



- Legend**
- Project Site
  - Parcel Lines
  - Sewer Mains
  - Recycled Water Mains
  - Manholes
  - ▲ Potable Water Service Location

Source: Data provided by the City of Napa and NSD in 2013; adapted by Ascent Environmental in 2013

Exhibit 3.10-1

Utility Infrastructure and Potential Connections to the Project Site



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## ELECTRICITY AND NATURAL GAS

Electricity and natural gas service to the site would be provided by PG&E. Major energy producing facilities within Napa county include Monticello Dam, American Canyon Powerplant, Napa State Hospital, Pacific Union College, Yountville Cogeneration facility, and the Soscol Water Recycling Facility. Napa County does not have any natural gas production (Napa County 2008). Table 3.10-16 provides information related to electricity and natural gas use at the existing Napa County Jail from December 2002 through June 2012. Electrical and natural gas connections are currently available at the project site (Owens, pers. comm., 2013b).

<b>Table 3.10-16 Electricity and Natural Gas Use at the Existing Napa County Jail Cumulative Monthly Demand December 2002 through June 2012</b>			
	<b>Average</b>	<b>Minimum</b>	<b>Maximum</b>
Gas	5,970 therms	2,290 therms	12,389 therms
Electric	186,890 kWh	5,860 kWh	395,700 kWh
Notes: kWh = kilowatt hour Source: Cahill, pers. comm., 2013			

## SOLID WASTE

The Napa Recycling and Waste Services (NRWS) and the Napa County Recycling and Waste Services (NCRWS) provide recycling, garbage, and yard waste collection services in the City and southern unincorporated Napa County. NRWS and NCRWS work together with the City, Napa County, and customers within their service area. (NRWS 2013).

NRWS collects waste and transports it to the Devlin Road Transfer Station, located in American Canyon, which is owned and operated by the Napa-Vallejo Waste Management Authority (NVWMA). The transfer station has a permitted capacity to process 1,440 tons per day (Calrecycle 2013). Currently, approximately 476 tons are accepted each day (Kelly, pers. comm., 2013).

Solid waste from the Devlin Road Transfer Station is hauled to Keller Canyon Landfill, located in Contra Costa County. Keller Canyon Landfill Company is permitted to accept up to 3,500 tons per day to a total capacity of 75 million cubic yards. As of November 2004, the landfill had a remaining capacity of over 63 million yards. Operation of the landfill is expected to remain available until the end of 2030 (Calrecycle 2013). The site currently handles 2,500 tons of waste per day (Pleasant Hill Bay Shore Disposal 2013).

In 2009, the current Napa County Jail generated approximately 122 tons of waste (Cahill, pers. comm., 2013). At a maximum capacity of 264 inmates, this results in a solid generation rate of 2.5 pounds per day per inmate is assumed.

### 3.10.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

#### METHODS AND ASSUMPTIONS

The following impact discussions rely on various demand factors to determine the environmental effects that would be associated with implementation of the project. While electrical and natural gas requirements are based on facility design, water and wastewater demand and solid waste generation is estimated using data associated with the existing Napa County Jail. The demand factors used for the purpose of this analysis are provided as follows:

- ▲ Water: 90 gpid,
- ▲ Wastewater: 90 gpid,
- ▲ Electricity: 3,180 kilowatts per year (kW/year),
- ▲ Gas: 100,800 therms/year, and
- ▲ Solid Waste: 2.5 pounds per inmate per day.

Electricity and natural gas consumption rates are based upon the ratio of energy used at the existing jail compared to square footage. These demand factors are considered to be conservative because the facility would be constructed to Title 24 standards.

## THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, a utilities and service systems impact is considered significant if implementation of the proposed project would do any of the following:

- ▲ result in a lack of sufficient water supplies available to serve the project from existing resources and entitlements, and/or a need for new or expanded entitlements.
- ▲ require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▲ require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▲ exceed wastewater treatment requirements of the applicable RWQCB;
- ▲ result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- ▲ generate waste materials that would exceed the permitted capacity of local landfills; or
- ▲ violate federal, state, and/or local statutes and regulations related to solid waste.

Although not included in Appendix G of the State CEQA Guidelines, a utilities and service systems impact is considered significant if implementation of the proposed project would:

- ▲ create demand for electricity or natural gas service that would require or result in the construction of new electricity or natural gas facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

## ISSUES OR POTENTIAL IMPACTS NOT DISCUSSED FURTHER

The project would generate solid waste materials that would be similar to those associated with domestic use (e.g., food waste, paper, limited medical-related waste) and construction-related waste from grading and clearing the site as part of project implementation. Napa County would follow all relevant federal, state, and local statutes and regulations associated with collection and disposal of waste generated at the site. Thus, there would be no impact related to violation of solid waste laws and regulations and this topic is not discussed further in this DEIR.

NSD currently meets NPDES discharge requirements. Because the project would not be implemented unless the WWTP is capable of treating flows at levels that are within the NPDES requirements, these requirements could not be violated. Thus, there would be no impact and this topic is not discussed further in this DEIR.

## IMPACT ANALYSIS

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**Impact 3.10-1** **Water Supply and Infrastructure Impacts.** Total water demand for the new jail and staff-secure facility would be approximately 63 afy at full buildout of the project. This demand would be partially offset by reduced demand at the existing jail. While water would be available to meet this demand during normal and multiple-dry years; based on the City's UWMP, the City faces a near term deficit in water supplies in single-dry years (i.e., if a "single dry year" occurred within the next 20 years). The City has historically accessed "carryover" water and other supplemental supplies to address any one time deficits, and the project would employ the same conservation measures as the rest of the City service area during single-dry years, such that overall, sufficient supplies would be available. This would be a *less-than-significant* impact.

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SB 610 (included in CEQA as California Code of Regulations [CCR] 15155) established the primary legal standards for assessing the sufficiency of water supplies for new development projects. Affected land developments are those that meet certain size thresholds. The thresholds are met for developments that include more than 500 residential dwelling units, or industrial, manufacturing or processing plants, or an industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

This proposed project does not meet the strict definitions of these thresholds, but in effect is a "residential" project because it functions much like a residential development, with water going toward drinking, cooking, showers, laundry, and landscape irrigation. Thus, a "per dwelling unit" equivalency analysis was conducted to determine if the project would consume an amount of water above or below the thresholds expressed in CCR 15155.

According to the City of Napa UWMP, the average water demand for single-family residence over the long term (2020 and beyond) is approximately 0.31 afy (see tables 5-7 and 5-8 of the UWMP). Thus, a 500 dwelling unit project would consume approximately 155 afy. As described below, the project at full buildout would consume an estimated 63 afy. Thus, it is not considered a "water supply project" as defined by CEQA. Nevertheless, this EIR evaluates the impacts associated with providing this amount of water to the project using the same methodology required by CCR 15155.

Under the proposed project, a new County Jail would be constructed at a new location to replace the existing facility. The project site is outside of the City of Napa water service area and would require a new connection to the City's infrastructure and the City would be required to amend its sphere of influence boundary through Napa County LAFCO. While groundwater wells are located on the project site, these wells would be decommissioned as part of the project (see Section 2.4.5, "Utilities and Service Systems," of the Project Description).

For the purposes of this analysis, projected potable water demands are considered to be the same during normal, dry, and multiple dry years. While the existing jail facility would remain in place, it would be converted to a holding area for inmates awaiting court dates, and continued use as office space. Future use of the unoccupied space is not known at this time; however, some portion of the existing demand would transfer to the new jail site. Because it's not possible to calculate the demand that would remain downtown with precision, this analysis assumes that water demands from the new jail facility (366 beds or 526 beds) and secure-staff facility are a net addition to the City's water system, even though this is acknowledged to be an over estimate and a conservative way to evaluate the project's water supply impacts. Additionally, inmates at the jail are from Napa County. The city of Napa water service area includes the cities of Napa and St. Helena, which together account for approximately 60% of the county population. It is reasonable to assume that 60% of the inmates, then, would be "transferred" from one land use (their homes) to another (the jail) within the same service area, and that their water use would not increase (only 40% of the water use, then, would be "new").

The project would be constructed in phases over time as demands for new bed space occur. A 366-bed facility would be operational in 2018; a staff-secure facility with 100 beds would be constructed by 2021; and an

additional 160 beds would be constructed by 2025. As described above, the average water demand at the existing jail is 90 gpid. Using this demand factor, water requirements would be approximately: 32,940 gpd (37 afy) for the 366-bed facility; 9,000 gpd (10 afy) for the 100-bed staff-secure facility; and 14,400 gpd (16 afy) for the additional 160-bed expansion. Total demand for the new jail and staff-secure facility would be approximately 63 afy at full buildout of the project. The project’s demands in relation to normal year water supplies as projected in the City’s UWMP are shown in Table 3.10-17. In addition to the reasons described above, these demand calculations are considered to be conservative because the County would design facilities to meet LEED gold standards. To meet water conservation requirements under LEED gold standards, the project would include water efficiency strategies, such as low flush toilets, timed showers, and high-efficiency clothes washers. These strategies are not currently implemented at the existing jail, and therefore, the assumed demand factor of 90 gpid is likely greater than what would occur upon implementation of the project.

Year	Condition	No Project Demands			With Project Demands			
		Total Supplies	Demands	Surplus (Deficit)	Supply as Percentage of Demands	Demands	Surplus (Deficit)	Supply as Percentage of Demands
2015	Normal	31,340	14,900	16,440	210%	14,900	16,440	210%
	Multiple Dry	21,629	14,754	6,876	147%	14,754	6,876	147%
	Single Dry	13,533	14,395	-862	94%	14,395	-862	94%
2020	Normal	31,340	14,300	17,040	219%	14,337	17,003	219%
	Multiple Dry	21,629	14,206	7,423	152%	14,243	7,386	152%
	Single Dry	13,533	13,803	-270	98%	13,840	-307	98%
2025	Normal	31,340	14,260	17,080	220%	14,323	17,017	219%
	Multiple Dry	21,337	14,286	7,052	149%	14,349	6,989	149%
	Single Dry	13,533	13,759	-226	98%	13,822	-289	98%
2030	Normal	31,340	14,390	16,950	218%	14,453	16,887	217%
	Multiple Dry	21,191	14,429	6,762	147%	14,492	6,699	146%
	Single Dry	14,409	13,891	518	104%	13,954	455	103%
2035	Normal	31,340	14,022	17,318	224%	14,085	17,255	223%
	Multiple Dry	21,191	14,560	6,631	146%	14,623	6,568	145%
	Single Dry	14,410	14,022	388	103%	14,085	325	102%

Notes: Multiple dry years reflect the average of the three-year-period shown in Table 3.10-12  
 Sources: City of Napa 2011; calculations by Ascent Environmental in 2013

As shown above, the existing water supply from the City of Napa would be sufficient to meet project needs over the long-term during normal water years.

**Water Supply Risk**

As described above, City water demands in normal and multiple dry years are expected to be met. Likewise, project demand would be met during normal and multiple dry year scenarios. In single dry years, however, the City has determined that demand would be greater than supply (see Table 3.10-17) because drought conservation measures would not have started. The potential deficit could occur during single-dry years in the period from 2015 through 2025. This potential deficit is expected to change to a slight surplus by 2030, and following years due to improved water use efficiency by City customers (City of Napa 2011). City of Napa projected water supplies and demands plus the proposed project are shown in Table 3.10-17.

In order to balance its total water supplies and demands during single-dry years, the City would need to receive and/or purchase water from the SWP. While the 2010 UWMP considers only water allocations set forth in Table

A, as shown in Table 3.10-5, water supplies are derived from a variety of SWP sources. Between 2008 and 2011, the City relied upon several of these sources and did not require a full allocation from Table A (e.g., SWP was supplied from Table A, and carryover, Article 21, Turnback Pool purchases, and the Yuba Accord Dry Year Program). Thus, while Table A supplies are important and used to consider future water supplies, they are not the exclusive component of the overall SWP deliveries to the City.

As discussed in Section 3.10.2, “Environmental Setting,” the Napa Pipe WSA was recently adopted by Napa County. Similar to the conclusions provided in the Napa Pipe WSA, in the event of a single-dry year scenario, the City would likely purchase carryover water or other supplemental supplies as it has done in the past. The City may also adopt a resolution to declare a water shortage emergency and implement the City’s WSCP, as it has done in the past. This plan has been shown to reduce demand by over 31% (City of Napa 2011), which is more than sufficient to make up for the 2% to 6% shortfall shown in Table 3.10-17. While the project, as its maximum 526-bed capacity would add up to 63 afy to annual demand, this equates to less than 0.5% of total demand in the City of Napa; this total would not substantially affect the ability of the City to supply its customers. The WSCP provides specific criteria for triggering various stages of action, and prioritizes the use of available water as: 1) health and safety; 2) commercial and industrial; 3) existing landscaping; 4) new demand; and 5) agriculture (City of Napa 2011). Restrictions that may be invoked as a result of a shortage include: operation of decorative fountains, the use of hoses without shut-off nozzles; hosing down pavement and driveways; draining and filling swimming pools; withdrawal of water from hydrants except for firefighting; serving water to restaurant patrons except on request; and daytime watering of landscapes. Under severe water shortage, restriction become greater and may include: allocations of water for individual customers at varying percentages of historical usage; a requirement for the City’s 50 largest users to submit a water conservation plan; and potential establishment of a special block rate structure to address drought-related water purchase and administration expenses.

Thus, while a water shortage could occur during a single-dry year, the City of Napa has the ability to address shortfalls, and the project would not substantially affect this outcome. Sufficient water is available now and over the next 20+ years in normal and multiple-dry year scenarios. Therefore, the project would have a **less-than-significant** impact on water supply.

Water would be piped from a connection point located on the west side of SR 221 for a distance of approximately 0.2 mile. The pipeline would be installed along areas that are currently disturbed, including along Basalt Road and under SR 221. Impacts associated with installing the water pipeline would be similar to other earthmoving activities discussed throughout this document and would be mitigated as appropriate through measures described herein. Thus, impacts associated with the environmental effects of installation of a new water pipeline would be **less than significant**.

## Mitigation Measure

*No mitigation is required.*

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<b>Impact 3.10-2</b>	<b>Wastewater Collection, Conveyance, and Treatment Infrastructure.</b> Under the existing conditions, the 66-inch trunk main that would serve the project is at capacity, and the WWTP is nearing capacity. Implementation of the project would require upgrades to the system in order to meet the project’s wastewater conveyance demands. Thus, this impact would be <b>potentially significant</b> . This impact would be reduced to a less-than-significant level with implementation of Mitigation Measure 3.10-2.
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Under the existing conditions, the project site is not within the NSD service area and does not have any connections to the existing collection and conveyance infrastructure. Thus, implementation of the project would require actions to extend the service area and construction of a pipeline to tie into the existing sewer main. A

new connection could be established through two routes: along Streblov Drive to connect to NSD's 66-inch truck main or an 8-inch line that serves the golf course; or, the to a main south of the project site along Basalt Road to connect near Enterprise Court (see Exhibit 3.10-1). A connection through Streblov road would be approximately 0.5 mile long, and a connection along Basalt Road would be approximately 0.3 mile long. The specific routes would be determined during detailed project design; however, connections would be made through existing roadways, and would require the County or NSD to obtain right-of-way and easements from relevant agencies (e.g., Caltrans, City of Napa). The project would be responsible for funding and constructing the necessary connections in conformance with NSD's standards. The connection point would be inspected, repaired as necessary, and accepted by NSD as a public main. In addition, a capacity analysis would be completed to ensure that sewer main is capable of serving the project.

The NSD collection system is in need of various upgrades to reduce substantial system-wide I/I issues. Some of these projects have been completed, which has resulted in reduced peak wet-weather flows in the 66-inch main located near the project site. However, no mainline improvements listed in the CMSP had been conducted in areas close to the project (Healy, pers. comm., 2013), and the pipeline is currently at capacity for wastewater flows (Damron, pers. comm., 2013). Thus, inadequate capacity would be available to meet project demands, and the project would require facility upgrades the construction of which could result in effects on the environment. This would be **potentially significant** impact.

In addition to an inadequate collection system, the NSD's influent pump station at the WWTP is close to reaching capacity during wet-weather events. To address this capacity constraint, NSD has plans for a variety of I/I upgrades that would reduce flows within the pipelines carrying wastewater to the WWTP and would ultimately reduce the flows through the influent pump station at the WWTP, which would free up additional treatment capacity (Damron, pers. comm., 2013).

For the purposes of this analysis, it is assumed that wastewater flow rates would be 90 gpid, based on records from the existing county jail. The project would be built in phases, which correspond to: 366 beds by 2018, an additional 100 beds for the staff secure facility in 2021, and another 160 beds in 2025 (to expand to 526 beds). Using the 90 gpid demand factor, wastewater flows from the proposed jail would be approximately:

- ▲ 32,940 gpd for the 366-bed facility in 2018;
- ▲ 9,000 gpd for the 100-bed staff secure facility;
- ▲ and 14,400 gpd for the additional 160-beds.

This would total 56,340 gpd of wastewater generation at full buildout of the project, which would be partially offset by reductions expected at the existing jail site. Because the wastewater pipelines and the influent pump station are experiencing capacity limitations and the project would contribute to the exacerbation of these capacity limitations, this impact would be **significant**.

### **Mitigation Measure 3.10-2. Coordinate with NSD to Fund and/or Implement I/I Projects to Reduce Wastewater Flow Throughout the System**

*In accordance with the Board of Directors of NSD, under Resolution No. 11-025, the County will coordinate funding and/or implement I/I reduction projects to provide sufficient wastewater conveyance capacity to meet the demands of the project. Specifically, the County will contribute funding to Basin L – I/I Reduction Projects (project 1, 2, 3, and/or 4) and/or Basin I/J – I/I Reduction Project 1 as identified in Resolution No. 11-025. The level of funding will be determined in consultation between the County and NSD, at a 2:1 (improvements to impacts) ratio. All necessary agreements between the County and NSD, and all LAFCO approval actions will be completed before the start of construction of the proposed project.*



Because implementation of Mitigation Measure 3.10-2 will include funding a larger I/I reduction project that would account for twice the demand of the proposed project's wastewater flows, implementation of this mitigation measure would allow for adequate wastewater collection and conveyance systems associated with the project. In addition, the net decrease in flow would allow for an increase in capacity at the WTP to serve the project. Construction projects associated with these improvements are similar or identical to those included in the master plans addressing NSD's treatment and collection systems. The City would complete all necessary environmental review associated with the project; however, pipe repair projects are generally found to be categorically exempt from review under CEQA due to their limited scope and duration. Because construction of or contribution to planned I/I projects will repair/replace existing pipes that have substantial I/I constraints, and are not expected to result in significant secondary impacts, the required mitigation would reduce this impact to a **less-than-significant** level.

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**Impact 3.10-3** **Increased Natural Gas and Electricity Services.** Implementation of the proposed project would result in increased demands for electricity and natural gas. While the project would result in improvements to existing on-site electrical and natural gas facilities, proposed improvements would be contained within the developed footprint of the project site and no off-site infrastructure would be required. Further, PG&E staff has indicated that it would be able to adequately serve the project site (Owens, pers. comm., 2013a). Therefore, this is a **less-than-significant** impact.

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Implementation of the proposed project would increase demands for electricity and natural gas and would require upgrades to existing utility connections. Electrical and natural gas infrastructure is currently available at the site (Owens, pers. comm., 2013b); however, the project would require improvements to these facilities. The details of these improvements are currently unknown but would be typical of other office/industrial facilities in the County and improvements would be contained within the developed footprint of the project site. No off-site infrastructure would be required. The project is estimated to require a peak demand of 100,800 therms/year of gas and 3,180,800 kW/year. PG&E staff has indicated that it would be able to adequately serve the project site (Owens, pers. comm., 2013a). Thus, this impact would be **less than significant**.

## Mitigation Measure

*No mitigation is required.*

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**Impact 3.10-4** **Increased Solid Waste Generation.** Implementation of the proposed project would result in the generation of approximately 0.78 ton of solid waste per day at full buildout. Because the Devlin Road Transfer Station and the Keller Canyon Landfill have adequate capacity to handle the project's solid waste collection and disposal demands, and because the County would comply with all laws and regulations associated with the collection, transport, and disposal of solid waste, this impact would be **less than significant**.

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As noted above, NRWS collects waste and transports it to the Devlin Road Transfer Station, located in American Canyon, which is owned and operated by the NVWMA. The transfer station has a permitted capacity to process 1,440 tons per day (Calrecycle 2013). Currently, approximately 476 tons are accepted each day (Kelly, pers. comm. 2013). Solid waste from the Devlin Road Transfer Station is hauled to Keller Canyon Landfill, located in Contra Costa County. Keller Canyon Landfill Company is permitted to accept up to 3,500 tons per day to a total capacity of 75 million cubic yards. As of November 2004, the landfill had a remaining capacity of over 63 million yards. Operation of the landfill is expected to remain available until the end of 2030 (Calrecycle 2013). The site currently handles 2,500 tons of waste per day (Pleasant Hill Bay Shore Disposal 2013).

Based on County estimates, the average solid waste generation rate is 2.5 pounds per inmate per day. Construction and operation of the proposed jail, at full buildout would be anticipated to generate an additional

1,565 pounds of solid waste per day (2.5 pounds per inmate per day x [526 inmates + 100 inmates from the staff-secure facility]), or 0.78 ton per day (0.05% of the Devlin Road Transfer Station daily capacity and 0.02% of the Keller Canyon Landfill daily capacity). This increased amount of solid waste use is not a substantial amount of the landfill's available capacity at the Delvin Road Transfer Station or Keller Canyon Landfill and would not result in the need to expand or construct new landfill facilities.

Because solid waste facilities would have adequate capacity to meet the project's solid waste demands, and because the County would comply with all laws and regulations associated with the collection, transport, and disposal of solid waste, this impact would be **less than significant**.

## Mitigation Measure

*No mitigation is required.*



## 4 CUMULATIVE IMPACTS

This DEIR provides an analysis of overall cumulative impacts of the proposed County Jail Project, taken together with other past, present, and probable (i.e., reasonably foreseeable) future projects producing related impacts, as required by the State CEQA Guidelines (14 California Code of Regulations Section 15130). The goal of this analysis is twofold: first, to determine whether the impacts of all such projects would be cumulatively significant; and, second, to determine whether the proposed County Jail Project would itself cause a “cumulatively considerable” (and thus significant) incremental contribution to any such cumulatively significant impacts.

### 4.1 CEQA REQUIREMENTS

Section 15130 of the State CEQA Guidelines requires that an EIR discuss cumulative impacts of a project and determines whether the project’s incremental effect is “cumulatively considerable.” The definition of cumulatively considerable is provided in Section 15065(a)(3):

“Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

According to Section 15130(b) of the State CEQA Guidelines,

[t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

### 4.2 GEOGRAPHIC SCOPE OF THE CUMULATIVE ANALYSIS AND RELATED PLANS AND PROJECTS

State CEQA Guidelines Section 15130(b)(1) identifies two basic methods for establishing the cumulative environment in which the project is to be considered: the use of a list of past, present, and probable future projects (projects) and the use of projections contained in relevant planning documents (projections). For this DEIR, both the projects and the projections approach have been combined to generate the most reliable future projections possible.

#### 4.2.1 GEOGRAPHIC CONTEXT

The geographic area that could be affected by implementation of the proposed County Jail Project in combination with other projects varies depending on the type of environmental resource being considered. The general geographic area associated with different types of environmental effects of the project defines the scope of the area considered in the cumulative impact analysis (see Table 4-1). Also listed is the method of evaluation used to analyze cumulative impacts for each environmental resource (described further in the introduction to Section 4.2).

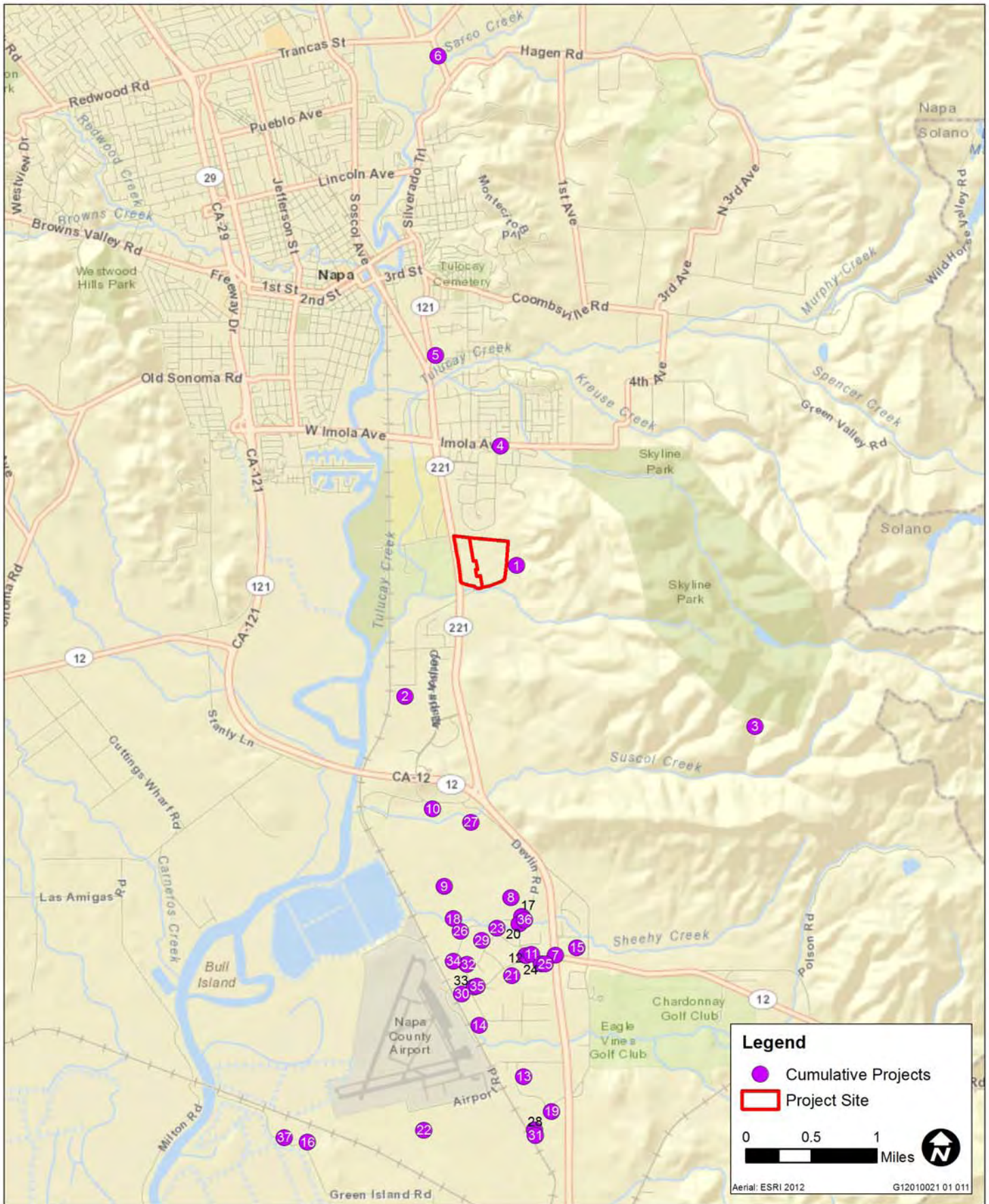
<b>Table 4-1 Geographic Scope of Cumulative Impacts and Method of Evaluation</b>		
<b>Resource Issue</b>	<b>Geographic Area</b>	<b>Method of Evaluation</b>
Aesthetics	Immediate project vicinity	Projects
Air Quality	Local (toxic air contaminants and odors) Air Basin (construction-related and mobile sources)	Projects and Projections
Greenhouse Gas Emissions	Global	Projections
Hazards and Hazardous Materials	Project site only (does not contribute to cumulative impacts)	Projects
Hydrology and Water Quality	Immediate project vicinity and Napa River watershed	Projects
Land Use	Immediate project vicinity	Projects
Noise	Immediate project vicinity (effects are highly localized)	Projects
Transportation and Traffic	Regional and local	Projects and Projections
Utilities and Service Systems	Regional	Projects and Projections
Notes: Projects = the use of a list of past, present, and probable future projects; Projections = the use of projections contained in relevant planning documents		
Source: Data compiled by Ascent Environmental in 2013		

For those environmental resources that were evaluated based on the projections approach, the projections take into consideration future projects that are not included in the below list of related plans and projects.

## 4.2.2 LIST OF RELATED PLANS AND PROJECTS

The list of past, present, and probable future projects used for this cumulative analysis is restricted to those projects that have occurred or are planned to occur within the County. For the purposes of this discussion, these projects that may have a cumulative effect on the resources of the project area will often be referred to as the “related projects.” These related projects are identified in Exhibit 4-1 and described in Tables 4-2 and 4-3; the map numbering corresponds to the numbers in Tables 4-2 and 4-3.





Source: Data provided by Napa County in 2013, adapted by Ascent Environmental in 2013

Exhibit 4-1

Locations of Related Projects within Napa County



Table 4-2 List of Related Projects			
Map Number	Lead Agency	Project Name	Project Description
1	Napa County	Syar Napa Quarry Surface Mining Permit P08-00337	This project includes continuation of the existing mining operations for an additional 35 years on property immediately adjacent to the project site; expansion of mining into approximately 291 acres and an increase in the depth of mining from 150 feet elevation to 0 feet elevation (above mean sea level); an increase in production of aggregate and aggregate related materials from approximately one million tons per year up to two million tons per year; and an amendment of the existing Reclamation Plan. Other activities and features associated with the proposed project include the relocation and improvement of two trails in Skyline Wilderness Park (which were originally constructed on Syar property) onto the Skyline Wilderness Park property.
2	Napa County	Napa Pipe Project	This project consists of a mixed-use residential neighborhood with 700–945 dwelling units, open space, neighborhood serving retail and restaurants, offices, and a hotel on 63 acres adjacent to the Napa River. The project also includes a Costco store, open spaces, and warehouse/industrial uses on 91 acres adjacent to the City’s existing business park.
3	Napa County	Suscol Mountain Vineyards Erosion Control Plan Application (P09-00176-ECPA)	The Suscol Mountain Vineyards Project is approximately 451 acres (395 net acres) of new vineyard within a 2,123-acre property. This includes vegetation removal and earthmoving and grading activities associated with soil cultivation, installation and maintenance of drainage and erosion control features, and vineyard planting.
4	Napa County and Napa Sanitation District	Milliken-Sarco-Tulocay (MST) Recycled Water Pipeline Project	The project will extend Napa Sanitation District’s recycled water pipeline from the wastewater treatment plant (WWTP) to Napa State Hospital (NSH) and further into the MST area to provide up to 2,000 acre-feet per year for landscaping and irrigation purposes.
5	City of Napa	Alexander Crossing Apartment Project	The project includes the development of 134 multi-family units (in 11 residential buildings) and a 4,800 square-foot community clubhouse on 6.39 acres.
6	Caltrans District #4	Sarco Creek Bridge Replacement Project	Caltrans proposes to remove the existing 35.5-foot wide, 31-foot long, two-span Sarco Creek Bridge (Bridge # 21-0008) and replace it with a 46-foot long, 44-foot wide, two-lane, single-span bridge. The bridge replacement would be completed as part of a bridge rehabilitation project that includes roadway widening, embankment work, and construction of a fish passage downstream of the bridge. This widening would not increase roadway capacity.
7	Caltrans District #4	State Route 12 / Jameson Canyon Road Widening	Caltrans is working with the Napa County Transportation and Planning Agency and the Solano Transportation Authority to widen a 5.8-mile stretch of State Route 12 through Jameson Canyon Road from a two-lane highway to a four-lane highway. The project extends from Highway Route 12 from the Highway 29 and Highway 12 junction in Napa County to Red Top Road & Highway 12 in Solano County. The project will also add a concrete median along the project route.
Source: Data provided by Napa County in 2013			

Table 4-3 includes a list of related projects that are located in the industrial area southwest of the project site. The list includes approved, pending, and completed (since 2012) projects.



Table 4-3 Airport Industrial Area Projects			
Map Number	Applicant	Project Name	Project Description
<b>Recent Projects – Approved / Under Construction</b>			
8	Marsha Ramsey HCV Napa Assoc 222 Kearny St, Suite 310 S.F., CA 94108	Montalcino at Napa Resort Hotel	408,184 sq. ft. of floor area 379 rooms & suites
9	Same as above	Montalcino at Napa Golf Course	18-hole golf course Driving range
10	Mike Fennel P.O. Box 3274 Napa, CA 94558	Suscol Creek Winery	Modify previous approval to increase production from 200,000 gallons per year (gpy) to 600,00 gpy; increase floor area of previously approved building from 61,281 sq. ft. to 66,338 sq. ft.; construct 7,500 sq. ft. of new floor area in a detached building; and increase employees from 21 to 35
11	William Maston Architect & Assc 384 Castro Street Mtn. View, CA 94041	Napa Gateway Plaza Phase 2	66,473 sq. ft. hotel with 100 rooms, conference/meeting rooms, and other amenities; 56,048 sq. ft. of retail; 10,348 sq. ft. of restaurant; and 41,182 sq. ft. of office floor area
12	William Maston Architect & Assc 384 Castro Street Mtn. View, CA 94041	Napa Gateway Plaza Phase 1	16,216 sq. ft. bank/office; 4,664 sq. ft. gasoline station/ convenience mart/fast food restaurant
13	Rick McClish 5510 Skyline Blvd Suite 201 Santa Rosa, CA 95403	Rinker Batch Plant	Small concrete batch plant; 250 sq. ft. office
14	James Lunt Foster's/Beringer Blass Wine Estate 655 Airpark Rd Napa, CA 94558	Napa Bottling Center	Phase 1 - convert 150,000 sq. ft. warehouse into a bottling bldg. with a 12,190 sq. ft. office & a 6,100 sq. ft. addition. Phase 2 - 21,197 sq. ft. processing & warehousing addition. Phase 3 - 57,635 sq. ft warehouse addition.
15	Napa Valley Crossroads PG, LLC 8413 Jackson Rd, #C Sacramento CA 95826	Napa Valley Crossroads	Construct two warehouse/distribution bldgs. (146,113 & 163,537 sq. ft.)
16	Phil Ziedman Matterhorn P.O. Box 5754 Santa Rosa, CA 95402	Ziedman	Establish concrete block mfg facility (5,300 sq. ft.)
17	Zapolski/Rudd, LLC c/o John Bowman P.O. Box 670 Napa, CA 94559	Zapolski Rudd Winery	Construct 34,510 sq. ft. for a 120,000 gal/yr winery

<b>Table 4-3 Airport Industrial Area Projects</b>			
<b>Map Number</b>	<b>Applicant</b>	<b>Project Name</b>	<b>Project Description</b>
18	Gateway Winery LLC c/o Kevin Teague DP&F 809 Coombs St Napa, CA 94559	Gateway Winery	Construct 261,000 sq. ft. (3 bldgs) for a 600,000 gal/yr winery/distillery; Approx 65 employees (2–3 shifts)
19	Panattoni Justin Bennett 8775 Folsom Blvd., Suite #200 Sacramento, CA 95826	Napa Airport Corporate Center	Construct 170,949 sq. ft. of light industrial floor area (4 bldgs)
20	Busby Enterprises 455 Technology Wy Napa, CA 94558	Busby Industrial Condo's	Construct a 27,677 sq. ft. spec industrial building. Parcel Map to split into 10 industrial condo units.
21	Napa Gateway Partners 2841 Sunrise Blvd., Suite200 Gold River, CA 95670	Greenwood Commerce Center	Modify previous approval to construct 371,467 sq. ft. of office/light industrial floor area (3 buildings)
22	Headwaters Construction, Inc. c/o Douglas Pope 50 Fullerton Ct #203 Sacramento, CA 95825	Headwaters 218	Construct a 645,000 sq. ft. spec. warehouse/distribution bldg.
23	Satish & Surekha Chohan 4650-A East 2nd St Benicia, CA 94510	Turnkey Technologies	Construct a 40,000 sq. ft. light industrial/office building.
24	Napa 34 Holdings c/o Brian Kaufman 2617 Castro St. Sacramento, CA 95818	Greenwood Commerce Center	Construct 5 office buildings totaling 113,136 sq. ft. and 3 warehouse buildings totaling 385,335 sq. ft.
25	Napa 34 Holdings c/o Kris Pigman 2481 Sunrise Blvd Gold River, CA 95670	Napa Commerce Center – Gasoline Station	Specific Plan Amendment, Modification & parcel map to replace 15,000 sq. ft. of office with gasoline station, convenience mart & carwash
26	David Busby 455 Technology Way Napa, CA 94558	Busby Winery	Construct a 18,162 sq. ft. building for a 50,000 gal/yr winery
27	Mary Rocca 129 Devlin Rd Napa, CA 94558	Rocca Family Winery	Construct 7,110 sq. ft. building for a 20,000 gal/yr winery; construct 2,660 sq. ft. of covered outdoor work area; and convert existing 2,000 sq. ft. residence to winery use
28	William Saks 1010 Main Street St. Helena, CA 94574	Napa Executive Management (Saks Office Building)	Construct a 67,839 sq. ft. 3-story office building.
29	Mr. Alan Sullivan Safe Harbor, LLC 110 Rancheria Road Kentfield, Ca 94904	Safe Harbor 2	61,879 sq. ft. wine storage building

Table 4-3 Airport Industrial Area Projects			
Map Number	Applicant	Project Name	Project Description
<b>Recent Projects – Pending</b>			
30	Rombauer Trust Inv, LLC, et. al c/o Meibeyer Law Group 1236 Spring St. St. Helena, CA 94574	Rombauer Vineyards	Construct a 130,000 sq. ft. facility for a 1,000,000 gal/yr winery
31	Panattoni Mike Kelley 8775 Folsom Blvd., Suite #200 Sacramento, Ca 95826	Napa Airport Corporate Center Phase 2	Construct a 279,385 sq. ft warehouse/distribution building.
32	Dennis Pauley 5400 Industrial Wy Benicia, CA 94510	E & P Properties Spec Warehouse	Construct a 103,410 sq. ft. warehouse
<b>Recent Projects – Completed</b>			
33	Dennis Pauley 5400 Industrial Wy Benicia, CA 94510	Metropolitan Van & Storage	Construct a 107,424 sq. ft. warehouse
34	Stewart Walkenhorst 1774 Industrial Wy Napa, CA 94558	Walkenhorst warehouse/Office Building	Construct a 37,695 sq. ft. warehouse/office building 132 parking spaces
35	Dennis Pauley 5400 Industrial Wy Benicia, CA 94510	Delicato Bottling Facility	33,526 sq. ft. interior tenant improvement with 2,503 sq. ft. of office within an existing 107,424 sq. ft. building.
36	Harvey Shein 6875 Enterprise Road Glen Ellen, CA 95442	Amorim Cork America	Construct a 48,133 sq. ft. building for a cork stopper company
37	Fahim Noorzay Ishaq Osman 1578 Green Island Rd American Canyon, CA 94503	Noorzay/Osman Auto Wrecking Yard	Establish an auto wrecking yard w/1140 sq. ft. office/storage bldg.
Source: Data provided by Napa County in 2013; adapted by Ascent Environmental in 2013			

The regional cumulative analysis area covers Napa County and includes an evaluation of the *Napa County General Plan*.

## 4.3 CUMULATIVE IMPACT ANALYSIS

For purposes of this EIR, the proposed County Jail Project would have a significant cumulative effect if:

- ▲ the cumulative effects of related projects (past, current, and probable future projects) are not significant and the incremental impact of implementing the proposed County Jail Project is substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact; or
- ▲ the cumulative effects of related projects (past, current, and probable future projects) are already significant and implementation of the proposed County Jail Project makes a considerable contribution to the effect.

The standards used herein to determine considerability are that either the impact must be substantial or must exceed an established threshold of significance.

### 4.3.1 AESTHETICS

Development of past and current projects, and future proposed projects continue to alter the visual environment in Napa County. In general, the visual resource impacts of the related projects are site-specific and would not necessarily combine with other projects that are not in the same viewshed to create a cumulative impact. Any related projects in close proximity to the project site would potentially result in cumulative impacts to visual resources in combination with the impacts of the project site development. The Syar Napa Quarry Surface Mining Permit project would be in close enough proximity to the project site that a cumulative effect could potentially occur in the same viewshed that includes the project site. However, the appearance of the quarry would not substantially change, and the construction of the proposed jail and ancillary facilities on the project site would not create significant visual impacts that would contribute to visual resource degradation in the viewshed. Therefore, cumulative viewshed impacts would be less than significant.

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create skyglow. The project site and surrounding area has minimal night time lighting under existing conditions, and does not presently contribute to skyglow in the area. Cumulative sky glow impacts are, therefore, less than significant. As described in Impact 3.2-4, the project would introduce new lighting sources at the project site; however, these fixtures would comply with County lighting design requirements and would not create an adverse skyglow condition. Therefore, the project would not have a considerable contribution to sky glow such that a new significant cumulative sky glow impact would occur. This would be a **less-than-significant** cumulative impact.

### 4.3.2 AIR QUALITY

#### SHORT-TERM CONSTRUCTION-RELATED IMPACTS

The Bay Area Air Quality Management District (BAAQMD) acknowledges that the entire San Francisco Bay Area Air Basin (SFBAAB), including Napa County, is a nonattainment area for state and federal ambient air quality standards for ozone and PM<sub>2.5</sub>, and state ambient air quality standards for PM<sub>10</sub> due to the combined levels of emissions generated by sources throughout the SFBAAB (including, but not limited to, the projects listed in Tables 4-2 and 4-3). Construction-generated emissions of ozone precursors (ROG and NO<sub>x</sub>) from related projects could violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. In addition, because the County is currently designated as a nonattainment area for ozone, construction-generated emissions of ROG and NO<sub>x</sub> could contribute on a cumulative basis to pollutant concentrations that exceed the ambient air quality standards because of growth in the area.

Construction-related emissions of ROG and NO<sub>x</sub> from project implementation were determined to be less than significant because project-related construction emissions would not exceed the established mass emission thresholds, which are considered to represent the allowable incremental contribution of a development while still progressing toward overall attainment within the SFBAAB, the construction-related emissions of ROG and NO<sub>x</sub> would not have a considerable contribution to a significant cumulative related impact with respect to ozone (Impact 3.3-1). This would be a **less-than-significant** cumulative impact.

Construction-related emissions of PM<sub>10</sub> and, correspondingly, PM<sub>2.5</sub>, from project implementation were determined to be significant (Impact 3.3-1). Implementation of mitigation measures identified for Impact 3.3-1, which include watering graded areas, covering haul trucks, street sweeping, limited vehicle speeds, and



minimizing idling time, would reduce these potential impacts to a less-than-significant level. Assuming that all related projects also implement all feasible dust control measures (consistent with BAAQMD and County guidelines and regulations), construction emissions from related projects may be reduced to less-than-significant levels, although it is likely that larger projects would result in significant and unavoidable air quality impacts on their own. However, because project implementation would not exceed the established thresholds, which are considered to represent the allowable incremental contribution of a development while still progressing toward overall attainment within the SFBAAB, the project-related construction would not have a considerable contribution to a significant cumulative air quality impact with respect to PM<sub>10</sub> and PM<sub>2.5</sub>. This would be a **less-than-significant** cumulative impact.

## LONG-TERM OPERATION-RELATED IMPACTS

Because Napa County is currently designated as a nonattainment area for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>, stationary-, area-, and mobile-source emissions could contribute on a cumulative basis to pollutant concentrations that exceed the ambient air quality standards because of growth in the area.

Long-term operation of the proposed project would result in regional emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> from area, stationary, and mobile sources (Impact 3.3-2). However, long-term operation-related emissions generated by the project would not exceed BAAQMD's significance thresholds for ROG, NO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>. Emissions from stationary sources would be regulated through BAAQMD's permitting process and implementation of best available control technologies (BACT) (all feasible measures to attain long-term air quality standards). Consequently, long-term operation of the proposed project would not contribute to an increase in regional emissions of ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> (the projected emissions inventory for the SFBAAB) of criteria pollutants that would conflict with the emissions budget used for regional air quality planning (i.e., BAAQMD's air quality attainment plans). This would be a **less-than-significant** cumulative impact.

Both BAAQMD and ARB have acknowledged that background levels of health risk are too high in their respective jurisdictions. TACs would be generated during project-related construction and operation activities; however, levels of TAC exposure would not exceed incremental increase thresholds regarding health risk exposure (Impact 3.3-3). These thresholds are considered to represent the allowable incremental level of health risk exposure without subjecting any nearby receptors to contribution of a development while still progressing toward overall risk reduction goals within both the SFBAAB and the state. This would be a **less-than-significant** cumulative impact.

### 4.3.3 GREENHOUSE GAS EMISSIONS

Cumulative greenhouse gas impacts are evaluated and presented in Section 3.4, "Greenhouse Gas Emissions."

### 4.3.4 HAZARDS AND HAZARDOUS MATERIALS

Hazardous materials impacts are site-specific rather than regional in nature. In addition, the storage, use, disposal, and transport of hazardous materials are extensively regulated by various federal, state, and local agencies. Therefore, cumulative hazardous materials impacts would be **less than significant** and are not addressed further.

## 4.3.5 HYDROLOGY AND WATER QUALITY

### WATER QUALITY

Overall water quality in the region has degraded over time as natural habitat has been converted to urban uses, and these uses have resulted in runoff of various pollutants into the Napa River (which is listed for nutrients, pathogens, and sedimentation/siltation on the Section 303[d] list of Impaired Water Bodies) and its tributaries. A variety of programs have been implemented with the goal of halting degradation of water quality and reversing this trend. Several state and federal agencies are involved in these programs, many of which come from the federal Clean Water Act. Nonetheless, a cumulative adverse water quality condition exists. Construction of the proposed project as well as construction of the related projects would result in surface disturbance through ground scraping, grading, trenching, and compaction associated with typical development activities. Existing vegetation would be removed thereby increasing the potential for erosion. Operational activities and proposed land uses (e.g., roadways, parking areas) would generate atmospheric pollution, tire-wear residues, petroleum products, and oil and grease which would be carried in stormwater runoff. These constituents could enter the storm drainage system and adversely affect water quality.

Napa County is a co-permittee on a municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System (NPDES) permit along with the cities of Napa, St. Helena, and Calistoga, and the town of Yountville. A Storm Water Pollution Prevention Plan (SWPPP) in support of the County's stormwater management program was completed in 2003, which outlines the County's approach to compliance with the requirements of the NPDES permit and addresses the program areas required under the MS4 permit.

Consistent with the County's SWPPP, project-specific SWPPPs that would include site-specific best management practices (BMPs) and any other necessary site-specific Waste Discharge Requirements or waivers under the Porter-Cologne Act would be prepared for each project to sufficiently reduce the potential surface water quality impacts during construction. In accordance with federal and state stormwater regulations, new construction and significant redevelopment must maintain pre-project hydrology and incorporate proper pollutant source controls, minimize pollutant exposure outdoors, and treat stormwater runoff through proper post-construction BMPs when source control or exposure protection are insufficient for reducing pollutant loads. Specifically, the County would be required to incorporate detention basins, post-construction BMPs, and low impact development stormwater management principles for operation of the proposed jail and ancillary facilities, which would provide some treatment of pollutants and would maintain the site's pre-project stormwater runoff. Therefore, project construction and operation and the construction and operation of related projects would reduce site-specific water quality impacts such that cumulatively adverse hydrology and water quality impacts would not occur and the project would not have a considerable contribution such that a new significant cumulative impact would occur. This would be a **less-than-significant** cumulative impact.

### STORMWATER CAPACITY

Development of the proposed jail and ancillary facilities in combination with development of the related projects would result in the addition of impervious surfaces, which could increase stormwater runoff. However, in accordance with federal and state stormwater regulations, new construction and significant redevelopment must maintain pre-project hydrology and incorporate proper pollutant source controls, minimize pollutant exposure outdoors, and treat stormwater runoff through proper post-construction BMPs when source control or exposure protection are insufficient for reducing pollutant loads. Therefore, before any construction-related ground disturbance, final drainage plans would be required to demonstrate that all runoff would be appropriately conveyed and not leave the project sites at rates exceeding pre-project runoff conditions. Therefore, the proposed project would not have a considerable contribution to cumulative stormwater drainage impacts such that a new cumulative impact would occur. This would be a **less-than-significant** cumulative impact.

### 4.3.6 LAND USE

No existing or reasonably foreseeable land use impacts were identified as a result of development of the project because it would not physically divide a community or conflict with any policies adopted for the purposes of avoiding environmental impacts. Therefore, it would not contribute to any cumulative land use impacts. Therefore, under cumulative land use conditions, the project would result in **no impact**.

### 4.3.7 NOISE

#### SHORT-TERM CONSTRUCTION-GENERATED NOISE

Cumulative impacts from construction-generated noise could result if other future planned construction activities were to take place in close proximity to the project and cumulatively combine with construction noise from the project. However, no other construction activity is planned to take place in close proximity to the proposed project. No significant cumulative impacts currently exist. Further, construction-related noise is typically a site specific impact that affects those in close proximity to the construction activities. Project-generated construction noise is exempt from the county noise standards. Therefore, because no other construction activities would cumulatively combine with the project and project generated construction noise is exempt from county noise standards the projects short-term construction-generated noise would not result in a substantial contribution such that a new significant cumulative noise impact would result. Therefore, under cumulative short-term noise conditions, the project would result in **no impact**.

#### LONG-TERM AMBIENT NOISE LEVELS

Cumulative noise levels could be affected by additional buildout of surrounding land uses and increases in vehicular traffic on affected roadways. Several new retail, commercial, industrial, and residential developments are planned for the City and County of Napa in the near future (e.g., Syar Napa Quarry Expansion and Surface Mining Permit, Alexander Crossing Apartments, Suscol Creek Winery). These projects could result in additional traffic-related noise on surrounding roadways and would contribute to cumulative noise impacts.

Future traffic noise levels were modeled based on Caltrans' traffic noise analysis protocol and the technical noise supplement and project-specific traffic data (Appendix D). As shown by the modeling, traffic noise levels would not result in a substantial increase in noise levels (i.e., less than 1 dB) on SR 221. A 3 dB increase would be an audible change. At less than 1dB, noise increases would not be noticeable. Further, the employee and visitor trips added to affected roadways would occur during typical business hours of the day when people are less likely to be disturbed by traffic noise. For these reasons, the project's contribution to this increase would not be considerable. Therefore, noise generated from project operation would not result in considerable contribution to a significant cumulative noise impact. Therefore, under cumulative long-term traffic noise conditions, the project would result in a **less-than-significant** cumulative impact.

The proposed project would result in additional noise sources from stationary equipment such as HVAC units, a PA system, and emergency electrical generators. The project site is an existing land use that is relatively remote and distant from offsite residential neighborhoods. The additional project-generated noise would not result in a substantial increase in ambient noise levels at any residence or to surrounding areas. Related projects would not cumulatively combine with stationary ambient noise levels at the project site because noise is typically site specific and dissipates with distance from the source. The future planned projects would not be located close enough to the project site for stationary noise to combine with project noise levels. Therefore, the project in combination with other projects would not result in a considerable contribution to a significant cumulative noise impact. Therefore, under cumulative long-term stationary noise conditions, the project would result in a **less-than-significant** cumulative impact.

### 4.3.8 TRANSPORTATION AND TRAFFIC

Cumulative traffic impacts are evaluated and presented in Section 3.9, “Transportation and Traffic.”

### 4.3.9 UTILITIES AND SERVICE SYSTEMS

#### WATER SUPPLY

Cumulative water supply impacts are evaluated and presented in Section 3.10, “Utilities and Service Systems.”

#### WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT

As described in Impact 3.10-2, the 66-inch main that would serve the project is currently at capacity and the NSD WWTP has limited remaining treatment capacity; thereby indicating an existing cumulative effect to the wastewater collection, conveyance, and treatment infrastructure that would serve the project. As a result, implementation of the proposed project would be unlikely unless the City agrees to annex the project site into its service area. However, implementation of Mitigation Measure 3.10-2 requires the County to coordinate with the City to fund projects that would reduce I/I at a rate of twice the anticipated wastewater flows. With this implementation, the project would result in a net decrease in the amount of wastewater flows in the system and would, therefore, not contribute to cumulative overcapacity of the pipeline. This would be a **less-than-significant** cumulative impact.

#### NATURAL GAS AND ELECTRICITY

The potential impact of increased natural gas and electricity services is not cumulative in nature because PG&E periodically considers the need to purchase more energy resources. In addition, infrastructure considerations are site-specific, and must be addressed during individual project planning and development. This would be a **less-than-significant** cumulative impact.

#### SOLID WASTE

Impact 3.10-4 considers the existing plus project condition to determine if the project would exceed capacity at the Delvin Road Transfer Station or Keller Canyon Landfill. As described, both facilities are currently accepting quantities of waste far below their accepted level. This would be a **less-than-significant** cumulative impact.



## 5 OTHER CEQA SECTIONS

### 5.1 SIGNIFICANT UNAVOIDABLE IMPACTS

Section 21100(b)(2)(A) of the State CEQA Guidelines provides that an EIR shall include a detailed statement setting forth “in a separate section: any significant effect on the environment that cannot be avoided if the project is implemented.” Accordingly, this section provides a summary of significant environmental impacts of the proposed project that cannot be mitigated to a less-than-significant level.

Chapter 3, “Environmental Setting, Impacts, and Mitigation Measures,” provides a description of the potential environmental impacts of the project and recommends various mitigation measures to reduce impacts, to the extent feasible. Chapter 4, “Cumulative Impacts,” determines whether the incremental effects of this project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. After implementation of the recommended mitigation measures, most of the impacts associated with development of the proposed project would be reduced to a less-than-significant level. The following impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the project’s impacts to a less-than-significant level.

The significant unavoidable environmental impacts of the proposed project are summarized below.

#### GREENHOUSE GAS EMISSIONS

##### Impact 3.4-1: Generation of Greenhouse Gas Emissions

Implementation of the proposed project (366 beds or 526 beds) would result in long-term operational emissions from mobile (i.e., employees and visitors) and indirect sources (i.e., electricity consumption) that exceed 1,100 metric tons of carbon dioxide equivalent per year. This would be a significant impact on climate change (Impact 3.4-1). Although mitigation is available to reduce this impact, it would not reduce the impact to a less-than-significant level. Therefore, this impact would remain **significant and unavoidable**.

#### TRANSPORTATION AND TRAFFIC

##### Impact 3.9-1: Existing Plus Project Intersection Level of Service Impacts

With implementation of either the 366-bed or 526-bed project under existing plus project conditions, three intersections (Soscol Avenue/Imola Avenue, State Route [SR] 221/Main Access, and SR 221-Soscol Ferry Road/SR 29) would experience further degradation to existing adverse operating conditions. This would be a significant impact (Impact 3.9-1). Mitigation would reduce this impact to a less-than-significant level at SR 221/Main Access; however, the impact would remain significant and unavoidable at Soscol Avenue/Imola Avenue and SR 221-Soscol Ferry Road/SR 29. Although mitigation is available to reduce this impact, the timing and funding of these improvements are currently uncertain, and are outside the County’s control. Therefore, this impact would remain **significant and unavoidable**.

##### Impact 3.9-2: Future Plus Project Intersection Level of Service Impacts

With implementation of either the 366-bed or 526-bed project under future plus project conditions, six intersections (Soscol Avenue-SR 221/SR 121-Imola Avenue, SR 221/Main Access, SR 221-Soscol Ferry Road/SR 29, Soscol Avenue/Silverado Trail, SR 221/Magnolia Drive-College Way, and SR 221/Kaiser Road) would degrade to unacceptable operating conditions and/or further exacerbate existing adverse operating conditions. This would be a significant impact (Impact 3.9-2). Mitigation would reduce this impact to a less-than-significant level at the following intersections: SR 221/Main Access, SR 221/Magnolia Drive-College Way, and SR 221/Kaiser

Road. The impacts at the remaining three intersections would remain significant and unavoidable. Although mitigation is available to reduce impacts at Soscol Avenue-SR 221/SR 121-Imola Avenue, SR 221-Soscol Ferry Road/SR 29, and Soscol Avenue/Silverado Trail, the timing and funding of these improvements are currently uncertain. Therefore, for these three intersections, this impact would remain **significant and unavoidable**.

Chapter 6, "Alternatives," considers alternatives to the proposed project that may be capable of reducing or avoiding some of these impacts.

## 5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The State CEQA Guidelines (Section 15126) require a discussion of the significant irreversible environmental changes which would be involved in a project should it be implemented.

The irreversible and irretrievable commitment of resources is the permanent loss of resources for future or alternative purposes. Irreversible and irretrievable resources are those that cannot be recovered or recycled or those that are consumed or reduced to unrecoverable forms. The proposed project would result in the irreversible and irretrievable commitment of energy and material resources during construction and operation, including the following:

- ▲ construction materials, including such resources as soil, rocks, wood, concrete, glass, roof shingles, and steel;
- ▲ land area committed to new project facilities;
- ▲ water supply for project operation; and
- ▲ energy expended in the form of electricity, gasoline, diesel fuel, and oil for equipment and transportation vehicles that would be needed for project construction and operation.

The use of these nonrenewable resources is expected to account for a minimal portion of the region's resources and would not affect the availability of these resources for other needs within the region. Construction activities would not result in inefficient use of energy or natural resources. Construction contractors selected would use best available engineering techniques, construction and design practices, and equipment operating procedures. Long-term project operation would not result in substantial long-term consumption of energy and natural resources.

As described in Chapter 2, "Project Description," the County has committed to meeting at least Leadership in Energy and Environmental Design (LEED) Silver, with plans to seek LEED Gold where feasible for the proposed County Jail Project. The design process would operate under the expectation of best long-term cost and environmental value, having a direct connection to the concept of sustainability and a possible result of LEED Gold. As part of this process, efforts would be made to utilize recycled and renewable materials, and the building would be designed using energy efficient technologies. Some nonrenewable resources would still be required. These nonrenewable resources are expected to account for a minimal portion of the region's resources and would not affect the availability of these resources for other needs within the region. Long-term operational energy and natural resource consumption is expected to be less than significant. Construction activities would not result in inefficient use of energy or natural resources. Construction contractors selected would use best available engineering techniques, construction and design practices, and equipment operating procedures. Because the contemplated development would be LEED-certified and use energy efficient materials where appropriate, potential irreversible changes related to long-term consumption of energy and natural resources would be less than significant.

## 5.3 ENERGY CONSERVATION

CEQA requires consideration of potential energy impacts of a proposed project (California Public Resources Code Section 21100[b][3]). Appendix F of the State CEQA Guidelines outlines issues related to energy conservation, and includes potential project description considerations, types of impacts applicable to energy use, and potential mitigation measures to reduce wasteful, inefficient, and unnecessary consumption of energy. According to CEQA, the goal of energy conservation implies wise and efficient use of energy, which can be accomplished by reducing energy consumption (e.g., natural gas and oil) and increasing reliance on renewable energy sources.

Energy used during project construction and operation would be expended in the form of electricity, gasoline, and diesel fuel, which would be used primarily by construction equipment and haul trucks during project construction and operation activities. Mitigation Measure 3.3-5, “Implement Construction-Related Measures to Reduce Impacts from Fugitive Dust Emissions,” includes reducing traffic speeds to 15 miles per hour on unpaved roads, and ensuring that equipment is properly tuned and maintained before and during on-site operation. Energy would be used wisely and efficiently during project construction and operation because air quality impacts would be mitigated to the extent feasible. Furthermore, the selected construction contractors would use the best available engineering techniques, construction and design practices, and equipment operating procedures.

## 5.4 GROWTH-INDUCING IMPACTS

### 5.4.1 CEQA REQUIREMENTS

CEQA specifies that growth-inducing impacts of a project must be addressed in an EIR (CCR Section 21100[b][5]). Specifically, Section 15126.2(d) of the State CEQA Guidelines states that the EIR shall:

Discuss the ways in which the proposed 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 (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Direct growth inducement would result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in any of the following:

- ▲ substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises);
- ▲ substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or
- ▲ removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

The State CEQA Guidelines do not distinguish between planned and unplanned growth for purposes of considering whether a project would foster additional growth. Therefore, for purposes of this EIR, to reach the

conclusion that a project is growth inducing as defined by CEQA, the EIR must find that it would foster (i.e., promote or encourage) additional growth in economic activity, population, or housing, regardless of whether the growth is already approved by and consistent with local plans. The conclusion does not determine that induced growth is beneficial or detrimental, consistent with Section 15126.2(d) of the State CEQA Guidelines.

If the analysis conducted for the EIR results in a determination that a project is growth inducing, the next question is whether that growth may cause adverse effects on the environment. Environmental effects resulting from induced growth (i.e., growth-induced effects) fit the CEQA definition of “indirect” effects in Section 15358(a)(2) of the State CEQA Guidelines. These indirect or secondary effects of growth may result in significant environmental impacts. CEQA does not require that the EIR speculate unduly about the precise location and site-specific characteristics of significant, indirect effects caused by induced growth, but a good-fail effort is required to disclose what is feasible to assess. Potential secondary effects of growth could include consequences – such as conversion of open space to developed uses, increased demand on community and public services and infrastructure, increased traffic and noise, degradation of air and water quality, or degradation or loss of plant and wildlife habitat – that are the result of growth fostered by the project.

## 5.4.2 GROWTH-INDUCING IMPACTS OF THE PROJECT

Implementation of the proposed project would foster short-term and long-term economic growth associated with construction and operational employment opportunities. Construction would begin in March 2016 and extend for approximately 24 months, ending in March 2018. During construction, the estimated peak level of construction workers at any given time would be 120 workers. Upon initiation of operational activities, the new 526-bed jail would employ approximately 170 people (of which 96 people would be existing County employees and 74 would be new employees), including correctional officers, medical/mental health personnel, vocational and educational staff, facility maintenance personnel, and administrative support staff. Operation of the new jail would foster long-term growth in three ways:

- ▲ direct growth related to employment at the new jail,
- ▲ growth related to induced employment resulting from jobs created to provide goods and services to the employees, and
- ▲ growth resulting from facility expenditures.

It is reasonable to assume that each new position would create some indirect or secondary jobs through payrolls and the purchase of local goods and services. Based on the wide geographic distribution of residences of existing employees of the Napa County Jail, and given that most new jobs generated by the proposed project would require skill levels that could be provided by existing residents of the region (i.e., City of Napa and other nearby cities), induced employment is not anticipated to have a substantial effect on population growth.

Implementation of the proposed project would not substantially increase population growth in the surrounding region because it would not require the construction of new housing. The proposed project would not remove barriers to population growth because no new or expanded (beyond what is currently planned by local jurisdictions) public infrastructure facilities would be installed. The proposed project is unlikely to tax existing local or regional community service facilities based on the anticipated wide geographic distribution of anticipated employees.

Several mitigation measures recommended in Section 3.9, “Transportation and Traffic,” would, if implemented, result in modifications to existing intersections or roadway segments in the County’s transportation network. However, these changes would be made to existing facilities and would not result in the extension of new roadways into undeveloped portions of the County. As a result, they are not expected to induce growth.

Although the proposed project would foster some economic and potentially very minor population growth associated with new employment opportunities at the new jail, this growth would not substantially affect the ability of public service providers to serve their existing customers, nor would it require the construction of new facilities to serve the proposed project. This growth would be widely dispersed throughout the County and would not result in an increased demand for housing in these areas. The population and employment growth expected with project implementation would be minor, and would not exceed the projections of local general plans in the communities surrounding the project site. Additionally, the proposed project would not extend infrastructure and public services to serve areas outside of the project site.

In conclusion, the proposed project has the potential to stimulate the economy both directly (by providing jobs) and indirectly (by creating a demand for local goods and services) in the region. Because of the general availability in the labor market and current unemployment rates, there would be an opportunity to fill some positions with local hires, while other positions would be filled by new employees that would relocate to the region. This in-migration would not substantially affect housing growth because new housing demands generated by the proposed project would account for only a small percentage of existing housing, and the current high number of foreclosures in the region due to current economic conditions may result in decreased demand. Further, the proposed project would not meaningfully affect employment or other growth in the region, given the size of the regional economy. Therefore, the proposed project would not contribute to substantial population growth, and there is no need to analyze impacts of growth beyond those included and evaluated in Chapter 4, "Cumulative Impacts."



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## 6 ALTERNATIVES

### 6.1 INTRODUCTION TO ALTERNATIVES

Section 15126.6(a) of the State CEQA Guidelines requires EIRs to describe “...a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.” This section of CEQA also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states the purpose of the alternatives analysis, as follows:

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code [PRC] Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

The State CEQA Guidelines further require that the alternatives be compared to the project’s environmental impacts and that the “no project” alternative be considered (CEQA Guidelines Section 15126.6[d] [e]).

In defining “feasibility” (e.g., “... feasibly attain most of the basic objectives of the project...”), State CEQA Guidelines Section 15126.6(f) (1) states, in part:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project’s significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of “potentially feasible” alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency’s decision-making body, here the Napa County Board of Supervisors. (See PRC Section 21081[a] [3].)

## 6.2 PROJECT OBJECTIVES

In identifying potentially feasible alternatives to the project, the ability of alternatives to meet most of the project's objectives were considered. The County has developed the following objectives for the project:

- ▲ develop a cost-effective and state of the art jail facility that provides adequate and efficient inmate housing, programming, medical, and mental health space in compliance with relevant requirements;
- ▲ provide for the efficient and timely transportation of inmates to and from court appearances;
- ▲ address the goals of the *Napa County Adult Correctional System Master Plan*;
- ▲ accommodate 366 beds in the near term, with possible expansion to 526 beds in the future;
- ▲ assist in meeting the goals outlined in the County's approved community correction partnership plan; and
- ▲ ensure the jail is compatible with its neighborhood context and incorporates sustainable design features to the maximum extent feasible.

## 6.3 PROJECT ALTERNATIVES CONSIDERED IN THIS EIR

### 6.3.1 DESCRIPTION OF ALTERNATIVES

The following alternatives are under consideration for this project:

- ▲ No Project (No Development) Alternative - Under this alternative, the existing jail in downtown Napa would continue to be used without expansion of capacity.
- ▲ Mitigated Design Alternative - Alter building design and area of disturbance on the project site to reduce the significant impacts of the project.
- ▲ Downtown Site Alternative - Expand the existing jail to accommodate a single 398-bed jail on the existing site in downtown Napa.

Alternatives considered and removed from further consideration are summarized in Section 6.4, including locating a new jail near the airport, splitting jail operations between two sites, and avoiding the construction of a new jail by using alternatives to incarceration.

### 6.3.2 SUMMARY OF PROJECT IMPACTS

Impacts associated with implementation of the County Jail Project are evaluated in Chapters 3, "Environmental Setting, Impacts, and Mitigation Measures," and 4, "Cumulative Impacts," of this DEIR. As identified in Table ES-1, "Summary of Impacts and Mitigation Measures," construction and/or operation of the County Jail Project would have the potential to cause the following significant but mitigable environmental impacts:

- ▲ Impact 3.3-1, Short-term Construction-Generated Emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>
- ▲ Impact 3.5-1, Exposure of Construction Workers and the Environment to Hazardous Materials
- ▲ Impact 3.5-2, Impacts From Implementation Of Or Physical Interference With An Adopted Emergency Response Plan Or Emergency Evacuation Plan
- ▲ Impact 3.6-2, Increase in Surface Runoff Potentially Exceeding the Capacity of Existing or Planned Stormwater Drainage Systems
- ▲ Impact 3.9-1, Existing Plus Project Intersection Level of Service Impacts (SR 221/Main Access)
- ▲ Impact 3.9-2, Future Plus Project Intersection Level of Service Impacts (SR 221/Main Access, SR 221/Magnolia Drive-College Way, and SR 221/Kaiser Road)

- ▲ Impact 3.9-3, Construction-Related Traffic Impacts
- ▲ Impact 3.9-4, Pedestrian, Bicycle, and Transit Facilities Impacts
- ▲ Impact 3.9-5, Access and Circulation Impacts
- ▲ Impact 3.9-7, Safety Impacts
- ▲ Impact 3.10-2, Wastewater Collection, Conveyance, and Treatment Infrastructure

In addition, the following impacts associated with the proposed project would remain significant and unavoidable, or potentially unavoidable, following implementation of available mitigation measures:

- ▲ Impact 3.4-1, Generation of Greenhouse Gas Emissions
- ▲ Impact 3.9-1, Existing Plus Project Intersection Level of Service Impacts (Soscol Avenue-SR 221/SR 121-Imola Avenue, and SR 221-Soscol Ferry Road/SR 29)
- ▲ Impact 3.9-3, Future Plus Project Intersection Level of Service Impacts (Soscol Avenue-SR 221/SR 121-Imola Avenue, SR 221-Soscol Ferry Road/SR 29, and Soscol Avenue/Silverado Trail)

### 6.3.3 NO PROJECT (NO DEVELOPMENT) ALTERNATIVE

State CEQA Guidelines Section 15126.6(e) (1) requires that the no project alternative be described and analyzed “to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project.” The no project analysis is required to discuss “the existing conditions at the time the notice of preparation is published...as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (Section 15126.6[e][2]).

Under this alternative, Napa County would continue to use the existing jail in downtown Napa without any major upgrades or changes to capacity. Industrial use of the project site (the Pacific Coast and Boca parcels) would continue similar to existing conditions. Any future use of the project site under this alternative would be too speculative, and, thus, is not described here. This alternative would not meet the objectives identified in Section 6.2, “Project Objectives.”

## ENVIRONMENTAL ANALYSIS

### AESTHETICS

No change in existing visual conditions would occur on the project site because existing dilapidated buildings would remain on-site. The existing jail would also remain unchanged in visual appearance. Therefore, no significant aesthetic impacts would occur under this alternative. By comparison, the project under either design option or site location would remove existing dilapidated buildings from the site and would organize views of the site from off-site areas. Further, proposed lighting would be minimal and would not result in significant light or glare impacts. Nonetheless, the No Project Alternative would not result in lighting changes at the site and overall aesthetic impacts would be less. (*Less, but no significant reduction*)

### AIR QUALITY

This alternative would not include any new development, and thus would not generate new construction or operations-related air emissions. Development of the project could generate construction-related and operational emissions that would exceed applicable thresholds. However, implementation of mitigation would reduce potential impacts associated with development of the project to less-than-significant levels. Nonetheless, because this alternative would avoid all air quality impacts, this alternative would result in less impact. (*Less*)

## GREENHOUSE GAS EMISSIONS

This alternative would not include any new development, and thus would not generate any GHG emissions. By comparison, the project would result in new development and associated construction and operational emissions of GHGs would exceed applicable threshold, which would be a significant impact. While mitigation was recommended that would implement GHG-reduction measures, these measures would not reduce the project's contribution to a less-than-significant level. Impacts would remain significant and unavoidable. Therefore, implementation of the No Project Alternative would eliminate a significant and unavoidable impact of the project and the impact would be less. (*Less; would avoid significant unavoidable impacts*)

## HAZARDS AND HAZARDOUS MATERIALS

This alternative would not include any new development, and thus would not generate new construction that could expose construction workers and the environment to hazardous chemicals or materials at the project site. Further, there would be no change in the potential for traffic or circulation patterns to interfere with adopted emergency response plans or emergency evacuation plans. By comparison, the proposed project would result in the demolition of on-site structures and past activities at the project site could have resulted in contamination of site soils and/or groundwater that could expose construction workers to hazardous chemicals. Mitigation Measure 3.5-1 was recommended to reduce this impact to a less-than-significant level through the preparation and implementation of a health and safety plan, which will outline measures such as proper handling of hazardous materials and procedures to follow in the event that contaminated soil and/or groundwater or other hazardous materials are generated or encountered during construction. The project's site-specific emergency response plan has not been prepared; therefore, the project's compatibility with implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan is currently unknown. Mitigation Measure 3.5-2 would reduce potentially significant impacts to a less-than-significant level through preparation of an emergency response plan for the project. Overall, the No Project Alternative would result in less hazard and hazardous material impacts compared to the project. (*Less*)

## HYDROLOGY AND WATER QUALITY

Under the No Project Alternative, no construction or soil disturbance would occur and, therefore, there would be no change in runoff conditions and soil erosion from site and, thus, no impacts on storm drainage systems. By comparison, development of the project would add new development at the project site, which could potentially increase surface runoff, potentially resulting in exceeding the capacity of on-site stormwater systems and increasing the potential for on- and off-site flooding. Therefore, this impact would be potentially significant. However, recommended mitigation would reduce this impact to a less-than-significant level. Although project construction would result in new impervious surfaces, the total area of impervious surface will decrease with project implementation compared to current conditions (i.e., the No Project Alternative) because of the already developed nature of the site. The proposed project would provide adequate on-site storm drainage facilities to ensure that all runoff from the project site will not exceed pre-project flow rates, and incorporate appropriate BMPs into project design to prevent long-term water quality degradation. This would serve to improve existing conditions. Therefore, even though the No Project Alternative would not result in any changes to discharges from the project site, it would not offer the improvement that the proposed project would; therefore, overall impacts would be greater. (*Greater*)

## LAND USE

This alternative would not alter land uses on the project site. There would be no change in land use or potential for land use conflicts to occur. The No Project Alternative would not conflict with plans adopted for the purpose of avoiding or mitigating a significant effect. This alternative would not conflict with existing industrial zoning on



the site. By comparison, the project would not result in any significant land use impacts as the project would not divide an establish community and would be consistent with relevant County plans and policies. Overall, impacts under this alternative would be similar. *(Similar)*

## NOISE

This alternative would not involve the construction of new or modified facilities. This alternative would not result in any construction-related impacts (although impacts with the project would be less than significant). Further, this alternative would not increase traffic on local roadways. While the project would contribute trips to the local roadways, these trips would not substantially affect noise levels in the area. While noise levels would not be substantially different than noise levels associated with the No Project Alternative, noise levels would be slightly less. *(Less, but no significant reduction)*

## TRANSPORTATION AND TRAFFIC

Under this alternative, a new jail facility would not be constructed at the projects site and no construction or operational traffic impacts would occur. By comparison, the project would add traffic to existing roadways resulting in adverse project and cumulative impacts on local intersections and during construction. Recommended mitigation measures would reduce some of these impacts to a less-than-significant level. However, some impacts at area intersections would be considered significant and unavoidable. Because this alternative would avoid any increase in roadway traffic, overall traffic impacts would be less than those that would occur with the project. *(Less; would avoid significant unavoidable impacts)*

## UTILITIES AND SERVICE SYSTEMS

This alternative would not construct the new jail on the site, and would not require extension of water or sewer infrastructure to the site. By comparison, the project would result in the need to extend water and sewer infrastructure to the site. Further, the City's wastewater conveyance infrastructure and the influent pump station at the WWTP are at capacity and the project's increased flows would result in a potentially significant impact. However, recommended mitigation would reduce this impact to a less-than-significant level. Although impacts would be less than significant, the No Project Alternative would not require the extension of water or sewer infrastructure to the site; therefore, overall impacts would be less. *(Less)*

## CONCLUSION

While the No Project Alternative would avoid the significant and unavoidable environmental impacts identified for the project (i.e., GHG emissions, transportation and traffic), it would not meet the County's project objectives (see Section 6.2, "Project Objectives").

### 6.3.4 MITIGATED DESIGN ALTERNATIVE

As described above, the project would result in significant and unavoidable impacts related to GHG emissions and traffic on area roadways. Other significant impacts (e.g., construction-related air emissions, exposure of construction workers to hazardous materials, storm drainage impacts, and wastewater infrastructure capacity) could be reduced to less-than-significant levels through the implementation of recommended mitigation. The purpose of the mitigated design alternative is to identify a project design that would eliminate or substantially reduce the project's significant and unavoidable impacts. To do this, an alternative that would avoid significant and unavoidable GHG emissions and transportation and traffic impacts would need to be developed.

This alternative would include development of a 366-bed jail on the project site, but without the core facilities that would permit expansion to 526 beds. These core facilities would include the kitchen, laundry, HVAC, etc. No

changes in the number of staffing would occur under this alternative. Rather, this alternative would limit the size of certain facilities and features of the project that would allow the expansion of the facility to 526 beds. Ultimately this alternative would limit total inmate and employees at the site to a 366-bed facility.

## ENVIRONMENTAL ANALYSIS

### AESTHETICS

The Mitigated Design Alternative would result in the development of a 366-bed jail on the project site. Visually, the Mitigated Design Alternative would be similar to the project, but with slightly less building footprint on the project site. While new lighting sources are proposed, these sources would not result in significant light and glare impacts. Both the Mitigated Design Alternative and the proposed project would result in similar, less-than-significant visual resource impacts. *(Similar)*

### AIR QUALITY

This alternative would include demolition and construction activities similar to the project over the same site footprint, and thus would generate new construction and operations-related air emissions that could exceed applicable thresholds. However, implementation of the same mitigation that was recommended for the project would reduce potential impacts associated with development of the Mitigated Design Alternative to a less-than-significant level. Overall, this alternative would result in similar air quality impacts compared to the project. *(Similar)*

### GREENHOUSE GAS EMISSIONS

This alternative would result in the development of a new jail facility that would have similar construction and operational activities as the project over a similar site footprint. The total building area developed would be slightly less than the project; therefore, this alternative would generate a reduced amount of construction and operational GHG emissions compared to the project. However, because of the size of the construction project, it is still likely that total GHG emissions would exceed applicable thresholds, which would be a significant impact. Mitigation recommended for the project that would implement GHG-reduction measures, would reduce GHG emissions from this alternative although it is likely that these measures would not reduce the alternative's contribution to a less-than-significant level. Impacts would remain significant and unavoidable but slightly less than the project. *(Less)*

### HAZARDS AND HAZARDOUS MATERIALS

This alternative would result in demolition of existing structures and new development similar to the project. Therefore, this alternative would have the similar potential to expose construction workers and the environment to hazardous chemicals or materials at the project site. Mitigation recommended for the project would reduce these impacts to a less-than-significant level. Overall, the Mitigated Design Alternative would result in similar hazards and hazardous materials impacts as the project. *(Similar)*

### HYDROLOGY AND WATER QUALITY

Construction of the Mitigated Design Alternative at the project site, as with the proposed project, has the potential to adversely affect water quality because this alternative would result in demolition and soil disturbance at the same site. Similar to the project, appropriate best management practices would be implemented to control and treat on-site stormwater and a Stormwater Pollution Prevention Plan would be prepared. Similar to the project, this alternative would design and construct facilities such that project stormwater discharges would not exceed pre-project conditions and would meet appropriate water quality

standards. Overall, hydrology and water quality impacts of the Mitigated Design Alternative would be similar to what would occur under the project. *(Similar)*

## LAND USE

Under the Mitigated Design Alternative, similar to the proposed project, no significant land use impacts would occur. Therefore, overall impacts under this alternative would be similar. *(Similar)*

## NOISE

This alternative would result in the demolition of existing structures and construction of new facilities. Similar construction-related noise impacts would occur under this alternative. Similar to the project, while this alternative would contribute trips to the local roadways, these trips would not substantially affect noise levels in the area. However, the total number of trips contributed to local roadways would be less because this alternative would not result in the expansion to 526 beds, which requires increased staffing compared to the proposed project. Therefore, overall noise impacts would be slightly less compared to the project. *(Less)*

## TRANSPORTATION AND TRAFFIC

Development of the Mitigated Design Alternative at the project site would result in similar levels of traffic in the project area compared with the proposed project (366 beds) because each would include the same number of inmates and staff. However, the total number of trips contributed to local roadways would be less because this alternative would not result in the expansion to 526 beds, which requires increased staffing compared to the proposed project. Nonetheless, it is likely that with implementation of this alternative, multiple project area intersections would degrade to unacceptable operating conditions and/or project implementation would further exacerbate existing adverse operating conditions at these intersections, which would be a significant impact. Mitigation recommended for the project includes the County contributing its proportional share to the City towards potential future improvements at these various intersections; however, timing and funding for many of these improvements are uncertain, and are outside the County's control. Impacts would remain significant and unavoidable. *(Less, but no significant reduction)*

## UTILITIES AND SERVICE SYSTEMS

Similar to the project, the Mitigated Design Alternative would result in the need to extend water and sewer infrastructure to the site. Further, the City's wastewater conveyance infrastructure and the influent pump station at the WWTP are at capacity and the project's increased flows would result in a potentially significant impact. However, recommended mitigation would reduce this impact to a less-than-significant level. Overall, this alternative would result in similar utility and service system impacts. *(Similar)*

## CONCLUSION

While the Mitigated Design Alternative would incrementally lessen the project's significant and unavoidable impact related to GHG emissions and transportation and traffic, it would not reduce the impacts to a less-than-significant level; they would remain significant and unavoidable. Further, this alternative would not fully satisfy the County's stated project objectives to meet future facility needs by providing the potential for up to 526 beds (see Section 6.2, "Project Objectives"). The Mitigated Design Alternative would only increase the inmate capacity from 277 beds to 366 beds, leaving the need for an additional 160 beds. Nonetheless, this alternative is environmentally superior to the project because it would incrementally lessen some of the project's significant and unavoidable impacts.

## 6.3.5 DOWNTOWN SITE ALTERNATIVE

This alternative would expand the existing jail in downtown Napa to accommodate a single 398-bed jail on the existing site. The existing County Jail is located at the Hall of Justice at 1125 3<sup>rd</sup> Street. The existing jail is approximately 53 feet tall and is housed in the Hall of Justice Building and Jail Annex, which together are approximately 125,000 square feet in area.

The existing jail facility would be demolished in phases and a new jail facility would be constructed in its place. The construction process may involve temporarily accommodating inmates elsewhere.

The architectural concept for the new jail on the downtown site provides for a basement and four above-ground floors providing 202,052 square feet of floor space and 398 beds. The height of the jail would be 51 to 55 feet tall. The exterior design of the structure could be designed to respect the character of nearby historic buildings. A total of 126 personnel, including 12 administrative staff, 22 support services staff, and 92 custodial staff would be required for this facility. Staff shifts and operations at the facility would be the same as the proposed project. Exhibit 6-1 presents a conceptual layout of the Downtown Site Alternative.



Source: CGL 2011; adapted by Ascent Environmental in 2013

**Exhibit 6-1**

**Downtown Site Alternative**



The downtown site would also accommodate a commercial development opportunity on the Main Street side of the new jail structure. This structure would be placed on the site where staff parking currently exists to screen the new jail building from Main Street. The commercial building would be mixed use, retail, office, and/or residential with a footprint of approximately 47 feet by 200 feet and would provide approximately 36,200 square feet of leasable area.

Industrial use of the project site (the Pacific Coast and Boca parcels) would continue similar to existing conditions. Any future use of the project site under this alternative would be too speculative, and, thus, is not described here. The County would look for other potential locations for the staff-secure facility; otherwise, this component would be eliminated under this alternative.

In January 2011, the County facilitated a community meeting to solicit public input on the Downtown Campus Redevelopment Plan (i.e., this alternative). At that meeting, which was attended by approximately 90 people, most of the comments were directed at the plan to keep the jail in downtown Napa. Among other things, speakers questioned whether keeping the jail downtown was a viable option given the Governor's prison inmate realignment proposal, argued that the land the new jail would sit on could better be used for retail or other purposes, and argued that the proposed new jail would be too big and not fit in with the surrounding land uses.

## ENVIRONMENTAL ANALYSIS

### AESTHETICS

The Downtown Site Alternative would result in the demolition of the existing jail facility and construction of a new jail facility in its place. The new jail building would be one story greater in height compared to the existing jail, with an expanded footprint by approximately 40,000 square feet. The Downtown Site Alternative would also include a new mixed retail structure on Main Street. The Downtown site is in an area that has undergone significant redevelopment over the last few years. The Downtown Site Alternative would be designed to be consistent with surrounding public facilities and would include elements intended to reflect the development surrounding the site. For example, the façade of the retail component of this alternative would include a high-level of design that would screen views of the jail from street level. Lighting at the facility would not substantially change from existing conditions. No significant visual resources impacts are anticipated. By comparison, the project would result in the demolition of existing industrial facilities at a different location and the construction of a new jail facility. The existing Downtown jail facility would remain in place and unchanged. The project would not substantially degrade views from off-site areas. While new lighting sources are proposed under the project, these sources would not result in significant light and glare impacts. Impacts would be less than significant with the project. Both the Downtown Site Alternative and the proposed project would result in less-than-significant visual resource impacts; however, impacts would occur in different visual settings. Nonetheless, a similar level of visual change would occur. (*Similar*)

### AIR QUALITY

This alternative would include demolition and construction activities similar to the project, and thus would generate new construction and operations-related air emissions that could exceed applicable thresholds. However, implementation of the same mitigation that was recommended for the project would reduce potential impacts associated with development of the Downtown Site Alternative to a less-than-significant level. This alternative would not be located in close proximity to any sources of TACs, and, as such, would not result in any significant impacts from exposure to TACs. Overall, this alternative would result in less air quality impacts compared to the project. (*Less*)



## GREENHOUSE GAS EMISSIONS

This alternative would result in the development of a new jail facility that would have similar construction and operational activities as the project, albeit slightly less because of the reduced number of beds and staff required for this alternative. Therefore, this alternative would generate a reduced amount of construction and operational GHG emissions compared to the project. However, because of the size of the construction project, it is still likely that total GHG emissions would exceed applicable thresholds, which would be a significant impact. Mitigation recommended for the project that would implement GHG-reduction measures, would reduce GHG emissions from this alternative although it is likely that these measures would not reduce the alternative's contribution to a less-than-significant level. Impacts would remain significant and unavoidable but slightly less than the project. (*Less*)

## HAZARDS AND HAZARDOUS MATERIALS

This alternative would result in demolition of existing structures and new development similar to the project. Therefore, this alternative would have the similar potential to expose construction workers and the environment to hazardous chemicals or materials at the project site. Mitigation recommended for the project would reduce these impacts to a less-than-significant level. The existing jail facility has an existing emergency response plan in place; therefore, implementation of this alternative would avoid the project's impact related to compatibility with implementation of or physical interference with an adopted emergency response plan. However, the project impact is reduced to a less-than-significant level through implementation of Mitigation Measure 3.5-2. Overall, the Downtown Site Alternative would result in similar hazards and hazardous materials impacts as the project. (*Similar*)

## HYDROLOGY AND WATER QUALITY

Construction of the proposed project at the downtown site, as with the proposed site, has the potential to adversely affect water quality because this alternative would result in demolition and soil disturbance. Similar to the project, this site is mostly paved and would implement appropriate best management practices to control and treat on-site stormwater and would prepare a Stormwater Pollution Prevention Plan for the site. Similar to the project, this alternative would design and construct facilities such that project stormwater discharges would not exceed pre-project conditions and would meet appropriate water quality standards. The Downtown Site is located within the 100-year floodplain of the Napa River. Therefore, this alternative would result in the exposure of persons to flood-related hazards, although project facilities would be designed consistent with City and County policies to resist the effects of flood damage. This would be a new significant impact that would not occur with the project. Overall, hydrology and water quality impacts of the Downtown Site Alternative would be greater than what would occur under the project. (*Greater*)

## LAND USE

The Downtown Alternative would continue existing jail uses on the site and therefore, would not result in any conflicts with City land use policies (although the City's preference is to remove the jail from downtown), nor would it result in the division of an established community. Further, because this alternative would result in the development of retail and commercial uses, it would likely be more compatible and complimentary with existing development surrounding the site. No significant land use impacts would occur. By comparison, the project would not result in any significant land use impacts; therefore, overall impacts under this alternative would be similar. (*Similar*)

## NOISE

This alternative would result in the demolition of existing structures and construction of new facilities. Similar construction-related noise impacts would occur under this alternative. However, this alternative would be located in closer proximity to noise-sensitive land uses including hotels, churches, and residences. Nonetheless, construction activities would likely occur between the hours of 7 a.m. and 7 p.m. and, therefore, would be exempt from the City's noise ordinance. Similar to the project, while this alternative would contribute trips to the local roadways, these trips would not substantially affect noise levels in the area and would be incrementally less than noise changes that would occur with the project. Overall, noise impacts would be less, but would not be substantially reduced compared to the project. (*Less, but no significant reduction*)

## TRANSPORTATION AND TRAFFIC

Construction of the new jail at the Downtown Site would increase levels of automobile traffic, pedestrian and bicycle traffic, and increase demand for parking in downtown Napa. According to the traffic analysis contained in the *Downtown Napa Specific Plan (DNSP) Draft Program EIR*, under existing conditions, all intersections in downtown Napa are operating at acceptable levels (City of Napa 2012: 4.L-6,) and would continue to do so with build out under the Downtown Specific Plan, which includes the existing jail (City of Napa 2012:4.L-27, 4.L-32). One intersection outside of the specific plan area (SR 29 northbound off ramp/First Street) would continue to operate at unacceptable levels.

The cumulative traffic (2030) analysis for the DNSP includes Napa County Jail expansion plans for up to 500 beds. Under the cumulative conditions, with the DNSP, it is anticipated that all intersections in the vicinity of the jail would continue to operate at acceptable levels, assuming planned roadway and intersection improvements are in place (City of Napa 2012:4.L-34 to 36). Two intersections outside of the downtown area (SR 29 off ramp/First Street and Silverado Trail/Third Street/East Avenue/Coombsville Road) would operate at unacceptable levels.

Based on the traffic analysis conducted for the DNSP, it is not anticipated that an increase in inmate capacity of 121 beds (to a total of 398 beds) would cause a substantial adverse effect on traffic conditions in downtown Napa. By comparison, the project would result in significant and unavoidable impacts to area roadways. Overall, impacts of this alternative would be less. (*Less*)

## UTILITIES AND SERVICE SYSTEMS

Similar to the proposed project, the City would provide utility service to the Downtown Site Alternative, including water, wastewater, and solid waste/recycling service. This alternative would result in fewer beds (i.e., 398 beds vs. 526 beds) than what would be constructed with the project and as a result would result in less demand for water supplies and wastewater conveyance and treatment services. As described for the project, adequate water supplies are available to meet the demands of a 526-bed jail facility and no significant water supply impacts would occur. It is anticipated that new water supply pipelines and connections would be constructed to meet the flow demand of this alternative such that no significant impacts would occur. This would be similar to what would occur under the project.

Similar to the project, the Downtown Site Alternative would increase the wastewater flows generated by the facility and conveyed to the City. Similar to conditions that would occur with the project, the City's wastewater conveyance infrastructure and the influent pump station at the WWTP are at capacity and the alternative's increased flows (although reduced compared to the project) would result in a potentially significant impact. However, mitigation recommended for the project would reduce these impacts to a less-than-significant level. Overall, this alternative would result in similar utility and service system impacts. (*Similar*)

## CONCLUSION

While the Downtown Site Alternative would lessen some of the significant and unavoidable impacts identified for the project (i.e., GHG, transportation and traffic), it would have greater hydrology and water quality impacts, and it would not fully satisfy the County’s stated project objectives to meet future facility needs by providing the potential for up to 526 beds (see Section 6.2, “Project Objectives”). The Downtown Site Alternative would only increase the inmate capacity from 277 beds to 398 beds, leaving the need for an additional 128 beds.

### 6.3.6 COMPARISON OF ALTERNATIVES

Table 6-1 summarizes the environmental analyses provided above for the project alternatives.

Table 6-1 Comparison of the Environmental Impacts of the Alternatives in Relation to the Proposed Project				
Environmental Topic	Proposed Project	No Project Alternative	Mitigated Design Alternative	Downtown Site Alternative
Aesthetics	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)
Air Quality	LTSM	LTS (Less)	LTSM (Similar)	LTSM (Less)
Greenhouse Gas Emissions	SU	LTS (Less)	SU (Less)	LTSM (Less)
Hazards and Hazardous Materials	LTSM	LTS (Less)	LTSM (Similar)	LTS (Similar)
Hydrology and Water Quality	LTSM	LTS (Greater)	LTSM (Similar)	LTSM (Greater)
Land Use	LTS	LTS (Similar)	LTS (Similar)	LTS (Similar)
Noise	LTS	LTS (Less)	LTS (Less)	LTS (Less)
Transportation and Traffic	SU	LTS (Less)	SU (Less)	LTS (Less)
Utilities and Service Systems	LTSM	LTS (Less)	LTSM (Similar)	LTSM (Similar)
Impact Status: LTS = Less Than Significant Impact LTSM = LTS with Mitigation SU = Significant and Unavoidable Source: Data compiled by Ascent Environmental in 2013				

## 6.4 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

State CEQA Guidelines Section 15126.6(c) provides the following guidance in selecting a range of reasonable alternatives for the project. The range of potential alternatives for the project shall include those that could feasibly accomplish most of the basic objectives of the project, and could avoid or substantially lessen one or more of the significant effects. The EIR should also identify any alternatives that were considered by the lead agency, but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency’s determination.

The following describes other alternatives considered by Napa County but dismissed from further evaluation in this DEIR, and a brief description of the reasons for their rejection.

### 6.4.1 NEW JAIL AT THE AIRPORT INDUSTRIAL AREA

Under this alternative, a new jail would be constructed at the Airport Industrial area, approximately 5.5 miles south of the existing jail. The jail would be constructed to provide 366 beds with future expansion potential for up to 526 beds. This alternative was rejected because the location is considered too distant from the courts, making inmate transportation impractical, and because the location in southern Napa County is a significant distance from the many law enforcement agencies who bring individuals for booking into the jail. Further, building a jail in the Airport Industrial area would conflict with the Specific Plan and would be incompatible with the County's objectives for that area, which include maintaining an industrial zone that acts as "back of house" for uses in the agricultural preserve, and provides an area for economic development (i.e., job growth and property taxes).

### 6.4.2 SPLIT OPERATIONS ALTERNATIVES

In addition to housing all inmates at one location, alternatives involving split operations were examined from the standpoint of feasibility and costs.

The following alternatives were considered:

1. A 526-bed two-jail operation with a 358-bed jail on the existing downtown site and a 168-bed jail elsewhere in the County; or
2. A 366-bed two-jail operation with a 262-bed jail on the existing downtown site and a 104-bed jail elsewhere in the County.

The County determined that implementation of these alternatives would have substantially greater costs. Specifically, the operation of split facilities would result in the need for more (duplicative) staff, and the operation of duplicate care facilities such as the kitchen. These additional staff would generate greater traffic trips on local roadways and would result in greater operational air and GHG emissions. Therefore, this alternative would not result in the elimination of any of the project's significant and unavoidable impacts and it was rejected from further consideration.

### 6.4.3 INCREASED ALTERNATIVES TO INCARCERATION TO LIMIT INMATE POPULATION GROWTH

Under this alternative, a new jail would not be necessary because the County would increase the utilization of alternatives to incarceration and programming options that would negate the need for an expanded jail. In this alternative, the existing downtown jail would continue to be used without any expansion. The County currently uses a number of evidence-based programs and alternatives to incarceration to help appropriately manage the jail population, including the following:

1. Deferred Entry of Judgment (Driving offenses/Misdemeanor offenses): Allows offenders to attend classes and complete other requirements to have charges for certain offenses dropped.
2. Pre-Trial Release Program: Allows offenders who meet certain qualifications to be released on varying levels of supervision pre-trial without having to post bond.
3. Home Detention/Electronic Monitoring Program: Allows offenders who meet certain qualifications to receive time served credits while under home detention/electronic monitoring outside of the jail facility.

4. Community Corrections Work Program: Currently under expansion, this program allows offenders who meet certain qualifications to perform community service under supervision and receive time served credits.
5. County Parole: Allows offenders who meet certain qualifications to be “paroled” from the facility for significant progress towards goals aimed at reducing recidivism (i.e., education, program attendance, etc.).

In its population projections, the County accounted for the impact that these types of programs and evidence-based practices would have on the recidivism rate and ultimately the jail population. The projections include growth limits resulting from a 23.5% reduction in recidivism through evidence-based programs. Even with the further addition of a staff-secure alternative custody facility, the projected numbers substantially exceed the jail’s capacity. To assume that programming and alternatives will expand enough to keep the population from growing at all in the planning period is impractical because many of the factors that affect jail populations, such as crime levels and sentencing policies, are both unpredictable and outside the County’s administrative control. Further, this alternative would not meet the project goals of providing adequate and efficient inmate housing, programming, medical, and mental health space for the population the County will have over the coming years. Therefore, this alternative was rejected from further consideration.

## **6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

The No Project Alternative is environmentally superior to the proposed project. However, the No Project Alternative would not attain any of the objectives of the proposed project. CEQA requires (CCR Section 15126.6 [e][2]) that if the environmentally superior project is the No Project Alternative, another environmental superior alternative shall be identified among the other alternatives. Among the other alternatives, the Mitigated Design Alternative is environmentally superior to the project because it would incrementally lessen some of the project’s significant and unavoidable impacts. However, this alternative would not meet the important project objective related to meeting future facility needs by providing the potential for up to 526 beds.



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## 9 ACRONYMS AND ABBREVIATIONS

μ	micro
μg/m <sup>3</sup>	micrograms per cubic meter
10 <sup>-6</sup>	one-in-a-million
2050 Study	2050 Napa Valley Water Resources Study
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACMs	asbestos containing materials
ADP	average daily population
ADWF	Average Dry Weather Flow
af	acre feet
afy	acre feet per year
AGT	aboveground fuel tank
ALUC	Napa Airport Land Use Commission
ALUCP	Napa County <i>Airport Land Use Compatibility Plan</i>
APCO	Air Pollution Control Officer
APS	Alternative Planning Strategy
ARB	California Air Resources Board
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measures
BAAQMD	Bay Area Air Quality Management District
Basin Plan	<i>San Francisco Bay (Region 2) Water Quality Control Plan</i>
c/mve	collisions per million vehicles entering
CAA	federal Clean Air Act
CAAA	Federal Clean Air Act Amendments of 1990
CAAQS	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CALARP	California Accidental Release Prevention Program
CALEEMOD	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	Federal Clean Air Plan
CAP	Napa County Climate Action Plan
CASQA	California Stormwater Quality Association
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDCR	California Department of Corrections and Rehabilitation
CDPH	California Department of Public Health
CEC	California Energy Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CFR	Code of Federal Regulations
cfs	cubic feet per second
CH <sub>4</sub>	methane
CHHSLs	California Human Health Screening Levels
City	City of Napa
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
Corrections	Napa County Department of Corrections
County	County of Napa
CSMP	Napa Sanitation District Collection System Master Plan
CUPA	Certified Unified Program Agency
CWA	Federal Clean Water Act
dB	decibels
dBA	A-weighted decibels
DOT	U.S. Department of Transportation
DSOD	California Division of Safety of Dams
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
DFW	California Department of Fish and Wildlife
ESA	Environmental Site Assessment
EPCRA	Emergency Planning and Community Right-to-Know Act
FED	Functional Equivalent Document
FEMA	Federal Emergency Management Agency
FHWA	U.S. Department of Transportation Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTA	Federal Transportation Administration
GHG	greenhouse gas
gpid	gallons per inmate per day
HAP	hazardous air pollutant
HCF	hydrofluorocarbons
HCM	<i>Highway Capacity Manual</i>
HCP	Habitat Conservation Plan
HMTA	Hazardous Materials Transportation Act
HSWA	Hazardous and Solid Waste Amendments of 1984
HVAC	heating, ventilation, and air conditioning
HWCA	Hazardous Waste Control Act
I/I	infiltration and inflow
I-80	Interstate 80
in/sec	inches per second
IPCC	United Nations Intergovernmental Panel on Climate Change

KW	Kilowatt
LAFCO	Local Agency Formation Commission
LBP	lead-based paint
LCFS	Low-Carbon Fuel Standard
L <sub>dn</sub>	Day-Night Noise Level
LEED	Leadership in Energy and Environmental Design
L <sub>eq</sub>	Equivalent Noise Level
LID	low impact development
L <sub>max</sub>	Maximum Noise Level
L <sub>min</sub>	Minimum Noise Level
LOS	level of service
LUST	leaking underground storage tank
M&E	mechanical & electrical
MACT and BACT	maximum or best available control technology for toxics
MCL	maximum contaminant level
mg/m <sup>3</sup>	milligrams per cubic meter
mgd	million gallons per day
MMRP	mitigation monitoring and reporting program
MMT	million metric tons
mph	miles per hour
MPO	Metropolitan Planning Organizations
MRZ	mineral resource zone
msl	mean sea level
MS4	municipal separate storm sewer system
MT	metric ton
MT CO <sub>2</sub> e	metric tons of carbon dioxide equivalents
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
N <sub>2</sub> O	nitrous oxide
NAAQS	national ambient air quality standards
NBA	North Bay Aqueduct
NCCP	Natural Community Conservation Plan
NCFWCWD	Napa County Flood Control and Water Conservation District
NCRWS	Napa County Recycling and Waste Services
NCSPPP	Napa Countywide Stormwater Pollution Prevention Program
NCTPA	Napa County Transportation and Planning Agency
NESHAP	national emissions standards for HAPs
NFIP	National Flood Insurance Program
NHTSA	National Highway Traffic Safety Administration
NO <sub>2</sub>	nitrogen dioxide
NOI	notice of intent
NO <sub>x</sub>	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRWS	Napa Recycling and Waste Services
NSD	Napa Sanitation District
NVUSD	Napa Valley Unified School District

NVWMA	Napa-Vallejo Waste Management Authority
OAHMP	<i>Napa Operational Area Hazards Mitigation Plan</i>
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	U.S. Occupational Safety and Health Administration
PBES	Napa County Planning, Building, & Environmental Services Department
PCBs	polychlorinated biphenyls
PFCs	perfluorocarbons
PG&E	Pacific Gas and Electric
Phase I ESA	Phase I Environmental Site Assessment
PM	particulate matter
PM <sub>10</sub>	inhalable particulate
PM <sub>2.5</sub>	fine particulate matter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PSD	New Source Review Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act of 1976
RMS	root mean square
ROG	reactive organic gas
RTP	<i>2001 Regional Transportation Plan</i>
RWD	Report of waste discharge
RWQCB	regional water quality control board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCS	Sustainable Communities Strategy
SEL	Single Event Noise Levels
SF <sub>6</sub>	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFRWQCB	San Francisco Regional Water Quality Control Board
SIP	State implementation plan
SLIC	Spills, Leaks, Investigation, and Cleanups
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SO <sub>2</sub>	sulfur dioxide
SQG	small quantity generator
SR	State Route
SWITRS	Statewide Integrated Traffic Records System
SWMP	Stormwater Management Plan
SWP	State Water Project
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
T-BACT	Toxics Best Available Control Technology
TDS	total dissolved solids
TMDL	Total Maximum Daily Load

TPY	tons per year
U.S. EPA	U.S. Environmental Protection Agency
UBC	Uniform Building Code
UP	Use Permit
USACE	U.S. Army Corp of Engineers
USC	U.S. Code
UST	underground fuel storage tank
UWMP	City of Napa 2010 Urban Water Management Plan
VdB	vibration decibel
VMT	vehicle miles traveled
Water Pollution Act	Water Pollution Prevention and Control Act
WDR	waste discharge requirement
WSA	water supply assessment
WSCP	City of Napa Water Shortage Contingency Plan
WTP	water treatment plant

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