacts of land use projects under CEQA instead of reduction in levels of service. In 2018, the CEQA Guidelines were updated to include Section 15064.3, which implements SB 743 and requires lead agencies to select a VMT methodology, choose significance thresholds, and determine feasible mitigation measures. Section 15064.3 will become effective statewide in July 2020. VMT should be reduced to minimize the transportation impact a development has on a community. The goal of SB 743 is to encourage development that reduces VMT.

With the passage of SB 743 amending CEQA's evaluation of transportation impacts and the December 28, 2018 effective date of the Guidelines implementing SB 743, the effect of a project on LOS shall no longer be considered an impact on the environment. However, as allowed by CEQA Guidelines Section 15064.3, subdivision (c), lead agencies have until July 2020 to start using VMT. The City of Napa does not currently have an adopted VMT policy. The City's adopted transportation

policy utilizes LOS as the metric by which the City determines the functionality of the roadway system and the effect of new development on the roadway network. As a result, this EIR/EA provides an evaluation of LOS as it pertains to consistency with the City’s adopted transportation policy affecting roadways. The Guidelines amendments implementing SB 743 contained in Section 15064.3 allow lead agencies to continue to use LOS as a growth management or planning tool, apart from CEQA’s evaluation of environmental effects. With the amended Guidelines, the relevant CEQA question for a project’s contribution to roadway congestion or vehicular delay as measured by LOS is whether any roadway improvements or other physical changes required of the project to restore or maintain LOS would have environmental impacts.

Local

Envision Napa 2020

The General Plan includes the following policies for the purpose of avoiding or reducing or avoiding impacts resulting related to transportation.

Policy	Description
T-1.1	The City shall require all new development to mitigate traffic impacts in accordance with the circulation system classifications.
T-1.2	The City shall assess fees on new development sufficient to cover the fair share portion of that development’s impacts on the local and regional transportation system.
T-1.4	The City shall require that new development construct improvements identified in the Capital Improvement Plan (CIP) as needed to serve the development.
T-1.9	The City shall require where feasible all development and redevelopment to provide for forward entry onto arterial and collector streets.
T-2.1	The City shall ensure that traffic levels of service (LOS) will not exceed midrange LOS D at all signalized intersections on arterial and collector streets with the following exceptions, where midrange LOS E will be permitted: <ul style="list-style-type: none"> a. Downtown Napa within the area bounded by Soscol Avenue, First Street, California Boulevard and Third Street; b. Jefferson Street between Third Street and Old Sonoma Road; and c. Silverado Trail between Soscol Avenue and First street.
T-2.2	The City shall ensure that all new development and redevelopment will meet adopted service levels (LOS) for transportation facilities unless findings are made that achieving other specific public goals found in this General Plan outweigh this requirement.
T-2.4	When reviewing projects, the City shall monitor stop-controlled intersections using LOS and the Highway Capacity Manual criterion as a guideline, applying CALTRANS signal warrant evaluation as indicated, and requiring mitigation as necessary.
T-2.5	The City shall ensure that streets are designed with attractive landscape amenities and street trees wherever possible.
T-3.1	The City shall require development within crucial corridors to adhere to the special guidelines set out in this section. The crucial corridor arterials are: <ul style="list-style-type: none"> b. Trancas Street - from State Route 29 to Soscol Avenue

City of Napa Definition of Significant Intersection Impacts

The following guidelines are outlined by the Public Works Department Policy Guidelines – Traffic Impact Analysis for Private Developmental Review in assessing significant impacts:

1. When a signalized intersection operates at midrange LOS ‘D’ (as allowed by the General Plan in most locations) or better under existing or interim baseline conditions, the addition of project trips degrades the intersection operations to LOS ‘E’ or ‘F’. The project mitigation should bring the facility to operate at midrange LOS ‘D’, at a minimum.
2. When a signalized intersection operates at midrange LOS ‘E’ (as allowed by the General Plan in some locations and for State Highways facilities) or better under existing or interim baseline conditions, the addition of project trips degrades the intersection operations to LOS ‘F’. The project mitigation should bring the facility to operate at midrange LOS ‘E’, at a minimum.
3. When a signalized intersection operates at LOS ‘F’ (a violation of the General Plan LOS policy) under existing or interim baseline conditions, the addition of more than 50 peak-hour project trips contributes to the continuing operational failure at the intersection. The project mitigation should bring the facility to pre-project conditions.
4. At an unsignalized intersection when the minor stop-controlled approach operates at LOS ‘E’ or better or has acceptable operation in terms of total control delay (see section C-7 above), the addition of project trips increases the total control delay to more than 4.0 vehicle-hours for a single lane approach or 5.0 vehicle-hours for a multilane approach. The project mitigation should bring the facility to operate at LOS ‘E’ or to bring the total control delay to less than 4.0 vehicle-hours for a single lane approach or 5.0 vehicle-hours for a multilane approach, at a minimum.
5. At an unsignalized intersection when the minor stop-controlled approach operates at LOS ‘F’ and does not have acceptable operation in terms of total control delay (total delay less than 4 vehicle hours for single lane movement or 5 vehicle hours for multilane movement), the addition of more than 50 peak-hour project trips contributes to the continuing operational failure at the minor approach. The project mitigation should bring the facility to pre-project conditions.

3.17.1.2 Existing Conditions

Roadway Network

Regional Access

State Route (SR) 29 is a four-lane north-south freeway in the vicinity of the Site. SR 29 extends through Napa and ultimately connects to SR37 in Vallejo. Access to and from the Project study area is provided via a full access interchange at Trancas Street.

State Route (SR) 121 is a two-lane scenic route in the Project vicinity. SR 121 is called Silverado Trail from Soscol Avenue to Trancas Street. At Trancas Street, SR121 diverges to the east as Monticello Road. Silverado Trail provides access to the Site via its intersection with Trancas Street. The speed limit on Silverado Trail is 55 mph.

Local Access

Local access to the Site is provided via Silverado Trail, Trancas Street, Valle Verde Drive, Firefly Lane and Villa Lane. These roadways are described below.

Trancas Street is a four- to five-lane east-west arterial extending from SR 121 in the east to SR 29 in the west. Trancas Street provides access to the Site via Valle Verde Drive. The posted speed limit on Trancas Street is 30 mph.

Valle Verde Drive is a two-lane north-south local street extending from the Site in the north to Trancas Street in the south. Valle Verde Drive provides direct access to the Site. The speed limit on this local street is 25 mph.

Villa Lane is a two-lane north-south local street extending from Pear Tree Lane in the south, to the roadway's northerly terminus just north of Villa Court. Villa Lane provides access to the Site via Firefly Lane. The posted speed limit on Villa Lane is 25 mph.

Firefly Lane is a two-lane east-west local street extending from Wild Rye Way in the east to Valle Verde Drive in the west. Firefly Lane provides direct access to the Site. The speed limit on this local street is 25 mph.

Pedestrian and Bicycle Facilities

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths (Class I facilities) are pathways, separate from roadways that are designated for use by bicycles. Often, these pathways also allow pedestrian access. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III) are existing rights-of-way that accommodate bicycles but are not separate from the existing travel lanes. Routes are typically designated only with signs.

Existing and future proposed bicycle facilities are identified in the Project area. There are Class I bike/pedestrian paths that extend from the northerly end of Valle Verde Drive along Salvador Creek to the adjacent neighborhoods to the north, and a Class I facility between Sierra Avenue and Garfield Lane (Austin Miller Memorial Bike Path) at the end of Villa Lane. There are Class II bike lanes on Villa Lane from Firefly Lane to the northerly terminus of Villa Lane, and on Trancas Street between Big Ranch Road and Silverado Trail. Although most nearby streets do not have bike facilities, they are low speed, low volume streets that are conducive to bicycling. Future Class II bicycle lanes are proposed on the remaining portion of Villa Lane from Firefly Lane to Pear Tree Lane, as well as, on Trancas Street west of Big Ranch Road. Future Class III lanes are proposed on Firefly Lane and Valle Verde Drive.

Sidewalks are present on all roadway segments within the vicinity of the Site. There are no marked crosswalks present at the unsignalized intersections of Valle Verde Drive and Firefly Lane. There are marked crosswalks present at all legs of the unsignalized intersection of Villa Lane and Firefly Lane. All intersections along Trancas Street within the Project vicinity have crosswalks on at least one leg on each side except at Montclair Avenue. All signalized intersections within the Project vicinity have actuated pedestrian push buttons and signal heads.

Transit Services

The Site is within walking distance of two bus lines. Existing transit service to the Project study area is provided by the VINE Transit. A description of the two bus routes is listed in Table 3.17-1.

Table 3.17-1: Existing Transit Service					
Bus Route	Description	Operating Hours	Peak Hour Headway	Closest Bus Stop	Walk Distance to Site
Regional Route 10	Between Calistoga and Napa Valley College	5:30 AM to 10:45 PM	55 to 60 min.	Trancas Street/Valle Verde Drive	1,500 feet
Regional Route 11	Between Trancas Park and Ride Lot (located on the corner of Redwood Road and Trancas Street) in the City of Napa to the Vallejo Ferry Terminal	5:00 AM to 10:40 PM	55 to 69 min	Trancas Street/Valle Verde Drive	1,500 feet

VINE GO

VINE Go is an origin to destination, shared ride service that provides demand responsive, origin to destination transportation for persons with disabilities in the cities of Calistoga, St. Helena, Napa, American Canyon, the Town of Yountville, and the unincorporated areas of Napa County. VINE Go is the ADA complementary paratransit service to the fixed route services.

TAXI SCRIP

NVTA (Napa Valley Transportation Authority) uses public transit tax dollars to subsidize taxi rides for seniors and/or persons with disabilities. While not intended as a primary means of transportation, this program was created to provide a lifeline service to supplement the regular VINE bus system for seniors and/or persons with disabilities that have evening trips after the bus goes out of service, or on a day when the rider may not feel well enough to take the bus. Under the program, eligible City of Napa residents may take a cab ride anywhere in the City of Napa and NVTA will pay up to 50% of the cost of the cab ride. The person must be 65 years or older or have received an ADA certification to qualify for this program.

Traffic Analysis – Methodology

City of Napa Intersections

The Traffic Impact Analysis (TIA) prepared for this Project based its findings on the *2010 Highway Capacity Manual* methodology for signalized intersections. This method evaluates intersection operations on the basis of average control delay time for all vehicles at the intersection. This average

delay can then be correlated to a level of service. For a description of the definitions of signalized intersection level of service, refer to Table 3.17-2.

Policy T-2.1 of the City's General Plan establishes a level of service standard of mid-LOS D or better for all signalized intersections on arterial and collector streets with the following exceptions, where midrange LOS E will be permitted.

- Downtown Napa within the area bounded by Soscol Avenue, First Street, California Boulevard, and Third Street
- Jefferson Street between Third Street and Old Sonoma Road
- Silverado Trail between Soscol Avenue and First Street

The Site is not within the vicinity of the above-listed intersections.

Unsignalized Intersections

For the unsignalized Two-Way Stop-Controlled (TWSC) study intersections in the Transportation Impact Analysis, the level of service corresponds to the average control delay for the worst approach. None of the study intersections were unsignalized All-Way Stop-Controlled (AWSC) intersections, thus no AWSC intersections were analyzed as part of this analysis. The City of Napa established a level of service standard of mid-LOS E or better for all unsignalized intersections in the City of Napa General Plan Revised Draft EIR.

Table 3.17-2: Signalized Intersection Level of Service Definition Based on Average Delay		
Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to- capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major-contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, 2010 Highway Capacity Manual (Washington, D.C., 2010) p18-6.

3.17.2 Transportation/Traffic Impacts

3.17.2.1 *Thresholds of Significance*

For the purposes of this EIR, a transportation/traffic impact is considered significant if the Project would:

- 1) Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths;
- 2) For a land use project, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)(1);
- 3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment); or
- 4) Result in inadequate emergency access.

3.17.2.2 *Project Impacts*

Impact TRN-1: The Project would not conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities. **(Less than Significant Impact)**

The Project would generate pedestrian traffic between the Site and the Trancas Street transit stop, among other destinations. Sidewalks are present on all roadway segments within the vicinity of the Site forming a continuous pedestrian connection from the Site to the transit stop on Trancas Street. Additionally, marked crosswalks are present at all legs of the unsignalized intersection of Villa Lane and Firefly Lane and all intersections along Trancas Street within the Project vicinity have marked crosswalks on at least one leg on each side except at Montclair Avenue.

Bicycle facilities within the Project vicinity include an existing Class I bike/pedestrian path along Salvador Creek and an existing Class I facility between Sierra Avenue and Garfield Lane (Austin Miller Memorial Bike Path). Existing Class II bike lanes are present on Villa Lane between Austin Miller Memorial Bike Path and Firefly lane and on Trancas Street between Big Ranch Road and Silverado Trail. Per the adopted City of Napa Bicycle Plan, Villa Lane and Trancas Street are identified as having future Class II bike lanes, and Firefly Lane and Valle Verde Drive are identified as future Class III bicycle routes. The Project proposes to build an 8-foot wide bike path offsite, adjacent to its parking lot. The path would replace the current Valle Verde Drive roadway connection through the Site to nearby existing Class I facilities so that cyclists would not have to ride through the Project's proposed parking lot. These additions will improve bicycle connectivity. The Project proposes bicycle racks at three locations providing 20 bicycle parking spaces for residents, guests and employees. Spaces are shown located at the Heritage House patio area and near the building entrances for both the Heritage House and Valle Verde apartments. Access to the bike racks at the Heritage House patio area would be provided for residents only.

The proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, nor would it decrease the performance or safety of existing facilities in the immediate vicinity of the Site.

As noted earlier in this section, with the passage of SB 743 amending CEQA's evaluation of transportation impacts and the effective date of the amendments to the CEQA Guidelines implementing SB 743, a project's effects on LOS shall no longer be considered an impact on the environment. The following discussion is included because the City of Napa has policies that address LOS as a planning or growth management matter, outside the CEQA process. In the event a deficient LOS condition is identified, the City has discretion whether to require a project to address the deficiency by implementing roadway or other transportation improvements to restore or improve the level of service, and the relevant question under CEQA is whether those improvements would result in adverse physical changes to the environment, and not whether Level of Service has degraded below the condition considered acceptable.

The City of Napa has not yet adopted a quantitative VMT threshold, as allowed by CEQA Guidelines Section 15064.3, subdivision (c), which allows lead agencies until July 1, 2020 to start using VMT.

As such, this EA/EIR provides an evaluation of LOS as it pertains to consistency with the City’s adopted transportation policy.

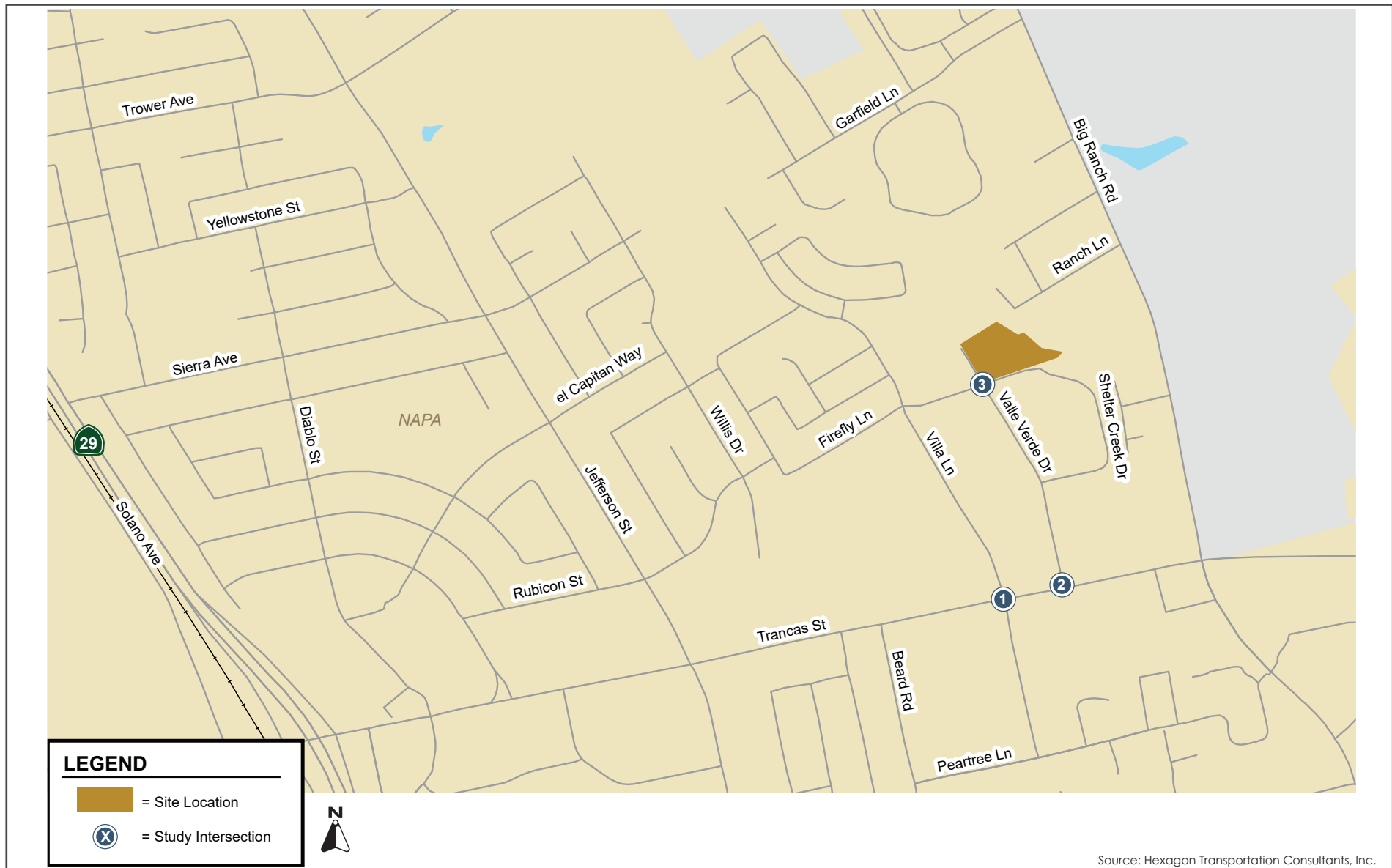
Trip Generation Estimates

As shown in Table 3.17-3, trip generation resulting from new development proposed within the City of Napa was estimated using the trip rates published in the *Institute of Transportation Engineers’ (ITE) Trip Generation Manual, 10th Edition (2017)*.

The Project trip generation rates were estimated using the “Mid-Rise Multifamily Housing” and “Congregate Care Facility” land use codes. Since there is no ITE land use type for supportive housing and SRO units (including the small accessible one-bedroom units), the “Congregate Care Facility” land use was chosen to represent the housing units within the Heritage House, which include 66 SROs (including eight ADA accessible one-bedroom units). SRO units are typically proposed by the City and County to address the needs of homeless and vulnerable populations, which includes seniors, those with disabilities, veterans, and at-risk families and individuals. Based on previous traffic study experiences, SRO residents typically do not own cars. Therefore, the best representative ITE category to represent the proposed SRO units is the “Congregate Care Facility” category. Trips associated with the existing building on the Heritage House Site were not credited against the Project trip generation since the existing building on the Heritage House Site is currently vacant.

The Project is expected to generate 264 new daily vehicle trips, with 14 new trips occurring during the AM peak hour and 23 new trips occurring during the PM peak hour (see Table 3.17-3 below).

Table 3.17-3: Project Trip Generation Estimates								
Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
<i>Proposed Uses</i>								
Congregate Care Facility	66 du	133	3	2	5	6	6	12
Multifamily Housing (Mid-Rise)	24 du	131	3	6	9	7	4	11
New Trips:		264	6	8	14	13	10	23
Notes: d.u.= dwelling unit All rates are from Institute of Transportation Engineers, <i>Trip Generation Manual, 10th Edition, 2017</i> . Average rates are used.								



Source: Hexagon Transportation Consultants, Inc.

STUDY INTERSECTIONS

FIGURE 3.17-1

Level of Service and Intersection Operations Analysis

The results of the intersection LOS analysis under existing plus Project and background plus Project conditions show that all the study intersections would operate at an acceptable level during both the AM and PM peak hours when measured against the City’s LOS standards (see Table 3.17-4). The study intersections included in the TIA are displayed in Cumulative conditions at the study intersections were estimated by adding the additional traffic generated by the Project to cumulative 2040 traffic volumes obtained from the City of Napa Citywide Travel Demand Model. Rather than the list of projects relied upon elsewhere for cumulative conditions, cumulative traffic conditions reflect foreseeable growth over the next twenty plus years. As shown Table 3.17-5, under cumulative and cumulative plus project conditions show that all the study intersections would operate at an acceptable level during both the AM and PM peak hours. As a result, none of the study intersections would be significantly impacted under cumulative plus project conditions.

Therefore, the Project would not conflict with a plan, ordinance or policy addressing the circulation system, including roadways.

Table 3.17-4: Project Level of Service Summary											
Number	Intersection	Control Type	Hour	Existing		Existing Plus Project		Background ²		Background Plus Project	
				Avg. Delay (Sec) ¹	LOS	Avg. Delay (Sec) ¹	LOS	Avg. Delay (Sec) ¹	LOS	Avg. Delay (Sec) ¹	LOS
1	Villa Lane & Trancas Street	Signal	AM	20.2	C	20.2	C	20.2	C	20.2	C
			PM	21.2	C	21.2	C	21.4	C	21.5	C
2	Valle Verde Drive & Trancas Street	TWSC	AM	22.9	C	23.3	C	23.5	C	23.8	C
			PM	21.5	C	22.1	C	22.2	C	22.8	C
3	Valle Verde Drive & Firefly Lane	TWSC	AM	9.3	A	9.4	A	9.3	A	9.4	A
			PM	9.7	A	9.9	A	9.7	A	9.9	A
<p>Notes:</p> <p>¹ For TWSC, the average Delay and LOS is reported to the worst movement.</p> <p>² Traffic volumes for background conditions comprise volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the Site. A list of approved background projects was provided by City staff and include the following projects: Pear Tree Terrace, Garfield/Griffen Lane, Pietro Place, Tyson Court/721 Trancas Street, Redwood Duets Amendment, Mayacamas Shop, Miliken Creek Inn Extension.</p>											

Number	Intersection	Control Type	Hour	Cumulative		Cumulative Plus Project	
				Avg. Delay (Sec) ¹	LOS	Avg. Delay (Sec) ¹	LOS
1	Villa Lane & Trancas Street	Signal	AM	20.3	C	20.3	C
			PM	21.7	C	21.8	C
2	Valle Verde Drive & Trancas Street	TWSC	AM	22.9	C	23.3	C
			PM	25.5	D	26.3	D
3	Valle Verde Drive & Firefly Lane	TWSC	AM	9.4	A	9.5	A
			PM	10.0	A	10.1	B

Notes:
¹For TWSC, the average Delay and LOS is reported for the worst movement.

Impact TRN-2: The Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)(1). **(Less than Significant Impact)**

This CEQA checklist question specifically addresses the new transportation metric of VMT, and whether a land use project would exceed an applicable threshold of significance. The City of Napa has not yet adopted a quantitative VMT threshold, as allowed by CEQA Guidelines Section 15064.3, subdivision (c), which allows lead agencies until July 1, 2020 to start using VMT. Therefore, the Project would not exceed an applicable threshold of significance. The following VMT analysis is included for information purposes.

The following discussion provides information about vehicle miles traveled for land uses in Napa compared to the average for the San Francisco Bay Area based on the Metropolitan Transportation Commission (MTC) travel demand forecast model (accessed on February 14, 2019). The average daily VMT per capita within the Site’s Transportation Analysis Zone (TAZ) of the travel demand forecast model is shown in Table 3.17-6 below. The Site is located within TAZ 1306. The average daily VMT per capita forecasted in TAZ 1306 is lower than the regional average for the San Francisco Bay Area. The Project proposes to construct 24 multi-family affordable housing units on the Valle Verde Site and 66 SROs (including eight ADA accessible one-bedroom units) on the Heritage House Site. The Heritage House component, due to the nature of the SRO occupants, is expected to have a lower VMT than the average for TAZ 1306. While the Valle Verde component would likely have similar VMT to the average for the Project area. As a result, the Project would not be expected to cause a substantial increase in VMT relative to the forecasted daily VMT of the area.

Year	TAZ 1306	SF Bay Area
2020	12.83	15.0
2030	12.74	14.4
2040	11.8	13.8

Impact TRN-3: The Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

The proposed Project is consistent with City policies and standards regarding Project design features. The Project proposes to have one private driveway aisle on Valle Verde Drive and two driveways from the private aisle, which would provide full access to the Site. The proposed driveway on Valle Verde would be 20 feet wide, and the two driveways off the private aisle would be 25 feet wide, consistent with the City of Napa standards. Adequate sight distance was analyzed for the Project driveway on Valle Verde Drive. Visibility triangles at the Project driveway are proposed in accordance with City of Napa Standards. The speed limit on Valle Verde Drive and Firefly Lane is 25 miles per hour. The Caltrans recommended stopping sight distance is 150 feet for a 25 mile per hour roadway. Eastbound Firefly lane traffic is controlled by a stop sign, and the necessary sight distance is available for vehicles exiting the Project driveway to see westbound vehicles. The Project would, therefore, not substantially increase hazards due to a geometric design feature.

Impact TRN-4: The Project would not result in inadequate emergency access. **(No Impact)**

The proposed Project would be reviewed by the City of Napa Fire Department and Police Department for consistency with safety standards prior to Project approval. As proposed, there are no hazards or design features that would hinder emergency vehicles access to the Site. The proposed driveway on Valle Verde Drive is 20 feet wide, and the two driveways off of the private aisle are 25 feet, which meet the City minimum driveway standard. The drive-aisles would be at least 25 feet wide, which complies with the minimum requirements established by the City of Napa Parking Standards. The Project, therefore, would not result in inadequate emergency access.

3.17.2.3 Cumulative Impacts

Impact TRN-C: The Project would not result in a cumulatively considerable contribution to a significant transportation impact. **(Less than Significant Cumulative Impact)**

As discussed under Impact TRN-1, cumulative conditions at the study intersections were estimated by adding the additional traffic generated by the Project to cumulative 2040 traffic volumes obtained from the City of Napa Citywide Travel Demand Model. As shown in Table 3.17-5, under Cumulative and Cumulative plus Project conditions all the study intersections would operate at an acceptable level during both the AM and PM peak hours. As a result, none of the study intersections would be

significantly impacted under Cumulative plus Project conditions. The Project shall implement the following Standard Permit Condition as a condition of approval for the Project.

Standard Permit Condition:

- In accordance with Napa Municipal Code Chapter 15.84, the Applicant shall pay a Street Improvement Fee prior to the issuance of any building permit for the Project. The fee is required to mitigate the cumulative impact of the traffic generated by the subject project on the City's arterial and collector street system. Such fee shall be payable at the rate in effect at the time of payment.

3.17.3 Non-CEQA Effects

Parking

Parking Occupancy Counts

The existing stub end of Valle Verde Drive allows on-street parking. It is believed that residents of the apartment complex located across the street use Valle Verde Drive for overflow parking and also that people park along Valle Verde Drive to access the adjacent trail. Parking occupancy counts on Valle Verde Drive north of Firefly Lane were taken for 24 hours on Wednesday, May 23rd, 2018 and Sunday, May 27th, 2018 to quantify the existing parking usage patterns. The number of parked vehicles was counted every 30 minutes for 24 hours (see Appendix L). On weekdays, the peak parking occurred during night time (between 12:00 AM and 6:00 AM). Peak parking on Sunday occurred during the morning (at 9:00 AM) and the evening (between 4:30 PM and 7:30 PM). The weekday parking demand peaked with 18 spaces occupied out of a total of 20 on-street spaces. On Sunday, all 20 spaces were occupied during peak times. The on-street parking spaces would be removed with the construction of the Project. Vehicles that currently park on the stub end of Valle Verde Drive would need to park elsewhere. Parking is allowed on Valle Verde south of Firefly Lane. Parking also is allowed on Firefly Lane. However, that parking is more heavily used and probably would not be available during peak times.

Proposed Parking

The Project is required to comply with vehicle parking standards per the City of Napa Zoning Ordinance. To comply with the City's Zoning Ordinance, the Project would be required to provide a minimum of:

- 1.4 parking spaces per studio or one-bedroom unit;
- 1.6 parking spaces per two-bedroom unit;
- 1.8 parking spaces per three-bedroom unit; and
- One guest parking space per four units.

The Project proposes the construction of 12 one-bedroom units, six two-bedroom units, and six three-bedroom units in the Valle Verde Apartments (affordable housing) building. Per City requirements, the Valle Verde component would be required to provide 44 parking spaces. The proposed Heritage House building would renovate the existing building to include construction of 66 SRO units, and would therefore, be required to provide 33 parking spaces.

In total, the Project would be required to provide 77 parking spaces for both the Valle Verde and Heritage House buildings. The Project is currently proposing 85 spaces, which exceeds the required number of spaces. Per Napa's Municipal Code, up to thirty percent of the required residential parking facilities may be designated "compact." The Project would provide seven (7) compact spaces for Valle Verde Apartments and 13 for Heritage House, which would meet the City's requirements.

The Napa Zoning Ordinance does not require bicycle parking for residential developments. Nevertheless, the Project would provide bicycle racks at three locations, providing 20 bicycle spaces for residents, guests, and employees at the Heritage House patio area and near the entrances for both the Heritage House and Valle Verde Apartments. Access to the bicycle racks at the Heritage House patio area would be provided for residents only.

3.18 TRIBAL CULTURAL RESOURCES

3.18.1 Environmental Setting

3.18.1.1 *Regulatory Framework*

Assembly Bill 52 – Tribal Cultural Resources

Assembly Bill (AB) 52 requires that tribal cultural resources be considered under CEQA. A tribal cultural resource can be a site, feature, place, object, or cultural landscape with value to a California Native American tribe that is also eligible for listing on the CRHR. AB 52 includes a broad definition of what may be considered to be a tribal cultural resource and includes a list of recommended mitigation measures for potential impacts. AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a tribe requests consultation with the lead agency for a project that may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or a party concludes that mutual agreement cannot be reached.

3.18.1.2 *Existing Conditions*

Tribal Cultural Resources

Upon receiving notification from the City of the t Project, the Yocha Dehe Wintun Nation requested consultation. On April 8, 2019, the City of Napa and the Yocha Dehe Wintun Nation met for project consultation, per AB 52. Based on the consultation the parties concluded that tribal cultural resources are potentially located within the Project area, given the Site’s proximity to Salvador Creek..

Archaeological Resources

The Site and greater Project area has been the subject of multiple recent Archaeological Literature Searches. The results of these searches did not yield cultural materials. The Site has a low potential to yield specific historic era deposits. However, as described above, based on consultation with the Yocha Dehe Wintun Nation, the Site has the potential to contain unknown buried prehistoric cultural resources.

3.18.2 Impact Discussion

For the purposes of this EIR, an impact relating to tribal cultural resources is considered significant if the Project would result in:

- 1) 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); or

- 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 this criteria, the significance of the resource to a California Native American tribe shall be considered.

3.18.2.1 *Project Impacts*

Impact TCR-1a: The Project would cause a substantial adverse change in the significance of a tribal cultural resource that is 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). **(Less than Significant Impact with Mitigation Incorporated)**

Impact TCR-1b: The Project would cause a substantial adverse change in the significance of a tribal cultural resource that is 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. **(Less than Significant Impact with Mitigation Incorporated)**

As part of the archeological investigation, Holman & Associates contacted the Native American Heritage Commission to request a review of the Sacred Land Files (SLF) for any evidence of cultural resources or traditional properties of potential concern that might be known on lands within or adjacent to the Site. The NAHC searched the SLF and identified sacred sites within the Project APE.⁷⁷ The NAHC provided a contact list of four Native American individuals/organizations who may know of cultural resources in this area or have specific concerns about the Project.

After outreach by the archaeologist was completed (phone calls and emails), one tribal spokesperson from the Middletown Rancheria Nation, responded that the tribe was not aware of any resources within the Project APE but would like to be notified immediately if any archaeological sites are identified.

The Yocha Dehe Wintun Nation (Nation) requested consultation upon receiving notice of the Project from the City. Based on a consultation meeting with the Nation on April 8, 2019 and via a conference call on May 23, 2019, the City and applicant has agreed to implement the following mitigation measures during Project construction to reduce potential impacts to a less than significant level.

Mitigation Measure:

MM TCR-1.1 The Nation tribe shall have the opportunity to provide tribal monitoring and consultation for the Project during the archaeological investigations and

⁷⁷ The project's area of potential effect (APE) is the geographic area within which an undertaking (project) may directly or indirectly cause changes in the character or use of historic properties. The APE for archaeological and tribal cultural resources consists of approximately 2.9 acres of land from APNs 038-170-042, -043, and -046 along with both sides of Valle Verde Drive north of Firefly Lane.

ground disturbing activities related to underground utility trenching and the stitch wall required for the Project. The Nation's monitors may work in collaboration with the archaeologists and Project engineers hired/employed by the Applicant. Applicant shall provide written notice to the Nation ten days in advance of any earth-disturbing activities related to utility trenching and stitch wall digging. If the Nation fails to respond or fails to provide monitoring and consultation personnel, on the date(s) of the activities, the Contractor may continue with those activities.

MM TCR-1.2: In the event that Native American human remains are discovered during Project construction activities, and where the Nation has been designated as the Most Likely Descendant (MLD), the following provisions shall be implemented:

- I. The Nation shall be allowed, under California Public Resources Code sections 5097.98 (a) and 21083.2 and State CEQA Guidelines section 15064.5 (e), to: (1) inspect the site of the discovery; and (2) make recommendations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity.
- II. The Nation shall complete its inspection within twenty-four (24) hours of receiving notification from either the Contractor or the NAHC, as required by California Public Resources Code section 5097.98 (a). The City and the Nation agree to discuss, in good faith, what constitutes "appropriate dignity" as that term is used in the applicable statutes.
- III. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code sections 5097.98 (a) and (b) and 21083.2 and State CEQA Guidelines section 15064.5 (e).
- IV. The City is aware that the Nation may wish to rebury the human remains and associated ceremonial and cultural items (artifacts) on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. Should the Nation recommend reburial of the human remains and associated ceremonial and cultural items (artifacts) on or near the site of their discovery, the City and Contractor shall make good faith efforts to accommodate the Nation's request.
- V. The term "human remains" encompasses more than human bones because Nation's traditions periodically necessitated the ceremonial burning of human remains, and monitors shall make recommendations for removal of cremations. Grave goods are those artifacts associated with any human remains. These items and the soil, in an area encompassing up to two (2) feet in diameter around the burial, and other funerary remnants and their ashes, are to be treated in the same manner as human bone fragments or bones that remain intact.

MM TCR-1.3: Treatment and Disposition of Cultural Items (Artifacts). Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Nation. Applicant agrees to cause its contractor to return all Native American ceremonial items and items of cultural

patrimony that may be found on the Site to the MLD for appropriate treatment, unless Contractor or Applicant is ordered to do otherwise by a court or agency of competent jurisdiction. In addition, the Nation requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations on or adjacent to the Site. Where appropriate (from the perspective of the Nation), and agreed upon in advance by the Nation, certain analyses of certain artifact types will be permitted, which may include, but which may not necessarily be limited to, shell, bone, ceramic, stone and/or other artifacts.

Implementation of MM TCR-1.1, MM TCR-1.2 and MM TCR-1.3 would reduce potential impacts to tribal cultural resources (if present) to a less than significant level.

3.18.2.2 *Cumulative Impacts*

Impact TCR-C: The Project would not result in a cumulatively considerable contribution to a significant tribal cultural resources impact. **(Less than Significant Cumulative Impact with Mitigation Incorporated)**

Cumulative impacts to unknown tribal cultural resources could occur as a result of ground-disturbing activities from construction of projects within the vicinity of the proposed Site. As discussed in Section 3.18.1.2, the City of Napa and the Nation met for Project consultation, per AB 52. The consultation concluded that tribal cultural resources are potentially located within the Project area, given the Site's proximity to Salvador Creek. As described in Impact TCR-1, the Project applicant would implement MM TCR-1.1, MM TCR-1.2 and MM TCR-1.3 to reduce potential impacts to unknown tribal cultural resources to a less than significant level. These mitigation measures were developed in consultation with the Nation and have been agreed to by the City of Napa. The City of Napa would be required to notify tribes on all future cumulative projects. Cumulative projects would be required to implement conditions of approval or mitigation measures that would avoid impacts and/or reduce impacts to tribal cultural resources to a less than significant level consistent with CEQA requirements. For these reasons, the proposed Project would not make a considerable contribution to a significant cumulative impact on tribal cultural resources.

3.19 UTILITIES AND SERVICE SYSTEMS

3.19.1 Environmental Setting

3.19.1.1 *Regulatory Framework*

State and Regional

Urban Water Management Plan

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Napa adopted its most recent UWMP in September 2017.

Wastewater

The San Francisco Bay RWQCB includes regulatory requirements that each wastewater collection system agency shall, at a minimum, develop goals for the City's Sewer System Management Plan to provide adequate capacity to convey peak flows.

Assembly Bill 939 and Senate Bill 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill 939 (AB 939), established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

Assembly Bill (AB) 341 sets forth the requirements of the statewide mandatory commercial and multi-family recycling program in the Public Resources Code. All businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020, and the City of Napa adopted its own Disposal Reduction Policy establishing a local goal of 75% diversion by 2020 as well.

Senate Bill 1383

Senate Bill (SB) 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Local

Envision Napa 2020

The General Plan includes the following policies for the purpose of reducing or avoiding impacts associated with utilities and service systems.

Policy	Description
CS-10.1	The City shall promote reduced wastewater system demand through efficient water use by: a. Requiring water-conserving design and equipment in new construction b. Encouraging retrofitting with water--conserving devices
CS-10.3	The City shall coordinate development review with the Napa Sanitation District to ensure that adequate wastewater collection, treatment, and disposal facilities can be provided by the District by requiring that all new applicants for development secure a “will-serve” letter from the NSD if the District notifies the City that a critical capacity situation exists. Where a critical capacity situation does exist, the City shall not issue, in the absence of a will-serve letter from the NSD, any building permits or similar ministerial entitlements for proposed structures that would increase net demand on NSD treatment capacity. In addition, when conducting environmental review for proposed development projects requiring General Plan amendments, specific plans, use permits, tentative subdivision maps, or similar discretionary approvals, the City shall include within the environmental document, information assessing whether NSD is likely to have sufficient capacity to serve the proposed development. In approving any such discretionary project, the City shall require, as a mitigation measure and condition of approval, that the applicant(s) shall obtain the necessary will-serve letters from NSD prior to receiving approval of a final subdivision map, or in the absence of a need for a final subdivision map, prior to receiving approval of any required building permits or similar ministerial approvals.

City of Napa Policy Resolution No. 27

The City of Napa adopted Policy Resolution 27 originally in August 1992 and has most recently amended the Resolution in December 2002. The Resolution includes the City’s standard mitigation measures that are imposed on all development projects, unless otherwise authorized by the City. Any or all of the mitigation measures listed in Resolution 27 may be imposed as conditions of project approval. The mitigation measures are periodically updated, as needed. The following measure listed in Policy Resolution No. 27 are applicable to the Project:

- Prior to trenching within existing roadway areas, the Developers engineer shall ascertain the location of all underground utility systems and shall design any proposed subsurface utility extensions to avoid disrupting the services of such systems.
- Water and energy conservation measures shall be incorporated into Project design and construction in accordance with applicable codes and ordinances.

- The Project shall be connected to the Napa Sanitation District for sanitary sewer service. If the subject property is currently served by individual sewage disposal systems, the septic systems, setbacks and reserve areas must be protected and maintained during cleaning, grading, construction and after connection to the District, the existing septic tank(s) shall be properly destroyed.
- The Project shall be connected to the City of Napa water system. Any existing well must be properly protected from potential contamination. If an existing well is to be destroyed, a well-destruction permit must be obtained from the Napa County Department of Environmental Management by a licensed well driller. If an existing well is not destroyed, it must be properly protected and an approved backflow prevention device installed according to the City Water Division's specifications.
- The Project shall be designed and built in accordance with the PWD Standard Specification regarding the adequate conveyance of storm waters.
- All faucets in sinks and lavatories shall be equipped with faucet aerators designed to limit the maximum flow to 2.2 gallons per minute.
- All showerheads shall be of a design to limit the maximum flow to 2.5 gallons per minute.
- The Developer shall completely offset the water requirements of this Project by complying with the retrofit requirements of Napa Municipal Code Chapter 13.09.
- During the construction/demolition/renovation period of the Project, Developer shall use the franchised garbage hauler for the service area in which the Project is located to remove all wastes generated during Project development, unless Developer transports Project waste. If the Developer transports the Project's waste, Developer must use the appropriate landfill for the service area in which the Project is located.
- Developer shall provide for the source separation of wood waste for recycling. Developer shall use the franchised garbage hauler for the service area in which located for collection of such wood waste, unless the Developer transports such wood waste to a location where wood waste is recycled.
- A recycling/solid waste enclosure shall be provided in accordance with Chapter 17.102, et seq. of the Napa Municipal Code and the City's Solid Waste and Recycling Enclosure Standards adopted by Resolution 2008 185 for all commercial, industrial, and multi-family projects with common solid waste facilities.

3.19.1.2 *Existing Conditions*

The Site is located in a developed area within the City of Napa and is currently served by existing phone, electrical, water, stormwater, wastewater, and solid waste service systems. Electrical service is provided by Pacific Gas and Electric (PG&E).

Water Supply

Domestic water service is provided by the City of Napa Water Division (NWD). Recycled water is provided by the Napa Sanitation District (NSD).

Domestic Water

NWD is responsible for the operation, maintenance, and improvement of the municipal drinking water system serving nearly 88,000 people in the City of Napa and adjacent areas. NWD operates three treatment plants and delivers upwards of 15,000-acre feet (AF) of water annually.⁷⁸

The City of Napa currently meets its demands by supplying water from three major sources: Lake Hennessey (28 percent), Milliken Reservoir (6 percent), and the State Water Project (SWP) (63 percent).⁷⁹ The remaining 3 percent comes from recycled water.

According to the City's UWMP, total water use in the City of Napa dropped to 12,034 AF. This represents the lowest annual demand on the system since the 1987-1992 drought, when population served was 15,000 fewer and extensive hotel development had yet to occur.⁸⁰ The 2015 UWMP forecasts projected available water supply of 32,873 AF in 2035. The UWMP concluded adequate water supply would be available to service the City of Napa through 2035. In fact, the City of Napa is estimated to have supplies nearly double projected water demand in 2035 (16,536 AF).

Recycled Water

Recycled water is municipal wastewater that has been treated to a specified quality to enable it to be used again for a beneficial purpose. This safe, non-potable water supply is typically distributed to large irrigation users such as golf courses, vineyards, parks, and commercial businesses. In the City's water service area, recycled water treatment and distribution is managed by a separate special district, the Napa Sanitation District (NSD) at its Soscol Water Recycling Facility.

There are no recycled water lines within the Project vicinity.

Wastewater Services

The NSD provides wastewater collection, treatment and disposal services to over 80,000 customers in the City of Napa and surrounding unincorporated areas. Wastewater is treated at the Soscol Water Recycling Facility (SWRF), which has a permitted dry weather treatment capacity of 15.4 million gallons per day (mgd).⁸¹ The facility treats approximately 10 mgd of wastewater per day.⁸²

The Site currently connects to an existing 18-inch sanitary sewer main in the surface parking lot of the Heritage House Site, adjacent to Salvador Creek.

Storm Drainage

The City of Napa's storm drainage system consists of a network of open ditches, culverts, and underground pipes of various sizes and capacities, many of which are maintained by the Public Works Department. The City's primary objective in relation to the drainage system is to reduce the risk of flooding, and potential loss of life and property damage from flooding.

⁷⁸ City of Napa. *Urban Water Management Plan: 2015 Update*. September 2017.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Napa Sanitation District. About Us. <http://www.napasan.com/Pages/Section.aspx?id=76>.

⁸² Ibid.

The City's existing storm drainage system service area covers approximately 22 square miles.⁸³ Drainage collection in the City's sub basins operates on a gravity system, facilitating storm-water runoff from low-lying or poorly graded areas into natural drainage channels. Runoff water enters the system through ditches or from street storm drains. The runoff is channeled through ditches, culverts, and buried pipes until it is discharged into a natural channel (i.e., the Napa River or one of its tributaries). Stormwater runoff from the Site is collected via on-site inlets/catch basins, which connect to the 8-inch diameter storm drains/piping systems running along Valle Verde. The runoff then flows from storm drains and into the City's stormwater system.

Solid Waste

Solid waste collection and recycling services for residents and businesses in Napa are provided by Napa Recycling and Waste Services (NRWS), under contract to the City of Napa Materials Diversion Division. Once collected, solid waste is transported to the Devlin Road Recycle and Transfer Station (approximately 9.4 miles south of the Site), where it is loaded into trucks and sent to Potrero Hills Landfill (approximately 28.4 miles southeast of the Site). The landfill is permitted to accept 4,330 peak tons per day and has a remaining capacity of 13,872,000 cubic yards.⁸⁴ Recyclables and organics are transported to the City of Napa Recycling and Compost Facility

The City of Napa Materials Diversion Division is responsible for meeting the City's Disposal Reduction Policy and the State of California's mutual goal of diverting at least 75 percent of waste away from landfills by the year 2020.

3.19.2 Utilities and Service Systems Impacts

3.19.2.1 *Thresholds of Significance*

For the purposes of this EIR, a utilities and service systems impact is considered significant if the Project would:

- 1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- 2) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years;
- 3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments;
- 4) Generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure; or
- 5) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste.

⁸³ City of Napa. *Envision Napa 2020, City of Napa General Plan*. December 1998.

⁸⁴ CalRecycle. Facility/Site Summary Details: Potrero Hills Landfill (48-AA-0075). Accessed September 5, 2018. <http://www.calrecycle.ca.gov/SWFacilities/Directory/48-AA-0075/Detail/>.

3.19.2.2 *Project Impacts*

Impact UTL-1: The Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

Water and Wastewater

The General Plan EIR concluded that buildout of the General Plan would be accommodated with the existing water distribution system and sanitary sewer lines. Development of the Project was considered as part of the City's General Plan and would not result in a significant impact to the City's ability to provide water and wastewater services beyond those analyzed as part of the preparation of the General Plan EIR. The Project would not have a significant impact related to the provisions of water and sewer service for the Project.

Stormwater Drainage

The Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility and associated surface parking lot, while the Valle Verde Site is undeveloped. Runoff from the Site currently enters the storm drainage system untreated and unimpeded from both the Heritage House Site and Valle Verde Site.

The Project proposes to rehabilitate the existing structure on the Heritage House Site and construct a new structure for the Valle Verde Apartments on the Valle Verde Site. In total, the Project would construct 36,369 sf of new impervious surface area. Stormwater on-site would be directed to landscaped areas for treatment prior to entering the City's storm system. The Project would construct two bio-retention facilities, one located northeast and adjacent to the Valle Verde Apartments building, and the second next to the trash enclosure which would serve the Heritage House Site. The post-construction runoff features (e.g. bio-retention facilities) included in the stormwater control plan would serve to regulate the amount of increased runoff entering the storm drain system.

Electric Power, Natural Gas & Telecommunication Facilities

The Project would connect to existing electric utility, natural gas, and telecommunication facilities within the Project area. The Project would not result in the relocation or construction of new electrical, natural gas, or telecommunication facilities.

Impact UTL-2: The Project would not have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

Water service is provided to the Site by the City of Napa Water Division (NWD). The primary water source for the City of Napa is surface water (i.e. local reservoirs and imported State Water Project supplies). The City's most recent Urban Water Management Plan (*Urban Water Management Plan*

2015 Update) concluded that the City of Napa water supply needs would be adequately served by existing and planned supplies through 2035.

The Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility and associated surface parking lot while the Valle Verde Site is undeveloped. Therefore, the Site does not currently generate a demand for water services. The Project proposes to develop the Site with multi-family and SRO residential uses. It is estimated that the Project would have a water demand of approximately 22,425 gallons of water per day.^{85 86}

Development of the proposed Project would contribute to total demand for NWD water supplies. In conformance with General Plan policies and the current CALGreen code, the Project would incorporate water conservation measures including drought-tolerant landscaping and low-flow fixtures. Implementation of these water conservation and efficiency measures would reduce the Project's water demand.

The proposed Project would increase water usage at the Site but would not significantly impact the NWD's water supplies or usage.

Impact UTL-3: The Project would not result in a determination by the wastewater treatment provider which serves or may serve the Project that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

Pursuant to the federal Clean Water Act and California's Porter-Cologne Water Quality Control Act, the RWQCB regulates wastewater discharges to surface waters, such as San Francisco Bay, through the NPDES program. Wastewater permits contain specific requirements that limit the pollutants in discharges.

Sanitary sewer lines serving the Site are owned and maintained by the Napa Sanitation District. The Project would connect to the existing 18-inch sanitary sewer lateral in the surface parking lot of the Heritage House Site, adjacent to Salvador Creek.

The Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility and associated surface parking lot and the Valle Verde Site is undeveloped. Therefore, the Site does not currently generate a demand for water or wastewater services. The proposed Project would generate approximately 19,061 gallons of wastewater per day and would be treated at the Soscol Water Recycling Facility, which has a permitted dry weather treatment capacity of 15.4 million gallons per day and treats approximately 10 million gallons of wastewater per day.⁸⁷ Given the nominal amount of wastewater generated by the Project the Soscol Water Recycling Facilities' existing available capacity, and the Project's consistency with the General Plan land use designation,

⁸⁵ Based upon the 2015 calculation of approximately 115 gallons per capita per day times the projected 195 residents of the project (115 gallons/capita/day x 195 residents = 22,425 gallons per day).

⁸⁶ City of Napa. *Urban Water Management Plan: 2015 Update*. September 5, 2017.

⁸⁷ Based upon the CalEEMod standard estimate of wastewater comprising 85 percent of water use.

the Project would not cause the Soscol Water Recycling Facility to exceed its treatment capacity and would represent a less than significant impact.

Impact UTL-4: The Project would not 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. **(Less than Significant Impact)**

Non-recyclable or compostable solid waste generated by the Project would be collected by Napa Recycling and Waste Services and transported to the Devlin Road Recycle and Transfer Facility, where it would be loaded into trucks and sent to Potrero Hills Landfill. Currently, the Potrero Hills Landfill has a remaining capacity of 13,872,000 cubic yards. According to the CalRecycle, the total amount of solid waste landfilled in 2015 was 100,123 tons, which equals a solid waste generation rate of approximately 4.0 pounds per resident per day. Assuming this rate remains stable, the Project's estimated 195 residents would generate approximately 780 pounds of solid waste per day, which would be adequately served by the City's services and would not cause the Potrero Hills Landfill to exceed its capacity.

As described above, the Project would generate approximately 780 pounds of solid waste per day, which would be collected by Napa Recycling and Waste Services. The General Plan EIR concluded that buildout of the General Plan would increase the amount of solid waste produced by the City's population; however, the increase was not expected to result in significant impacts to the present solid waste disposal system. Development of the Project was considered as part of the City's General Plan and would not result in a significant impact to the City's ability to provide solid waste services beyond those analyzed as part of the preparation of the General Plan EIR.

The Project would be required to comply with Policy Resolution No. 27, which require submittal of a source reduction plan consistent with the Source Reduction and Recycling Element of the City's General Plan. For these reasons, the Project would not impair the attainment of solid waste reduction goals.

Impact UTL-5: The Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

The City of Napa General Plan EIR concluded that the increase in waste generated by buildout of the plan would not cause the City to exceed the capacity of existing landfills serving the City. Consistent with Policy Resolution No. 27, the Project would be required to submit a source reduction plan, consistent with the Source Reduction and Recycling Element of the City's General Plan. The proposed Project would comply with the policies of the City's General Plan and the regulations of the Municipal Code and therefore, would result in a less than significant impact related to solid waste.

3.19.2.3 *Cumulative Impacts*

Impact UTL-C: The Project would not result in a cumulatively considerable contribution to a significant utilities and service systems impact. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative utility and service systems is the City boundaries.

Water Supply

As discussed in Impact UTL-2, the Project would increase water usage at the Site but would not significantly impact the NWD's water supplies or usage. Consequently, the Project would not contribute considerably to a significant cumulative water supply impact.

Wastewater Treatment/Sanitary Sewer System

As discussed in Impact UTL-3, the Project would generate approximately 19,061 gallons of wastewater per day. Given the nominal amount of wastewater generated by the Project and the Project's consistency with the General Plan land use designation, the Project would not cause the Soscol Water Recycling Facility to exceed its treatment capacity, and, as a result, would not contribute considerably to a significant cumulative wastewater conveyance or treatment impact.

Storm Drainage

The proposed Project would increase impervious surfaces by approximately 36,369 square feet. Stormwater on-site would be directed to landscaped areas for treatment prior to entering the City's storm system and Project would construct two bio-retention facilities. Since the Project is consistent with the land use designation and zoning for the Site and the General Plan EIR determined that build out of the General Plan would not result in significant impacts on the City's stormwater drainage system, the Project would not have a cumulatively considerable impact to the City's storm drainage system.

Solid Waste

Build out of the City and the proposed Project would generate solid waste that would need to be disposed of appropriately. The landfills serving the Site and the City have a permitted landfill capacity of approximately 13,872,000 cubic yards. The proposed Project would generate about 780 pounds of solid waste per day, which would be adequately served by the City's services and would not contribute considerably to a significant cumulative solid waste impact.

3.20 WILDFIRE

3.20.1 Environmental Setting

3.20.1.1 *Existing Conditions*

The Site is not identified by CalFIRE as a wildfire hazard zone.⁸⁸

3.20.2 Impact Discussion

For the purpose of determining the significance of the Project's impact on wildfire, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

- 1) Substantially impair an adopted emergency response plan or emergency evacuation plan;
- 2) 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;
- 3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- 4) 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.

3.20.2.1 *Project Impacts*

Impact WF-1: The Project would not impair an adopted emergency response plan or emergency evacuation plan. **(No Impact)**

Development of the Site and operation of the proposed Project would not interfere with an adopted emergency response or evacuation plan.

Impact WF-2: The Project would not, 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 or adjacent to an identified wildfire hazard zone and would not, due to slope, prevailing winds, or other factors, expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of a wildfire.

⁸⁸ CalFIRE. CalFIRE Fire Hazard Severity Zones. Accessed on April 26, 2019. Available at: http://frap.fire.ca.gov/webdata/maps/napa/fhszl_map.28.pdf.

Impact WF-3: The Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. **(No Impact)**

The Project is not located in a wildfire hazard zone and would not require the installation or maintenance of infrastructure that would exacerbate fire risk or result in temporary or ongoing impacts to the environment.

Impact WF-4: The Project would not 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 is not located in or adjacent to an area identified as a wildfire hazard and, therefore, would not 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)**

3.20.2.2 *Cumulative Impacts*

Impact WF-C: The Project would not result in a cumulatively considerable contribution to a significant wildfire impact. **(Less than Significant Cumulative Impact)**

The Site is not located in or adjacent to an area identified as a wildfire hazard and development of the Site and operation of the Project would not interfere with an adopted emergency response or evacuation plan; would not expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; would not require the installation or maintenance of infrastructure that would exacerbate fire risk or result in temporary or ongoing impacts to the environment; and would not 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. For these reasons, the Project would not contribute considerably to a significant cumulative wildfire impact.

SECTION 4.0 OTHER SECTIONS REQUIRED BY NEPA

The National Environmental Policy Act requires consideration of physical and socioeconomic impacts beyond those required by the California Environmental Quality Act. The purpose of this chapter is to address those additional NEPA requirements and to fulfill the additional environmental documentation required by the U.S. Department of Housing and Urban Development prior to its taking a federal action.

4.1 COMPLIANCE WITH 24 CFR 50.4, 58.5, AND 58.6 LAWS AND AUTHORITIES

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The Site is not located within any airport influence area, airport clear zones, or safety zones (see Figure 4.1-1). (Source: (1))
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The Site is an infill parcel within a developed area of Napa. The Site is not located in or near a coastal zone or coastal barrier resource area. (Source: (2))
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 (42 USC 4001-4128 and 42 USC 5154a)	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	The eastern portion of the Site adjacent to Salvador Creek is located within the Federal Emergency Management Agency's 100-year Zone AE floodplain, a FEMA-designated Special Flood Hazard Area (Map No. 06055C0508F and the Letter of Map Revision [LOMR] dated February 20, 2012) (refer to Figure 4.1-2). The Project would construct a new building (Valle Verde) and modify the proposed Heritage House Site in the 100-year floodplain. The existing base flood elevation (BFE) for the Valle Verde Site is 39.2 feet, and 39.0 feet for the Heritage House Site. Construction of the Valle Verde building and proposed grading would increase the BFE at

		<p>the Valle Verde Site to 40.2 feet; whereas the BFE at the Heritage House Site would decrease to 38.3 feet. Since the existing Sunrise Napa Assisted Living Facility is downstream of the proposed Valle Verde Apartments, the reduction in the BFE is likely due to the proposed grading and resulting redirection of flows.</p> <p>Pursuant to CFR Part 55, projects involving new construction and substantial improvements (as defined in 55.2(b)(10)) must be elevated to the base flood elevation of the floodplain in order to get flood insurance from FEMA.</p> <p>The lowest adjacent grade for the proposed Valle Verde Apartment building is 41.2 feet. Therefore, the proposed Valle Verde Apartment building could be removed from the special flood hazard area, as its lowest adjacent grade is equal to or greater than the BFE of 40.2 feet.</p> <p>The lowest adjacent grade for the existing Sunrise Napa Assisted Living Facility is 37.2 feet. However, most of the building adjacent grade is above the 38.3 BFE. The lowest adjacent grade on the northeast corner of the building would need to be elevated at or above the BFE to be removed from the floodplain. This would likely involve the installation of an engineered structure (i.e. berm) to protect the existing structure from flood waters.</p> <p>If the City of Napa approves the Project, it may condition its approval on partial removal of the Zerba Bridge. Under this scenario, the BFE for the existing Sunrise Napa Assisted Living Facility and the proposed Valle Verde Apartments would be 38.0 and 39.5 feet, respectively. In the event the City requires partial removal of the bridge, the Valle Verde Apartments could be removed from the special flood hazard area, as its lowest adjacent grade is equal to or greater than the BFE of 39.5 feet. The existing Sunrise Napa Assisted Living</p>
--	--	---

		<p>Facility lowest adjacent grade on the northeast corner of the building would still be below the 38.0-foot BFE and would need to be elevated at or above the BFE to be removed from the floodplain.</p> <p>(Source: (3))</p>
<p>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5</p>		
<p>Clean Air</p> <p>Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The proposed Project will conform to the Federal Clean Air Plan. Based on the location, service area, and objectives of the Project, the Project will not substantially increase traffic in the Project area.</p> <p>The Project includes mitigation, MM AIR-1.1 and AIR-1.2, and best management practices to reduce construction-related toxic air contaminants by selection of low-emissions equipment and preparation of a construction operations plan.</p> <p>See the discussion in <i>Section 3.3, Air Quality</i> of the EIR/EA.</p> <p>(Source: (4))</p>
<p>Coastal Zone Management</p> <p>Coastal Zone Management Act, sections 307(c) & (d)</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Site is not located in a coastal zone, as defined by the California Coastal Act (Public Resources Code, Division 20, Section 3000 et seq.). The nearest coastal zone is located to the west in Marin County. The Coastal Zone Management Act does not apply to the Project.</p> <p>(Source: (2))</p>
<p>Contamination and Toxic Substances</p> <p>24 CFR Part 50.3(i) & 58.5(i)(2)</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>A <i>Phase I Environmental Site Assessment</i> was prepared for the Site in December 2014.</p> <p>The results of the Phase I indicate that there are no known sources of contamination on-site nor are there any within the Project vicinity that would pose a risk to construction workers or future Site occupants. As such, no subsequent investigation occurred and there are no mitigation measures proposed for Project implementation.</p> <p>(Source: (5))</p>

<p>Endangered Species</p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>One federally threatened species, steelhead, has moderate potential to occur in Salvador Creek.</p> <p>The Project, as a condition of approval, may be required to remove a portion of the existing private concrete and steel bridge located to the east of the Project Site. Demolition of the bridge would include removal of the bridge decking and tops of piers. Proposed work related to the existing bridge spanning Salvador Creek has the potential to impact steelhead.</p> <p>If work occurs within the stream channel consultation with the National Marine Fisheries Service and permits from the USACE, RWQCB, and CDFW would be required. Though the Project would result in an improvement of existing conditions, there is the potential for impacts to steelhead to occur during construction activities as a result of sedimentation, material spills, and erosion.</p> <p>As described in <i>Section 3.4 Biological Resources</i>, implementation of MM BIO-1c and best management practices, as well as any additional permit and wildlife agency consultation requirements, would ensure the Project will be compliant with the Endangered Species Act.</p> <p>(Source: (6))</p>
<p>Explosive and Flammable Hazards</p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>An Explosives and Fire Hazards Review was completed on July 5, 2018 for the proposed Project.</p> <p>The review included a visual survey of the Project area and consultation with the Napa Fire Department. The review and survey was completed in accordance with 24 CFR Part 51 C. There are no explosive or flammable operations on the Site. The survey identified one facility within 2,000 feet of the Site reporting storage of materials that warranted calculation of Acceptable Separation Distance (ASD). The ASD for the 30 gallons of xylene located at Queen of the Valley Medical Center, is approximately 912 feet south of the Site. Based on the calculated values, the ASD for</p>

		<p>the identified hazardous substances is satisfied for the Site. The identified substance conforms with HUD 24 CFR Part 51 C.</p> <p>(Source: (7))</p>
<p>Farmlands Protection</p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Project is located in a developed residential area and will not impact any protected farmlands. The Project is not actively farmed, subject to a Williamson Act Contract, or designated as Prime Farmland. The Site is designated as “urban and built-up land” on the 2016 Napa County Important Farmland Map, therefore, the Project complies with the Farmland Protection Policy Act.</p> <p>(Source: (8))</p>
<p>Floodplain Management</p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes No</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>Executive Order 11988 - Floodplain Management requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.</p> <p>HUD’s regulations in 24 CFR Part 55 outline HUD’s procedures for complying with EO 11988. HUD projects within a 100-Year Floodplain must complete the 8-Step Decision Making Process to determine whether there are practicable alternatives to locating the project in the floodplain. The following has been prepared to document the Project’s compliance with 24 CFR Part 55.</p> <p>The eastern portion of the Site adjacent to Salvador Creek is located within the Federal Emergency Management Agency’s 100-year Zone AE floodplain, a FEMA-designated Special Flood Hazard Area (Map No. 06055C0508F and the Letter of Map Revision [LOMR] dated February 20, 2012) (refer to Figure 4.1 2). The Project is located within the 100-year floodplain and for this reason, EO 11988 applies. An evaluation of direct and indirect impacts associated with construction, occupancy, and modification of the floodplain is required.</p>

		<p>As discussed in <i>Section 3.10 Hydrology and Water Quality</i>, the Project would result in a less than one-foot increase in floodplain elevations directly upstream of the proposed Valle Verde Apartment building due to overbank floodplain blockage. Pursuant to Section 17.38.040 of the Napa Municipal Code, any development that causes an increase in the water surface elevation of the base flood more than one foot at any point would constitute an “adverse affect.” The Project results in less than one-foot of cumulative impact in the floodplain and less than one-foot rise in the water surface profile of the creek. For these reasons, the Project would not significantly impede or redirect flows.</p> <p>Under the Project plus Bridge Removal scenario, there are slight increases in flood elevations downstream of the Project Site due to the removal of the bridge deck and piers. However, partial removal of the bridge would lessen upstream Project development impacts resulting from blockage due to the proposed Valle Verde Apartment building. The Project plus Bridge Removal scenario would result in a less than one-foot increase in floodplain elevations, and therefore comply with Section 17.38.040 of the Napa Municipal Code. In addition, the Project plus Bridge Removal scenario would result in slight decreases in in-channel water surface elevation upstream of the Project whereas there are slight increases at the Project boundary.</p> <p>In summary, the introduction of the proposed Valle Verde Apartments building, site-grading, and other site improvements would alter the existing floodplain, but would not cause significant off-site flooding impacts as defined by Section 17.38.040 of the Napa Municipal Code. Therefore, Project impacts on existing flooding conditions would be less than significant.</p>
--	--	--

		<p>In the event the Project is required to remove (some or all of) the Zerba Bridge, flood elevations would be lessened compared to existing conditions upstream of the bridge and increased downstream of the bridge, although in all cases the change from existing would be less than a foot per Section 17.38.040 of the Napa Municipal Code.</p> <p>(Source: (3))</p>
<p>Historic Preservation</p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes No <input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>The Site is not listed on the City of Napa Register of Historic Resources, California’s Historic Resources Inventory, or the National Register of Historic Places.</p> <p>An Archaeological Literature Search was completed for the Project in February 2019. The City of Napa received a request from the Yocha Dehe Wintun Nation for Project consultation. Mitigation measures were included in the EIR/EA (see <i>Section 3.18</i>) based on the expressed interest of the Yocha Dehe Wintun Nation. Implementation of mitigation measures TCR-1.1 and TCR-1.2 would reduce potential impacts to unknown tribal cultural resources to a less than significant level.</p> <p>A Historic Resources Survey and Report was completed on March 29, 2019. No historic resources were identified within the Project APE (see Figure 4.1-3). A request for review and historic resources determination was submitted to the State Historic Preservation Officer (SHPO) by the City of Napa on April 15, 2019 for concurrence of finding of no adverse effect.</p> <p>(Source:(9) (10))</p>
<p>Noise Abatement and Control</p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes No <input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>HUD environmental noise regulations are set forth in 24 CFR Part 51B. The following noise standards for new housing construction would be applicable to this Project:</p> <p>Interior:</p>

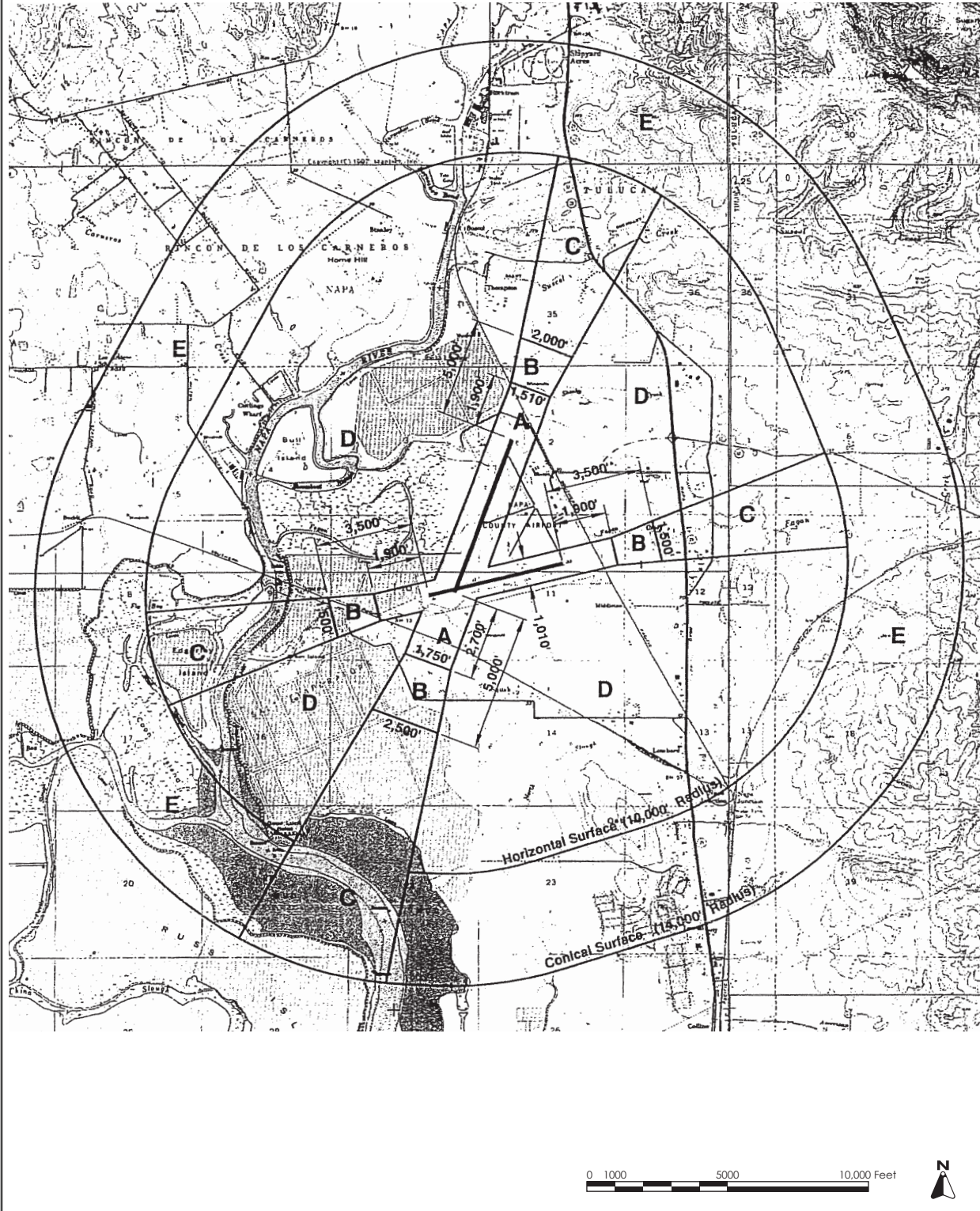
		<ul style="list-style-type: none"> • <u>Acceptable</u> – 45 DNL or less <p>Exterior:</p> <ul style="list-style-type: none"> • <u>Acceptable</u> – 60 DNL or less. • <u>Conditionally unacceptable</u> – exceeding 60 DNL but not exceeding 75 DNL. • <u>Unacceptable</u>– Exceeding 75 DNL. <p>The primary source of traffic in the area is vehicular traffic along Valle Verde and Firefly Lane, with occasional sirens from emergency vehicles going to Queen of the Valley Medical Center.</p> <p>An acoustical analysis was completed for the Site by <i>Illingworth & Rodkin, Inc.</i>, on August 8th and 10th, 2018, and is available as Appendix K and Appendix M.</p> <p>Construction noise and vibration would be reduced through implementation of best management practices.</p> <p><i>Exterior Noise Environment</i></p> <p>Future cumulative exterior noise levels at the Site would continue to result primarily from roadway traffic. Based on future traffic volumes, future traffic noise levels along Valle Verde Drive and Firefly Lane are not anticipated to increase under future conditions due to increases in traffic volumes along these roadways.</p> <p>The Heritage House Site includes an outdoor patio located in the central courtyard, and the Valle Verde Apartments would include a courtyard patio and BBQ area, play area, shade garden, half basketball court, and picnic area. The outdoor uses of both Project components would be shielded by existing and proposed buildings. Noise levels at the exterior use areas of Heritage House and Valle Verde Apartments would not exceed the City’s acceptable exterior noise level criteria of 65 dBA CNEL for multi-family residential use.</p>
--	--	---

		<p><i>Interior Noise Environment</i></p> <p>Future cumulative interior noise levels at the Site due to roadway traffic are estimated to reach up to a maximum of approximately 71 dBA DNL with windows open. The inclusion of forced air mechanical ventilation, to allow occupants the option of keeping windows closed to control noise, and windows with STC ratings of 28 or greater, would be sufficient to limit interior noise inside all Valle Verde Apartment units and of east, west, and north facing Heritage House units to acceptable maximum instantaneous levels (55 dBA L_{max}).</p> <p>The Project will be in compliance with City of Napa regulations and with HUD Noise Abatement and Control regulations of 24 CRF 51 B.</p> <p>(Source: (11))</p>
<p>Sole Source Aquifers</p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Project is not in an area designated by the U.S. EPA as being supported by a sole source aquifer.</p> <p>(Source: (12))</p>
<p>Wetlands Protection</p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Site is an in-fill parcel located in a developed residential area and is adjacent to Salvador Creek. The Site does not contain any wetlands (see Figure 4.1-4); therefore, no wetlands will be impacted and the Project complies with Executive Order 11990. The Project is located adjacent to Salvador Creek and the creek's riparian corridor.</p> <p>(Source: (6))</p>
<p>Wild and Scenic Rivers</p> <p>Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The Site is not located within a mile of a designated wild and scenic river system. There are no such rivers in Napa.</p> <p>(Source: (13))</p>

ENVIRONMENTAL JUSTICE		
<p>Environmental Justice</p> <p>Executive Order 12898</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Executive Order 12898 requires consideration of how federally assisted projects may have disproportionately high and adverse human health or environmental effects on minority and low-income populations. According to the EPA’s EJSCREEN tool, the Project site is not in an area that has a disproportionate concentration of low-income or minority populations. Using the EJSCREEN tool, the Project site is an area that is 38 percent minority/34 percent low income and is at the 58th and 55th national percentile, respectively.⁸⁹ This means that 38 percent of the area’s population is minority and 34 percent low income, and that is an equal or higher percent minority than where 58 and 55 percent of the U.S. population lives, respectively. As a result, the Project would not result in adverse effects on low-income or minority populations and would comply with Executive Order 12898. (Source: (21))</p>

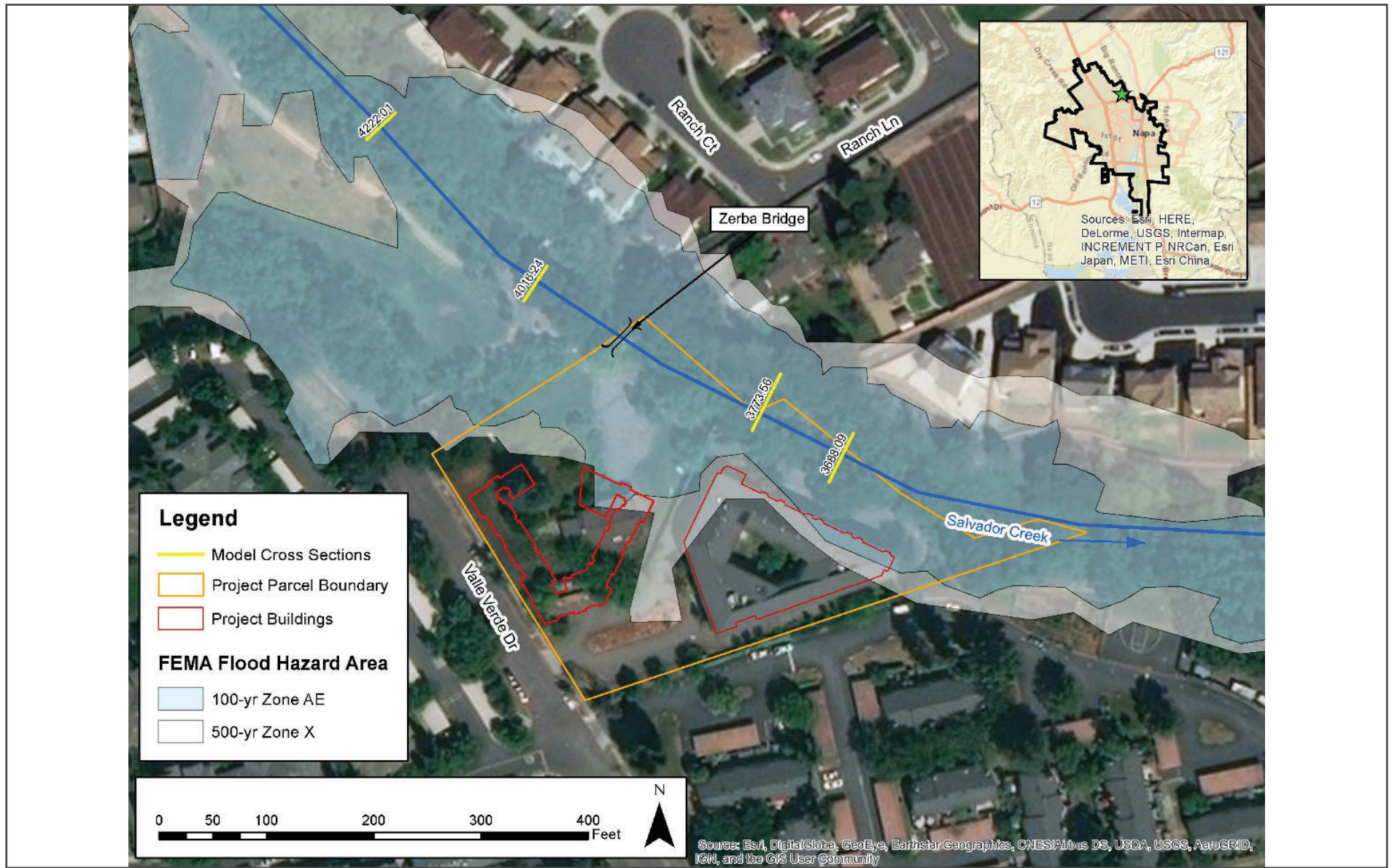
⁸⁹ EPA. EJSCREEN. EPA's Environmental Justice Screening and Mapping Tool (Version 2018). <https://ejscreen.epa.gov/mapper/>

Project Site
(Located North)



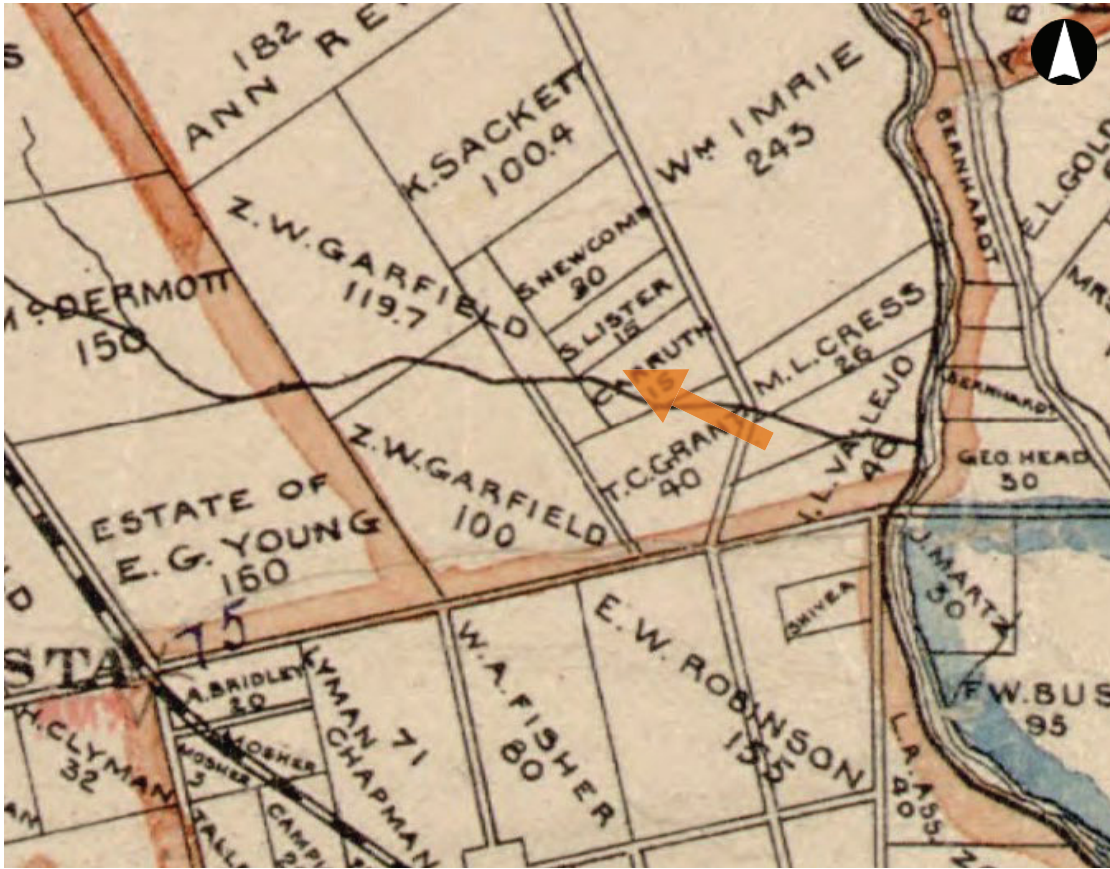
NAPA AIRPORT LAND USE COMPATIBILITY

FIGURE 4.1-1



PROJECT LOCATION AND EFFECTIVE FEMA FLOOD HAZARD AREAS

FIGURE 4.1-2



Source: Page & Turnbull, March 2019.

USGS 7.5 MINUTE QUADRANGLE

FIGURE 4.1-3



April 18, 2019

Wetlands

- | | | |
|--------------------------------|-----------------------------------|-------|
| Estuarine and Marine Deepwater | Freshwater Emergent Wetland | Lake |
| Estuarine and Marine Wetland | Freshwater Forested/Shrub Wetland | Other |
| Freshwater Pond | Riverine | |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

4.2 ENVIRONMENTAL ASSESSMENT FACTORS (24 CFR 58.40; REF. 40 CFR 1508.8 & 1508.27)

Recorded below is the qualitative and quantitative significance of the effects of the Project on the character, features, and resources of the Project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source consultations have been completed and applicable permits or approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

Impact Codes: The following codes are used to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	<p>The Project is consistent with the General Plan designation and applicable general plan policies as well as with the current zoning district regulations.</p> <p>The Site has a General Plan land use designation of <i>Multi-Family Residential</i> and is zoned <i>Multi-Family Residential</i>.</p> <p>The proposed Project is consistent with the permitted land uses under the General Plan land use designation and will be consistent with building height, landscaping, setbacks, and parking requirements of the City’s Residential Design Guidelines.</p> <p>Surrounding lands uses include residential and medical facilities and will not conflict with the proposed residential development. The Project includes landscaping around the perimeter of the Site and setbacks of a minimum of 15 feet at property boundaries in order to minimize any land use conflicts.</p> <p>(Source: (15))</p>

<p>Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff</p>	<p>3</p>	<p style="text-align: center;"><i>Soil Suitability/Slope/Erosion</i></p> <p>The Site is located in a relatively flat area of Napa. The Site is primarily underlain by alluvial deposits, described as mixtures of sand, gravel, silt, and clay.</p> <p>The Site is not located in a California Geological Survey Fault Rupture or Landslide Hazard Zone. The Site is located in a Liquefaction Hazard Zone. There is no known history of liquefaction-induced damage at the Site. As discussed in <i>Section 3.6, Geology and Soils</i>, adherence to the Standard Permit Condition would reduce potential liquefaction related impacts to a less than significant level since the Project would be required to adhere to the recommendations of the Project-specific geotechnical investigation.</p> <p>The Site is expected to have low to moderately expansive underlying soils. As discussed in <i>Section 3.6, Geology and Soils</i> of this EIR/EA, the Project would be built using standard engineering and seismic safety design techniques, and the building design and construction would be built in conformance with the recommendations of the approved geotechnical investigation.</p> <p style="text-align: center;"><i>Drainage/Stormwater Runoff</i></p> <p>As described in <i>Section 3.7</i>, there are two areas of active erosion on the Site adjacent to its interface with Salvador Creek. The Project would install a stitch pier retaining wall to repair the current erosion and prevent future erosion from occurring as a result of Project implementation.</p> <p>Additionally, the Project would prepare and implement a Stormwater Pollution Prevention Plan consistent with the requirements of the National Pollution Discharge Elimination System General Permit for Construction Activities. The Project will adhere to Policy Resolution No. 27 which includes standard permit conditions to reduce stormwater pollution and sedimentation during construction. Full and complete compliance with these conditions of approval will ensure that there is no new impact to stormwater runoff in terms of quality or volume as a result of Project-related construction activities. Post-construction, the proposed Project will not alter the existing drainage pattern of the Site or area or increase the amount of runoff in a manner that could potentially exceed the capacity of existing stormwater system or result in erosion or siltation on- or off-site. While Site impervious surface area will</p>
---	----------	--

		<p>increase, leading to increased runoff, the Project includes a post-construction stormwater control plan to manage and treat stormwater on-site prior to conveying stormwater into the City’s storm drainage system.</p> <p>(Source: (16))</p>
<p>Hazards and Nuisances including Site Safety and Noise</p>	<p>3</p>	<p>The Project will not create a risk of explosion, release of hazardous substances or other dangers to public health. The Project provides a safe place for residents.</p> <p>Conditions of Approval and best management practices have been incorporated into the Project to reduce potential noise impacts, as noted in <i>Section 3.12, Noise and Vibration</i>.</p> <p style="text-align: center;"><i>Seismicity</i></p> <p>The Site is located in the San Francisco Bay Area, which is considered one of the most seismically active regions in the United States. The Site is located in a Liquefaction Hazard Zone. See discussion in <i>Section 3.6, Geology and Soils</i>.</p> <p>The Site could experience strong seismic ground shaking and related effects in the event of an earthquake on one of the identified active or potentially active faults in the region. Required Project compliance with the latest California Building Code requirements for new construction will reduce the associated risk of property loss and hazards to occupants to a less-than significant level. The Project will also be constructed in conformance with the California Building Code for Seismic Zone 4 to avoid and minimize potential damage from seismic ground shaking.</p> <p style="text-align: center;"><i>Noise</i></p> <p>The primary permanent, ongoing noise anticipated at the Site is traffic on Valle Verde and Firefly Lane, with occasional emergency sirens from Queen of the Valley Medical Facility. Traffic noise associated with the proposed Project would not have a significant effect due to the minimal increase in trips compared to current roadway volumes. The Project includes best management practices and a Condition of Approval to address potential construction noise impacts and impacts of existing noise sources onto future residents of the Project such that the interior noise levels meet City requirements. Therefore, the</p>

		Project complies with the HUD noise abatement and control regulations of 24 CFR 51B. (Source: (11))
Energy Consumption	2	The Project will not represent a wasteful use of energy, as discussed in detail in <i>Section 3.6 Energy</i> of this EIR/EA. The Project will be required to comply with applicable building energy efficiency standards pursuant to Title 24, Part 6 of the California Code of Regulations. At the building permit stage, the Project will comply with the California Green Building Standards Code that establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. (Source: (17))
Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	2	According to the U.S. Census Bureau, the median household income for the City of Napa is \$75,341. Approximately 2.7% of households earned less than \$10,000, 4.1 percent between \$10,000 and \$14,999, 6.7% between \$15,000 and \$24,999, 7.2% between \$25,000 and \$34,999, 11.4% between \$35,000 and \$49,999, and 17.8% between \$50,000 and \$74,999. The Project will increase the availability of affordable housing for the residents of Napa, where such housing is in high demand. No significant change to the demographic character is expected because of the Project, as it is intended to serve the existing area population. (Source: (18))
Demographic Character Changes, Displacement	1	The Project will provide affordable housing designed to accommodate the unmet needs of the low-income populations of Napa and Napa County. The Project does not represent a significant change to the demographics of the area or on area social services as it is intended to serve the existing area population. (Source: (17))

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	<p>The proposed 24 affordable multi-family units on the Valle Verde Site and 66 SROs (including 8 ADA accessible one-bedroom units) on the Heritage House Site are not anticipated to have impacts on education or cultural facilities since the Project is designed for low-income families and at-risk population in the County of Napa.</p> <p>In accordance with California Government Code Section 65996, the Applicant shall pay a school impact fee to the School District to offset potential increased demands on school facilities.</p> <p>The Project will not displace existing cultural facilities nor will it affect cultural facilities by its operation.</p> <p>(Source: (17))</p>
Commercial Facilities	2	<p>The Project is not anticipated to have impacts to commercial facilities. The Project is located in a developed area within proximity to shopping and commercial opportunities.</p> <p>(Source: (17))</p>
Health Care and Social Services	1	<p>The Project would provide housing opportunities for low-income families and at-risk populations in Napa and Napa County. The Project is located within 600 feet of Queen of the Valley Medical Center. In addition, OLE Health provides primary care services at multiple locations in the vicinity of the project site.</p> <p>In the City of Napa, 8.1 percent of individuals are living below the poverty level. The Project will provide affordable housing designed to accommodate the unmet needs of the census tract population. The Project does not represent a significant change to the demographics of the area or on area social services as it is intended to serve the existing population.</p> <p>(Source: (18))</p>
Solid Waste Disposal / Recycling	2	<p>The Project is not anticipated to have impacts to solid waste disposal/recycling facilities. The Project will have an incremental increase in solid waste disposal but would not exceed the capacity of the existing facilities or services.</p>

		(Source: (17))
Waste Water / Sanitary Sewers	2	<p>The proposed 24 units of affordable multi-family apartments and 66 SRO units are not anticipated to have impacts to waste water/sanitary sewer services. The Project will have an incremental increase in wastewater and sanitary sewer services. As discussed in <i>Section 3.17, Utilities and Service Systems</i>, the Project is estimated to generate 19,061 gallons of wastewater per day. The Project is subject to Napa Sanitation District development fees to accommodate the incremental demand on wastewater and sanitary sewer services. There is available wastewater treatment capacity to serve the proposed Project, as documented in Section 3.17.</p> <p>(Source: (17))</p>
Water Supply	2	<p>The proposed 24 units of affordable multi-family apartments and 66 SROs are not anticipated to have impacts to the water supply. As discussed in <i>Section 3.17, Utilities and Service Systems</i>, the proposed development is estimated to use 22,425 gallons of water per day for potable water and irrigation requirements.</p> <p>The Site is served by the City of Napa Water Division.</p> <p>The Napa 2020 General Plan EIR concluded that sufficient water supplies are available to serve planned growth in the City. Therefore, there will be adequate water supply to serve the Project.</p> <p>(Source: (17) (18))</p>
Public Safety - Police, Fire and Emergency Medical	2	<p>The Project is not anticipated to have significant impacts on police, fire, or medical services. See discussion in <i>Section 3.14, Public Services</i>. Public services are generally provided to the community as a whole and financed on a community-wide basis. The proposed affordable housing Project is located on a previously developed site in an urban area that is currently served by municipal providers. The Project will result in an incremental increase in the demand for public services. The Project is subject to City of Napa development fees to accommodate the incremental demand for services. The Project will not require a significant change in emergency police, fire, and medical services already provided in the area.</p> <p>(Source: (17))</p>

Parks, Open Space and Recreation	2	<p>The Project is not anticipated to have impacts on parks, open space, or recreation. The Project is located in an area adequately served by parks and recreational facilities and will result in an incremental increase in demand. The Project is subject to City of Napa development fees to accommodate the incremental demand.</p> <p>The Project will be required to pay fees consistent with the City's Park Development Fee Ordinance. These fees are used to improve existing parkland and recreational facilities.</p> <p>(Source: (17))</p>
Transportation and Accessibility	2	<p>The Site is located in an urbanized area of Napa that is well-served by pedestrian and bicycle facilities. Regional access to the Site is provided by State Route 29 and 121. All of the signalized intersections in the Project area currently operate at an acceptable level of service D or better during both the AM and PM peak hours of traffic.</p> <p>Based on the Traffic Impact Analysis completed for the Project by Hexagon Transportation Consultants in November 2018, the Project is estimated to generate 264 new daily vehicle trips, with 14 new trips occurring during the AM peak hour and 23 new trips occurring during the PM peak hour (see Table 3.17-2).</p> <p>The Project would not result in inadequate circulation. The Project would not result in significant intersection level of service impacts and would not impede alternative transportation modes.</p> <p>(Source: (20))</p>
Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		
Unique Natural Features, Water Resources	3	<p>The Project will be located on an in-fill lot currently partially developed with the vacant Sunrise Napa Assisted Living Facility and an undeveloped lot. The Project will not impact unique natural features or water resources. Salvador Creek is directly adjacent to the western boundary of the Site. Through implementation of best management practices</p>

		<p>during Project construction, the Project would have a less than significant impact to water quality.</p> <p>The Project would be served by the City of Napa. The Project would have an increase in water consumption, estimated to be approximately 22,425 gallons of water per day. The Napa 2020 General Plan FEIR concluded that sufficient water supplies are available to serve planned growth in the City. Therefore, there will be adequate water supply to serve the Project. There will be no significant change to water resources used.</p> <p>(Source: (17) (19))</p>
Vegetation, Wildlife	3	<p>Vegetation within the Study Area is comprised of ruderal vegetation and remnant ornamental trees in the northwestern portion; sparse vegetation in the southeastern portion where there is a vacant apartment building and associated paved roads and parking areas; and riparian vegetation associated with Salvador Creek along the northeastern boundary.</p> <p>The Study Area is surrounded on all sides by residential developments, with the exception of a small, undeveloped area to the northwest as well as Salvador Creek to the northwest and east.</p> <p style="text-align: center;"><i>Natural Communities</i></p> <p>As described in Section 3.4 <i>Biological Resources</i>, Natural communities observed in the Study area include ruderal, developed, intermittent stream, and riparian.</p> <p><u>Intermittent Stream</u></p> <p>A single intermittent stream—Salvador Creek—is present along the northeastern boundary of the Study Area. Within the Study Area, most of Salvador Creek has a dense riparian tree canopy, but small portions are fully or partially outside of tree canopy. The tree canopy is a mix of species and contains elements of several vegetation alliances that are too small to map separately, including red willow thickets, Oregon ash groves, coast live oak woodland. Other tree species include silver wattle and Lombardy poplar. The understory is typically sparse and includes Himalayan blackberry and poison oak. Where canopy cover is open or</p>

	<p>absent, water primrose was observed in the channel bottom, and Himalayan blackberry was often dense.</p> <p>Salvador Creek is a tributary to Napa Creek, which drains to the San Francisco Bay, a navigable water of the U.S.; therefore, the portion of Salvador Creek within the Study Area is potentially jurisdictional by the USACE. In addition, this feature is also potentially jurisdictional by the RWQCB and CDFW.</p> <p><u>Riparian</u></p> <p>Riparian was mapped within the Study Area where the tree canopy is adjacent to, but not directly above, Salvador Creek. The tree canopy is typically dense and comprised of a mix of species as described above. The understory is also as described above.</p> <p>Riparian, non-wetland areas above ordinary high-water mark are not considered jurisdictional by the USACE. However, riparian within the Study Area is potentially jurisdictional by the RWQCB and CDFW.</p> <p style="text-align: center;"><i>Special-Status Species</i></p> <p>Four special-status wildlife species have a high or moderate potential to occur in the Study Area. One special-status wildlife species, Nuttall’s woodpecker, was observed in the Study Area during the site assessment.</p> <p><u>Nuttall’s Woodpecker, Bird of Conservation Concern</u></p> <p>Trees within the Study Area have suitable cavities and complex structures that are likely to support nesting by this species. In addition, this species is fairly common in oak woodlands throughout this portion of California. Therefore, because the species was observed within the Study Area, and suitable habitat is present, the species is considered Present.</p> <p><u>Steelhead, Federally Threatened</u></p> <p>Steelhead has been documented in Salvador Creek. Steelhead may use Salvador Creek during these low flow periods, when access to more suitable habitat upstream is not available. Considering these conditions, returning adult steelhead may hold in Salvador Creek when migrating upstream to spawning</p>
--	---

		<p>grounds (outside of Salvador Creek) and would have a moderate potential to occur at these times of year.</p> <p><u>Pallid bat, Species of Special Concern</u> There is a high potential for pallid bat to occur within the Study Area. The existing structure on the south side of the Study Area may provide suitable roosting habitat for this species. This species may also forage for insects over Salvador Creek, the adjacent field in Salvador Creek Park, and vegetated portions of the Study Area. Based on the proximity of documented occurrences, the presence of potential roost structures, as well as watering and foraging opportunities, there is a high potential for this species to occur within the Study Area.</p> <p><u>Western red bat</u> The riparian vegetation on either side of Salvador creek may contain potential roosting habitat for this species. The nearest documented occurrence of this species is within 7.5 miles of the Study Area. Western red bats may also forage over Salvador Creek, as well as over the adjacent field in Salvador Creek Park. Due to the potential presence of roosting trees, water and foraging grounds, but considering the distance from known occurrences, there is a moderate potential for this species to occur within the Study Area.</p> <p><u>Protected Trees</u> The Project proposes to remove 12 protected native trees, as defined by the City’s Municipal Code. The Project would replace trees consistent with the City’s Municipal Code.</p> <p>Implementation of best management practices, mitigation measures (MM BIO-1 through MM BIO-3), as well as any additional permit and wildlife agency consultation requirements will avoid and minimize impacts to sensitive natural communities and special-status species.</p> <p>(Source: (6))</p>
Other Factors	1	<p>The Project will provide safe living conditions for low-income families by meeting fire, life safety, and Americans with Disabilities Act (ADA) codes.</p> <p>(Source: (17) (19))</p>

4.3 **ADDITIONAL STUDIES PERFORMED**

- Appendix B: Air Quality and Greenhouse Gas Assessment
- Appendix C: Biological Resources Technical Report
- Appendix D: Arborist Report
- Appendix E: Section 106 Technical Report
- Appendix F: Geotechnical Investigation
- Appendix G: GreenPoint Rated Checklists
- Appendix H: Phase I Environmental Site Assessment
- Appendix I: HUD Explosive and Fire Hazards Review
- Appendix J: Hydraulic Analysis
- Appendix K: Noise and Vibration Analysis
- Appendix L: Traffic Impact Analysis
- Appendix M: NEPA Noise Assessment

4.4 **LIST OF SOURCES, AGENCIES AND PERSONS CONSULTED [40 CFR 1508.9(B)]**

1. Napa County Airport Land Use Commission. Airport Land Use Compatibility Plan. December 15, 1999. Available at <https://www.countyofnapa.org/DocumentCenter/View/1980/Airport-Land-Use-Compatibility-Plan-PDF>
2. San Francisco Bay Conservation and Development Commission. The San Francisco Bay Plan. State of California. San Francisco, CA, 1969. Available at: http://www.bcdc.ca.gov/plans/sfbay_plan.html
3. Schaaf & Wheeler Consulting Civil Engineers. Hydraulic Analysis for 3700/3710 Valle Verde Drive Project. June 2019. Attached as Appendix J of this EIR/EA.
4. Illingworth & Rodkin, Inc. Heritage House & Valle Verde Air Quality and Greenhouse Gas Assessment. March 20, 2019. Attached as Appendix B of this EIR/EA.
5. Basics Environmental. Phase I Environmental Site Assessment 3700, 3710 & 3720 Valle Verde Drive. January 5, 2011. Available as Appendix H of this EIR/EA.
6. WRA. Biological Resources Technical Report Napa Creekside Housing Project. July 2019.
7. Running Moose Environmental Consulting, LLC. HUD Explosive and Fire Hazards Review Heritage House Project 3700, 3710 and 3720 Valle Verde Drive Napa, California. July 5, 2018. Available as Appendix I of this EIR/EA.
8. County of Napa. Napa County Important Farmland 2016. Available at https://www.napa.lafco.ca.gov/uploads/documents/NapaCounty_ImportantFarmland_2016.pdf
9. Holman & Associates. Archaeological Survey Report for Proposed Valle Verde & Heritage House Continuum of Housing. February 2019. Attached as Appendix E of this EIR/EA.

10. Page & Turnbull. Section 106 Technical Report for Heritage House & Valle Verde Housing Project. March 29, 2019. Available at Appendix E of this EIR/EA.
11. Illingworth & Rodkin, Inc. Heritage House NEPA Noise Assessment. February 25, 2019. Available as Appendix M of this EIR/EA.
12. U.S. Environmental Protection Agency. Sole Source Aquifers. Available at: <https://www.epa.gov/uic/underground-injection-control-region-9-az-ca-hi-nv-mp-gu>
13. U.S. Forest Service. National Wild and Scenic River System. Available at: <https://www.rivers.gov/california.php>
14. U.S. Environmental Protection Agency. Environmental Justice Screening and Mapping Tool. Available at: <https://www.epa.gov/ejscreen>
15. City of Napa. Envision Napa 2020, City of Napa General Plan. December 1998.
16. Miller Pacific Engineering Group. Updated Geotechnical Investigation Valle Verde and Heritage House Projects. January 29, 2019. Available as Appendix F of this EIR/EA.
17. David J. Powers and Associates. Professional judgment and expertise and review of project plans.
18. United States Census Bureau. Community Facts. Available at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>
19. City of Napa. City of Napa General Plan Environmental Impact Report. 1998.
20. Hexagon Transportation Consultants, Inc. 3700-3720 Valle Verde Drive Draft Transportation Impact Analysis. November 26, 2018.
21. EPA. EJSCREEN. EPA's Environmental Justice Screening and Mapping Tool (Version 2018). <https://ejscreen.epa.gov/mapper/>.

4.5 **FIELD INSPECTION (DATE AND COMPLETED BY)**

November 5, 2018

David J. Powers & Associates, Inc.

4.6 **LIST OF PERMITS OBTAINED**

The Project and Proposed Action would require the following approvals:

- Right of way abandonment
- Lot Line Adjustment/Lot Merger
- Conditional Use Permit
- Design Review Permit
- Grading Permits
- Building Permits
- Other Public Works Clearances

4.7 **PUBLIC OUTREACH (24 CFR 50.23 & 58.43)**

The development of the Site for the Project will be the subject of community meetings and notified public hearings before the Community Development Director, Planning Commission and City Council of the City of Napa.

4.8 **CUMULATIVE IMPACT ANALYSIS (24 CFR 58.32)**

The potential environmental impacts from the proposed Project are primarily short-term impacts associated with the construction of the Valle Verde Apartments. It is possible that other proposed construction schedules in the Project area may overlap with the Project, however the proposed Project includes mitigation measures to limit disturbance to adjacent land uses and would not result in cumulatively considerable impacts. A more detail discussion of cumulative impacts can be found in the respective environmental subsections in Section 3.0 of this EIR/EA.

4.9 **ALTERNATIVES (24 CFR 58.40(E); 40 CFR 1508.9)**

Section 8.0 of this EIR/EA provides a detailed discussion of Project alternatives, including the No Action Alternative. Under the No Action Alternative, the existing Sunrise Napa Assisted Living Facility on the Heritage House Site would remain and the adjacent Valle Verde Site is undeveloped; therefore, this alternative would avoid the mitigated construction TAC impacts, the potential for erosion during construction, potential for bird nesting disturbance, and all other less than significant impacts. The No Action Alternative would not meet any of the proposed Project objectives to address underserved housing needs in the City of Napa.

4.10 **MITIGATION MEASURES AND CONDITIONS (40 CFR 1505.2(C))**

The following table summarizes the potentially significant impacts of the Project on the environment and mitigation measures proposed to reduce those impacts to a less than significant level. A significant impact on the environment is a substantial, or potentially substantial, adverse change to the environment. Impacts that are less than significant without mitigation are not described in this summary and can be found in the text of the EIR/EA.

Significant Impact	Mitigation Measures
Air Quality	
Impact AIR-3: The Project would expose sensitive receptors to substantial pollutant concentrations.	MM AIR-3.1: During any construction period ground disturbance, the applicant shall ensure that the Project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following best management practices that are required of all projects: <ol style="list-style-type: none"><li>1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.<li>2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.<li>3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
5. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
6. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
7. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
8. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
9. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
10. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
11. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

MM AIR-3.2: The Project shall develop a plan demonstrating that the off-road equipment used on-site to construct the Project would achieve a fleet-wide average 21 percent reduction in particulate matter exhaust emissions or more. One feasible plan to achieve this reduction would include the following:

- All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall, at a minimum, meet U.S. EPA particulate matter emissions standards for Tier 2 engines or equivalent. The use of equipment that includes CARB-certified Level 3 Diesel Particulate Filters would also meet this requirement. Alternatively, the use of alternatively-fueled equipment (i.e., non-diesel) would meet this requirement.

Biological Resources

Impact BIO-1: The Project would have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

MM BIO-1.1: A survey for active bird nests shall be conducted by a qualified biologist no more than 14 days prior to the start of Project activities (vegetation removal, grading, or other initial ground-disturbing activities) if ground disturbing activities commence during the nesting season (February 1 through August 31). The survey shall be conducted in a sufficient area around the Study Area to identify the location and status of any nests that could potentially be directly or indirectly affected by vegetation removal, or grading activities. Based on the results of the pre-construction breeding bird survey, the following measure shall apply.

- If active nests of protected species are found within the Study Area or close enough to the area for construction activity to affect nesting success, a work exclusion zone shall be established around each nest. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g. due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers, ambient sound levels, and other factors. An exclusion zone radius may be as small as 25 feet (for common, disturbance-adapted species) or as large as 250 feet or more for raptors. Exclusion zone size may also be reduced from established levels if supported with nest monitoring by a qualified biologist indicating that work activities are not significantly impacting the nest.

MM BIO-1.2: A pre-construction survey shall be conducted of the existing structures, bridge, and trees within 100 feet of the work areas to determine if any suitable roost habitat is present and the potential for occupancy. Based on the results of the survey, the following measure shall apply.

- If an active maternity roost is located within features scheduled for removal, then consultation with CDFW would be required.
- If any large trees are identified during the preconstruction survey which contain potential roosting features, the tree shall be felled outside of the maternity season (September 1 through April 30) and shall be allowed to lay on the ground for one night to allow any undetected bats to leave the tree before it is processed.
- If no roosts or potential bat roosting substrates are located, then work may proceed without further measure.

MM BIO-1.3: The following avoidance and minimization measures shall be implemented during bridge removal activities:

- A debris containment device (e.g. net, or tarp) shall be installed prior to work in order to prevent material from entering Salvador Creek.
-

- Riparian vegetation removed within the Study Area shall be the minimum amount needed for work to occur.
- The extent of disturbance shall be delineated with construction fencing or other high visibility marker to prevent disturbance to areas below top of bank or outside of the construction footprint.

Impact BIO-2: The Project would have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.

MM BIO-2.1: Prior to initiating any Project activities within these areas, the applicant shall obtain any required permits for impacts to jurisdictional areas. Permanent impacts to all jurisdictional resources would be compensated at 1:1 replacement ratio, or as required by the USACE, CDFW, and RWQCB.

Impact BIO-4.: The Project would 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.

MM BIO-4.1: The following measures shall be implemented:

- Hours for initial phases of work shall be limited to 30 minutes after sunrise to 30 minutes before sunset in order to avoid causing disturbance when wildlife are most likely to migrate through surrounding habitats.
- Any lighting used for the Project shall be kept to the minimum necessary to safely operate. Those lights shall also be directed inward toward the Study Area, and not into surrounding habitats.
- All work shall occur only within designated work areas.

Cultural Resources

Impact CUL-2: The Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

MM CUL-2.1: In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, work within 50 ft. of the find shall cease until a qualified archaeologist can assess the find and provide recommendations for further treatment, if warranted. Construction and potential impacts to the area(s) within a radius determined by the archaeologist shall not recommence until the assessment is complete. Implementation of this mitigation measure would reduce potential impacts to archaeological resources to a less than significant level.

Impact CUL-3: While the Project is not expected to disturb any human remains, including those interred outside of dedicated cemeteries, the potential exists that unknown resources could be uncovered during

MM CUL-3.1: Human Remains: Native American coordination shall follow the protocols established under Assembly Bill 52, State of California Code, and applicable City of Napa procedures. In addition, the following measures shall be implemented with regard to human remains:

- The treatment of any human remains and associated, or unassociated funerary objects discovered during soil disturbing activities shall comply with applicable state laws. Such treatment would include immediate notification of the Napa County Coroner. In the event of

subsurface construction activities.

the coroner’s determination that the human remains are Native American, the coroner shall notify of the Native American Heritage Commission, which would appoint a Most Likely Descendant (MLD) (PRC § 5097.98). The archaeological consultant, the City of Napa, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects (CEQA Guidelines § 15064.5[d]). The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The PRC allows 48 hours to reach agreement on these matters. If the MLD and the other parties could not agree on the reburial method, the Event Authority shall follow Section 5097.98(b) of the PRC, which states that “the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.”

Geology and Soils

Impact GEO-2:

The Project would result in substantial erosion or the loss of topsoil.

MM GEO-2.1: The Project Civil Engineer shall design and implement a site drainage system to collect surface water and direct towards an established storm drainage system. The Civil Engineer shall also design an erosion control plan prior to Project construction, per the current guidelines of the *California Stormwater Quality Association’s Best Management Practice Handbook* (2003).

Impact TCR-1a: The Project would cause a substantial adverse change in the significance of a tribal cultural resource that is 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).

MM TCR-1.1 The Nation shall have the opportunity to provide tribal monitoring and consultation for the Project during the archaeological investigations and ground disturbing activities related to underground utility trenching and the stitch wall required for the Project. The Nation’s monitors may work in collaboration with the archaeologists and Project engineers hired/employed by the Applicant. Applicant shall provide written notice to the Nation ten days in advance of any earth-disturbing activities related to utility trenching and stitch wall digging. If the Nation fails to respond or fails to provide monitoring and consultation personnel, on the date(s) of the activities, the Contractor may continue with those activities.

MM TCR-1.2: In the event that Native American human remains are discovered during Project construction activities, and where the Nation

Impact TCR-1b: The Project would cause a

substantial adverse change in the significance of a tribal cultural resource that is 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.

has been designated as the Most Likely Descendant (MLD), the following provisions shall be implemented:

- I. The Nation shall be allowed, under California Public Resources Code sections 5097.98 (a) and 21083.2 and State CEQA Guidelines section 15064.5 (e), to: (1) inspect the site of the discovery; and (2) make recommendations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity.
- II. The Nation shall complete its inspection within twenty-four (24) hours of receiving notification from either the Contractor or the NAHC, as required by California Public Resources Code section 5097.98 (a). The City and the Nation agree to discuss, in good faith, what constitutes “appropriate dignity” as that term is used in the applicable statutes.
- III. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code sections 5097.98 (a) and (b) and 21083.2 and State CEQA Guidelines section 15064.5 (e).
- IV. The City is aware that the Nation may wish to rebury the human remains and associated ceremonial and cultural items (artifacts) on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. Should the Nation recommend reburial of the human remains and associated ceremonial and cultural items (artifacts) on or near the site of their discovery, the City and Contractor shall make good faith efforts to accommodate the Nation’s request.
- V. The term “human remains” encompasses more than human bones because Nation’s traditions periodically necessitated the ceremonial burning of human remains, and monitors shall make recommendations for removal of cremations. Grave goods are those artifacts associated with any human remains. These items and the soil, in an area encompassing up to two (2) feet in diameter around the burial, and other funerary remnants and their ashes, are to be treated in the same manner as human bone fragments or bones that remain intact.

MM TCR-1.3: Treatment and Disposition of Cultural Items (Artifacts). Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Nation. Applicant agrees to cause its contractor to return all Native American ceremonial items and items of cultural patrimony that may be found on the Site to the MLD for

appropriate treatment, unless Contractor or Applicant is ordered to do otherwise by a court or agency of competent jurisdiction. In addition, the Nation requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations on or adjacent to the Site. Where appropriate (from the perspective of the Nation), and agreed upon in advance by the Nation, certain analyses of certain artifact types will be permitted, which may include, but which may not necessarily be limited to, shell, bone, ceramic, stone and/or other artifacts.

4.11 **IRREVERSIBLE DAMAGE RESULTING FROM ENVIRONMENTAL ACCIDENTS ASSOCIATED WITH THE PROJECT**

The Project does not propose any new or uniquely hazardous uses and its operation would not cause environmental accidents that would impact other areas. As discussed in Section 3.9 Hazards and Hazardous Materials, there would be no significant hazards and hazardous materials conditions on-site or off-site that would substantially affect the public and surrounding environment. As discussed in Section 3.7 Geology and Soils, the Project would construct a stitch pier retaining structure at the Heritage House Site to address the active erosion at the Site. Installation of the stitch pier retaining structure would stabilize the areas of active erosion such that the Project would not exacerbate erosion. With implementation of MM GEO-2.1, there would be no significant geology and soils impacts from implementation of the Project. For these reasons, the Project would not result in irreversible damage that may result from environmental accidents.

SECTION 5.0 GROWTH-INDUCING IMPACTS

Section 15126.2(e) of the CEQA Guidelines requires an EIR to “discuss the ways in which the Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth.”

For the purposes of this EIR, a growth inducing impact is considered significant if the Project would:

- Cumulatively exceed official regional or local population projections;
- Directly induce substantial growth or concentration of population. The determination of significance shall consider the following factors: the degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds planned levels in local land use plans; or
- Indirectly induce substantial growth or concentration of population (i.e., introduction of an unplanned infrastructure project or expansion of a critical public facility such as a road or sewer line necessitated by new development, either of which could result in the potential for new development not accounted for in local general plans).

The Project would add 66 affordable single room occupancy units (including eight ADA accessible one-bedroom units) and 24 affordable multi-family units in the City of Napa. The single room occupancy and accessible one-bedroom units would likely house one person per unit, however, to be conservative this EIR assumes up to two persons per unit, for a total of 132 new residents. Assuming 2.76 persons per household for the Valle Verde Apartment units, development of the Valle Verde Apartments would generate approximately 67 new residents in the City of Napa. The 199 new residents generated by the Project would represent an increase of approximately 0.2 percent.

The Project would marginally increase the number of housing units in the City of Napa. The proposed Heritage House facility would employ approximately three to five persons, and the Valle Verde apartments would employ up to two onsite manager, for a total of seven employees, which would not be enough to create substantial unplanned population growth. The proposed Project’s relatively low contribution to population growth would not be expected to substantially change the relatively balanced and steady regional job/housing ratio.

The Project is consistent with the land use assumptions of the buildout of the General Plan. The Project does not entail or require the construction or expansion of unplanned infrastructure. The additional residents, therefore, were accounted for in the General Plan EIR. The Project would not result in substantial unplanned population growth.

Impact GRO-1: Based on the above discussion, the Project would not result in significant growth-inducing impacts. **[Less than Significant Growth-Inducing Impact]**

SECTION 6.0 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

This section was prepared pursuant to CEQA Guidelines Section 15126.2(c), which requires a discussion of the significant irreversible changes that would result from the implementation of a proposed Project. Significant irreversible changes include the use of nonrenewable resources, the commitment of future generations to similar use, irreversible damage resulting from environmental accidents associated with the Project, and irretrievable commitments of resources.

6.1 USE OF NONRENEWABLE RESOURCE

Energy would be consumed during both the construction and operational phases of the Project. The construction phase would require energy for the actual manufacture and transportation of building materials, preparation of the Site (e.g., importing fill and grading), and the actual construction of the building on the Valle Verde Site. The operational phase would consume energy for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Operational energy would also be consumed during each vehicle trip associated with the proposed uses.

Although the proposed Project would use energy, the consumption would not be wasteful, inefficient, or unnecessary. The Project would comply with the CALGreen Building Code, City of Napa General Plan and Municipal Code, and the City's High-Performance Building Regulations. As noted above, CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to State environmental directives. The most recent update to CALGreen went into effect on January 1, 2017, and covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

By complying with the mandatory provisions of CALGreen that pertain to energy consumption and energy efficiency, and implementation of the proposed green building features, the Project would not result in wasteful, inefficient, or unnecessary consumption or wasteful use of energy resources.

6.2 COMMITMENT OF FUTURE GENERATIONS TO SIMILAR USE

The Project would be developed on a Site that was already developed for residential uses. Development of the Project would commit resources to prepare the site, construct the buildings, and operate them, but it would not result in development of a previously undeveloped area.

SECTION 7.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

The Project would not result in any significant and unavoidable impacts.

SECTION 8.0 ALTERNATIVES

8.1 INTRODUCTION

Section 15126.6 of the CEQA Guidelines provides extensive direction on identifying and evaluating EIR alternatives to a proposed project. The purpose of analyzing alternatives in an EIR is to identify ways to substantially lessen or avoid the significant effects a proposed project may have on the environment. The range of alternatives selected for analysis is governed by the “rule of reason,” which requires the EIR to discuss only those alternatives necessary to permit a reasoned choice. Although the alternatives do not have to meet every goal and objective set for the proposed project, they should “feasibly attain most of the basic objectives of the project.”

The CEQA Guidelines (Section 15126.6) do not require that all possible alternatives be evaluated, only that a range of feasible alternatives be discussed so as to encourage both meaningful public participation and informed decision making. In selecting alternatives to be evaluated, consideration may be given to their potential for reducing significant unavoidable impacts, reducing significant impacts that are mitigated by the project to less than significant levels, and further reducing less than significant impacts.

The three critical factors to consider in selecting and evaluating alternatives are, therefore: (1) the significant impacts from the proposed project which could be reduced or avoided by an alternative, (2) the project’s objectives, and (3) the feasibility of the alternatives available. Each of these factors is described below.

8.2 SIGNIFICANT IMPACTS OF THE PROJECT

As mentioned above, the CEQA Guidelines advise that the alternatives analysis in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project, and would achieve most of the project objectives. As discussed previously in this EIR, the Project would not result in any significant, unavoidable impacts. Under CEQA, however, alternatives may also be considered if they would further reduce impacts that are already less than significant because of required or proposed mitigation. Impacts that would be significant, and for which the Project includes mitigation to reduce them to less than significant levels include:

- Health risks associated with exposure to TACs during temporary construction activities;
- Exacerbate active erosion at the Site;
- Loss of top soil during temporary construction activities;
- Discovery of unknown tribal cultural resources or archaeological resources during temporary construction activities; and
- Potential disturbance of bird nesting activity during breeding season.

8.3 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124, the EIR must include a statement of the objectives sought by the proposed Project. The stated objectives of the Project proponent are to:

- To provide needed housing affordable to low income households on an infill parcel of approximately 2.9 acres, consistent with the City of Napa’s General Plan Housing Element, housing policies, and State law for lower income residents in two modalities: apartments for families; and single room occupancy units for individuals.
- To aid the City of Napa in meeting its Regional Housing Needs Allocation (RHNA) obligation identified by the Association of Bay Area Governments (ABAG/MTC) for affordable housing and confirmed by the California Department of Housing and Community Development (HCD).
- To develop a project consistent with the City and Napa County’s Housing First policy to address the needs of Napa’s homeless and vulnerable populations, which includes seniors, those with disabilities, veterans, and at-risk families and individuals.
- To redevelop and retrofit an existing dilapidated structure to accommodate the Heritage House as an affordable housing project, including permanent supportive housing with on-site supportive services.
- To construct an affordable housing apartment complex for lower income families.
- To support the goals of the non-profit Applicants (the Gasser Foundation and Burbank Housing) to provide permanent housing for all Napa residents, which is a fundamental community need and the foundation for a healthy and vibrant community.

ALTERNATIVES ANALYSIS

8.3.1 Feasibility of Alternatives

CEQA, the CEQA Guidelines, and case law on the subject have found that feasibility can be based on a wide range of factors and influences. The Guidelines advise that such factors *can* include (but are not necessarily limited to) the suitability of an alternate site, economic viability, availability of infrastructure, consistency with a general plan or with other plans or regulatory limitations, jurisdictional boundaries, and whether the Project proponent can “reasonably acquire, control or otherwise have access to the alternative site” [Section 15126.6(f)(1)].

Alternatives Considered But Rejected

Location Alternative

CEQA encourages consideration of an alternative site when significant effects of the project might be avoided or substantially lessened. Only locations that would avoid or substantially lessen any of the significant impacts of the project and meet most of the project objectives need be considered for inclusion in the EIR. In order to identify an alternative site that might reasonably be considered to “feasibly accomplish most of the basic purposes” of the project, and would also mitigate some or all of the significant impacts of the project, it is assumed that such a site would need to have the following characteristics:

- Approximately 2.5 to three acres in size;
- A *Multi-Family Residential* General Plan designation that would allow multi-family uses and SRO facilities;
- Preferably developed with an existing structure that could be economically rehabilitated for adaptive reuse, although entirely vacant sites could be suitable;

- Served by available infrastructure and nearby transit amenities; and
- Immediately available.

However, location alternatives were rejected because the number of potentially suitable sites is extremely limited and development of such sites would not substantially reduce the severity of any of the Project's potentially significant impacts. Specifically, development of the alternative sites would not reduce the severity of the Project's potential TAC and tribal cultural resources impacts because construction would occur on the alternative sites in a similar manner to the proposed Site and the surrounding uses in an urban infill setting would likely be similar to that of the proposed Site. Alternative sites that are not located along a creek would avoid potential impacts to riparian habitats and the species they support, however most sites have trees on or near the site that could host nesting activity that would require pre-construction surveys to prevent construction disturbance. Development of alternative sites could also have the potential for uncovering unknown tribal cultural resources, which would not be determined until the CEQA process was initiated for the site. Further, these sites are not controlled by the applicant. Since no feasible alternative site was identified that would avoid or lessen the Project potential impacts, a location alternative was not further analyzed.

No Abandonment of the Valle Verde Drive Right-of-Way Alternative

Under this alternative, the City of Napa would not abandon the portion of Valle Verde Drive north of the intersection. As a result, the former street right-of-way would not be incorporated into the Site. Valle Verde would remain in its current configuration, and on-street parking currently used by the general public would continue to be available for such use.

This alternative was rejected because the Site would not be able to accommodate the Project as there would be insufficient site area available to accommodate the Valle Verde Apartments building and associated parking. In addition, this alternative would not substantially reduce the severity of any of the Project's potentially significant impacts because construction would occur in the same manner and require the same mitigation measures to reduce impacts to less than significant levels. Because this alternative would not avoid or lessen the Project impacts, it was not further analyzed.

8.3.2 Selection of Alternatives

In addition to the "No Project Alternative," the CEQA Guidelines advise that the range of alternatives discussed in the EIR should be limited to those that "would avoid or substantially lessen any of the significant effects of the project" [§15126.6(f)]. The discussion below includes two versions of a reduced scale alternative which could reduce Project impacts.

The Project, with alterations, mitigation measures, and permit conditions discussed throughout the EIR, would not result in any significant, unavoidable impacts. All impacts are capable of being reduced to acceptable levels with feasible measures and conditions. Under CEQA, however, alternatives may also be considered if they would reduce the severity of impacts that are already less than significant because of required or proposed mitigation. Therefore, this analysis focuses on alternatives that would reduce construction TAC impacts, impacts to special-status bats and minimize erosion and loss of top soil. Because there is the potential to discover unknown tribal cultural resources with any soil disturbance on the Site, this factor was not weighed heavily in the analysis of alternatives. Additionally, any construction activity has the potential to disturb bird nesting activity on or near the Site, and all construction activity would be subject to pre-construction surveys.

PROJECT ALTERNATIVES

No Project – No Development Alternative

The CEQA Guidelines stipulate that an EIR include a No Project Alternative to allow decision-makers to compare the impacts of approving the Project with the impacts of not approving the Project. Under the No Project – No Development Alternative, the existing Sunrise Napa Assisted Living Facility on the Heritage House Site would remain and the adjacent Valle Verde Site is undeveloped; therefore, this alternative would avoid the mitigated construction TAC impacts, the potential for erosion during construction, potential for bird nesting disturbance, and all other less than significant impacts. The No Project - No Development Alternative would not meet any of the proposed Project objectives to address underserved housing needs in the City of Napa.

No Project – Existing Plans and Policies Alternative

The Guidelines specifically advise that the No Project Alternative is “what would be reasonably expected to occur in the foreseeable future if the Project is not approved, based on current plans and consistent with available infrastructure and community services.” The Guidelines emphasize that an EIR should take a practical approach, and not “...create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment” [Section 15126.6(e)(3)(B)].

Since the Heritage House Site is currently developed with the vacant Sunrise Napa Assisted Living Facility, the “No Project – Existing Plans and Policies alternative could include the re-occupancy of the vacant building. The Valle Verde Site (approximately 1.3 acres) is vacant and presumably could be developed with a range of medium and higher density multifamily apartments, single-family attached and detached units, group residential, live-work housing, larger residential care facilities, and similar compatible uses such as day care. Under the MFR-33H General Plan designation, the Valle Verde Site could be developed with a maximum buildout of 32 dwelling units (25 dwelling units per acre).

The No Project – Existing Plans and Policies Alternative would have similar environmental impacts as the proposed Project because any development of the Site would likely result in the same construction TACs and erosion impacts because construction of this alternative would occur in a similar manner to the proposed Project. In addition, any development of the Site involving ground disturbance would have a similar potential for uncovering unknown tribal cultural or archaeological resources.

While the No Project – Existing Plans and Policies alternative would provide some amount of housing on the Valle Verde Site in the form of new construction and some expected re-use of the existing Sunrise Napa Assisted Living Facility on the Heritage House Site, it would not necessarily provide the same housing opportunities for the target resident population as the proposed Project, and therefore would not achieve the stated Project objectives to the same extent as the proposed Project.

Reduced Scale Alternative

Under the Reduced Scale Alternative, the existing vacant Sunrise Napa Assisted Living Facility on the Heritage House Site would be developed with 66 SRO units (including 8 accessible one-bedroom units), like the Project. Under this alternative, the Valle Verde Site (approximately 1.3 acres) would not be developed. Developing the Site with a smaller project would likely involve a shorter

construction timeframe and less grading, which may lessen construction TAC impacts as compared to the Project. A portion of Valle Verde Drive would not be abandoned, and there would not be a need for a lot line adjustment/lot merger. On-street parking would not be displaced. The Reduced Scale Alternative would have reduced erosion and loss of top soil compared to the Project, due the reduced construction disturbance area on the Site. However, the proposed stitch wall would still need to be constructed to minimize bank erosion. In addition, the Reduced Scale Alternative would have the same potential for uncovering unknown tribal cultural resources as the Project, although the Valle Verde Site would remain undisturbed. While this alternative would have reduced environmental impacts, the basic objectives related to the provision of affordable housing for low income families would not be met since the 24 affordable units would not be constructed, although the objectives related to the provision of supportive housing and SRO units would be achieved.

Bridge Removal Alternative

Under this alternative, as a condition of Project approval, the City of Napa would require removal of portions of the Zerba Bridge. Under this alternative, the City would require partial removal of the bridge, including the bridge decking and tops of piers in order to improve flood conditions, since the bridge acts as an impediment to floodwater flows during large storm events.

As described in *Section 3.10*, under the Bridge Removal Alternative, the BFE at the existing Sunrise Napa Assisted Living Facility and the proposed Valle Verde Apartments would be 38.0 and 39.5 feet, respectively. Similar to the Project, the Valle Verde Apartments could be removed from the special flood hazard area, as its lowest adjacent grade is equal to or greater than the BFE of 39.5 feet. As with the Project, the existing Sunrise Napa Assisted Living Facility lowest adjacent grade on the northeast corner of the building would still be below the 38.0-foot BFE and would need to be elevated at or above the BFE to be removed from the floodplain.

Under the Bridge Removal Alternative, there are slight increases in flood elevations downstream of the Project Site due to the removal of the bridge deck and piers (refer to Figure 3.10-5 and 3.10-6). However, removal of the bridge would improve conditions in the floodplain upstream of the Project resulting from blockage due to the proposed Valle Verde Apartment building. As with the Project, the Bridge Removal Alternative would result in less than one-foot increase in floodplain elevations. In addition, the Bridge Removal Alternative would result in slight decreases in in-channel water surface elevation upstream of the Project whereas there are slight increases at the Project boundary.

Under the Bridge Removal Alternative, impacts to biological resources would be greater than the proposed Project. As described in *Section 3.4*, the Bridge Removal Alternative would result in potential impacts to steelhead within Salvador Creek. Under this alternative, the Applicant would be required to implement avoidance and minimization measures during bridge removal activities to reduce potential impacts to steelhead. Removal of the bridge would impact approximately 23 linear feet and 0.01 acre of USACE jurisdictional intermittent stream. The CDFW and RWQCB would also take jurisdiction over the intermittent stream and approximately 0.13 acre of riparian habitat. Under this alternative, the Applicant would be required to obtain any required permits for work in jurisdictional areas and compensate impacts at a 1:1 replacement ratio.

The Bridge Removal Alternative would have similar TAC and erosion impacts because construction of this alternative would occur in a similar manner to the proposed Project, i.e. the incremental effects of bridge removal would add slightly to the construction impacts disclosed in a number of

EIR sections, including Air Quality and Noise. In addition, any development of the Site would have a similar potential for uncovering unknown tribal cultural resource.

No Bikeway Improvements Alternative

The Project proposes to build an eight-foot wide bike path adjacent to its parking lot. The path would replace the current Valle Verde Drive connection to nearby trails. Under the No Bikeway Improvements alternative, bikeway improvements would not be implemented, and cyclists would either cycle through the Site drive aisle to connect to nearby trails, or use the existing offsite sidewalk which is narrow. This alternative would have similar environmental impacts as the proposed Project because it would likely result in the same construction TAC and erosion impacts because construction of this alternative would occur in a similar manner to the proposed Project. Under the No Bikeway Alternative, there would be a similar potential for uncovering unknown tribal cultural resource. The No Bikeway Improvements alternative would achieve all of the Project objectives. However, this alternative would not require the removal of seven trees to accommodate construction of the multi-use trail.

8.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE(S)

The *CEQA Guidelines* state that an EIR shall identify an environmentally superior alternative. If the environmentally superior alternative is the “No Project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (Section 15126.6(e)(2)).

Based upon the previous discussion, the environmentally superior alternative would be the No Project – No Development Alternative, which would avoid all Project impacts. This alternative would not meet any Project objectives.

The Reduced Scale Alternative would eliminate the Valle Verde Apartments from the Project, which may lessen the severity of the less than significant (with mitigation) construction-related TAC impact. This alternative would partially meet the Project objectives, though to a lesser extent since the 24 affordable units would not be constructed. The Reduced Scale Alternative would be the environmentally superior alternative to the Project. However, as discussed in each section of the EIR, all Project impacts are capable of being reduced to acceptable levels through implementation of feasible measures and conditions, and there would be no significant and unavoidable impacts from Project implementation.

SECTION 9.0 REFERENCES

1. County of Napa. *Napa County Housing Element Update Draft Housing Needs Assessment*. December 2014. Site accessed June 13, 2018. Available at <https://www.countyofnapa.org/DocumentCenter/View/3282/Draft-Final-Housing-Element-Needs-AssessmentDecember-2014-PDF>
2. City of Napa. *City of Napa Registry of Significant Trees*. January 27, 2016. Accessed on April 29, 2019. Available at: https://docs.wixstatic.com/ugd/51100c_4d351324e01d4fd492cadd8e731b99ff.pdf.
3. CARB. "Overview: Diesel Exhaust and Health". Accessed April 16, 2018. <https://www.arb.ca.gov/research/diesel/diesel-health.htm>.
4. State of California, Department of Conservation. *California Important Farmland Finder*. Accessed August 8, 2018. Available at: <https://maps.conservation.ca.gov/dlrp/ciff/>.
5. California Supreme Court published opinion in *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478), filed December 17, 2015.
6. PG&E. "Exploring Clean Energy Solutions". Accessed April 30, 2019. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.
7. California Building Standards Commission. "Welcome to the California Building Standards Commission". Accessed February 6, 2018. <http://www.bsc.ca.gov/>.
8. California Energy Commission (CEC). "2016 Building Energy Efficiency Standards". Accessed February 6, 2018. <http://www.energy.ca.gov/title24/2016standards/index.html>.
9. United States Energy Information Administration. *State Profile and Energy Estimates, 2015*. Accessed August 1, 2018. <https://www.eia.gov/state/?sid=CA#tabs-2>.
10. CEC. "Total System Electric Generation". Accessed August 1, 2018. http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.
11. EIA. "California State Profile and Energy Estimates Profile Analysis". Accessed August 1, 2018. <https://www.eia.gov/state/analysis.php?sid=CA#40>.
12. CEC. *California Energy Demand Updated Forecast, 2017-2027*. Accessed August 1, 2018. http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-05/TN214635_20161205T142341_California_Energy_Demand_Updated_Forecast.pdf.
13. CEC. Energy Consumption Data Management System. "Electricity Consumption by County". Accessed August 1, 2016. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.
14. California Gas and Electric Utilities. 2016 California Gas Report. Accessed August 1, 2018. http://docketpublic.energy.ca.gov/PublicDocuments/16-BSTD-06/TN212364_20160720T111050_2016_California_Gas_Report.pdf.

15. EIA. "Natural Gas Delivered to Consumers in California". Accessed August 1, 2018. http://www.eia.gov/dnav/ng/ng_sum_lsum_dc_u_sca_a.htm.
16. CEC. "Natural Gas Consumption by County". Accessed August 1, 2018. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.
17. California Gas and Electric Utilities. 2017 Natural Gas Market Trends and Outlook. Accessed August 1, 2018. http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-04/TN222400_20180131T074538_STAFF_FINAL_REPORT_2017_Natural_Gas_Market_Trends_and_Outlook.pdf.
18. U.S. EIA. *California State Profile and Energy Estimates: Profile Analysis*. Accessed August 1, 2018. <http://www.eia.gov/beta/state/analysis.cfm?sid=CA>
19. California Department of Tax and Fee Administration. Net Taxable Gasoline Gallons. Accessed August 1, 2018. http://www.cdtfa.ca.gov/taxes-and-fees/MVF_10_Year_Report.pdf.
20. U.S. EPA. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Accessed August 1, 2018. http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_statistics/html/table_04_23.html.
21. U.S. Department of Energy. Energy Independence & Security Act of 2007. Accessed August 1, 2018. <http://www.afdc.energy.gov/laws/eisa>.
22. Public Law 110–140—December 19, 2007. Energy Independence & Security Act of 2007. Accessed August 1, 2018. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.
23. National Highway Traffic Safety Administration. *Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards*. August 28, 2012. Accessed August 1, 2018. <http://www.nhtsa.gov/About+NHTSA/Press+Releases/2012/Obama+Administration+Finalizes+Historic+54.5+mpg+Fuel+Efficiency+Standards>.
24. Miller Pacific Engineering Group. *Updated Geotechnical Investigation*. January 29, 2019.
25. CARB. "The Advanced Clean Cars Program". Accessed April 6, 2018. <https://www.arb.ca.gov/msprog/acc/acc.htm>.
26. DTSC. "Hazardous Waste and Substances Site List (Cortese)". Accessed August 1, 2018. [http://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=cortese&site_type=csites,open,fuds,close&status=act,bklg,com,colur&reporttitle=hazardous+waste+and+substances+site+list+\(cortese\)](http://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=cortese&site_type=csites,open,fuds,close&status=act,bklg,com,colur&reporttitle=hazardous+waste+and+substances+site+list+(cortese)).
27. State of California. 2013. *2013 State Hazards Mitigation Plan*. Accessed April 23, 2018. http://hazardmitigation.calema.ca.gov/plan/state_multi-hazard_mitigation_plan_shmp.
28. Basics Environmental. *Phase I Environmental Site Assessment*. December 9, 2014.
29. City of Napa. *Envision Napa 2020, City of Napa General Plan*. December 1998.

30. City of Napa. *Envision Napa 2020, City of Napa General Plan*. Figure 8-7 Flood Water Inundation from Dam Failure. December 1998.
31. Association of Bay Area Governments. *Tsunami Inundation Map for Emergency Planning San Francisco Bay Area*. Site accessed August 8, 2018. <http://gis.abag.ca.gov/website/Hazards/?hlyr=femaZones>.
32. Association of Bay Area Governments. *Rainfall-Induced Landslides*. Accessed August 8, 2018. <http://gis.abag.ca.gov/website/Hazards/?hlyr=existingLndsld#nogo1>.
33. City of Napa. Policy Resolution No. 27. *A Policy Resolution of the City Council of the City of Napa, State of California, Amending Standard Mitigation Measures and Conditions of Approval for All Development Projects within the City of Napa*. Adopted 08/04/92. Amended 12/03/02.
34. California Department of Conservation, Division of Mines and Geology. *Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area*. 1987. Accessed August 8, 2018. <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>
35. ABAG. Plan Bay Area. Priority Development Area Showcase. <http://gis.abag.ca.gov/website/PDAShowcase/#nogo1>.
36. State of California, Department of Finance. E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change – January 1, 2017 and 2018. May 2018. [Accessed: August 7, 2018](#). Available at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-1/>.
37. State of California, Department of Finance. Table 2: E-5 City/County Population and Housing Estimates, 1/1/2018. Accessed: August 7, 2018. Available at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.
38. County of Napa. *Napa County Housing Element Update Draft Housing Needs Assessment*. December 2014. Site accessed June 13, 2018. Available at: <https://www.countyofnapa.org/DocumentCenter/View/3282/Draft-Final-Housing-Element-Needs-AssessmentDecember-2014-PDF>.
39. City of Napa. *Downtown Napa Specific Plan Draft PEIR*. January 2012.
40. City of Napa Fire Department. *2016 Annual Report*. Accessed August 7, 2018. <https://www.cityofnapa.org/DocumentCenter/View/2638/2016-Annual-Report>
41. Jack Schreder & Associates. *School Facilities Needs Analysis for Napa Valley Unified School District*. 2015. Table 1 – Student Generation Factors
42. Personal Communication. Lark Ferrell, Housing Manager. City of Napa. Email correspondence on April 22, 2019.
43. City of Napa Municipal Code. Title 16 Subdivisions. Chapter 16.32 Dedications, Fees, and Reservations.
44. City of Napa. *Urban Water Management Plan: 2015 Update*. September 2017
45. Napa Sanitation District. About Us. <http://www.napasan.com/Pages/Section.aspx?id=76>.

46. CalRecycle. Facility/Site Summary Details: Potrero Hills Landfill (48-AA-0075). Accessed September 5, 2018. <http://www.calrecycle.ca.gov/SWFacilities/Directory/48-AA-0075/Detail/>.
47. CalFIRE. CalFIRE Fire Hazard Severity Zones. Accessed on April 26, 2019. Available at: http://frap.fire.ca.gov/webdata/maps/napa/fhszl_map.28.pdf.
48. WRA. Biological Resources Technical Report Napa Creekside Housing Project. July 2019.
49. EPA. EJSCREEN. EPA's Environmental Justice Screening and Mapping Tool (Version 2018). <https://ejscreen.epa.gov/mapper/>
50. Illingworth & Rodkin, Inc. Heritage House & Valle Verde Air Quality and Greenhouse Gas Assessment. March 20, 2019.
51. Illingworth & Rodkin, Inc. Heritage House Environmental Noise and Vibration Assessment. February 25, 2019.
52. Illingworth & Rodkin, Inc. Heritage House NEPA Noise Assessment. February 25, 2019.
53. Schaaf & Wheeler. Hydraulic Analysis for 3700/3710 Valle Verde Drive Project. June 21, 2019.