

V. ALTERNATIVES

The *CEQA Guidelines* require the analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the project's basic objectives and avoid or substantially lessen any of the significant effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.¹ CEQA states that an EIR should not consider alternatives "whose effect cannot be ascertained and whose implementation is remote and speculative."

The Draft Specific Plan has been described and analyzed in the previous chapters, with an emphasis on significant impacts resulting from the project and recommended mitigation measures to avoid these impacts. The following discussion is intended to inform the public and decision-makers of the relative impacts of four potentially feasible alternatives to the Draft Specific Plan. A discussion of the environmentally superior alternative is also provided.

The following project goals, listed below, inform this evaluation of project alternatives:

- Preserve, enhance, and promote the Arsenal Historic District;
- Restore the project area into a unified ensemble of high-quality, 19th and 20th-century architecture through major restoration and rehabilitation of existing historic buildings and sites, and the careful placement and integration of new structures;
- Integrate arts, culture, and historic identity into future development plans for the project area, including enhancement of opportunities for the arts community, development of a destination campus, establishment of heritage tourism, and renovation of period architecture;
- Establish an integrated system of scenic trails, paths, and circulation routes connecting key destinations within the project area, the Arsenal Historic District, and throughout the City; and
- Ensure that public services keep pace with new development, and that new development pays its fair share of infrastructure costs.

The four alternatives to the proposed project discussed in this chapter include the following:

- The **No Project alternative** assumes that the Draft Specific Plan is not implemented, but that existing uses in the project site continue to evolve and intensify.
- The **Option 1 alternative**, which would rehabilitate the historic buildings and landscapes in the Jefferson Ridge/Officers' Row Zone but would not introduce new buildings to the area.
- The **Option 1.5 alternative**, which would strike a balance between the development objectives of Option 1 and Option 2 (analyzed as the proposed project): historic buildings and landscapes in

¹ *CEQA Guidelines*, 2006. Section 15126.6.

Jefferson Ridge/Officers' Row would be rehabilitated, two new structures would be constructed in the area, and an "Arsenal Memorial Park" would be developed south of Jefferson Street.

- The **Senior Housing alternative** would be the most intensely-developed of all the project alternatives, and would consist of construction of a 50-unit senior apartment complex north of Jefferson Street between the Commanding Officer's Quarters and the Lieutenant's Quarters, and construction of 30 market-rate townhouse units south of Jefferson Street.

Following is a discussion of each alternative, including an analysis of anticipated environmental impacts. This analysis compares the anticipated impacts of each alternative to the impacts associated with the proposed project; the discussion includes a determination as to whether or not each alternative would reduce, eliminate, or create new significant impacts.

A. NO PROJECT ALTERNATIVE

1. Principal Characteristics

The No Project alternative assumes that the Draft Specific Plan would not be adopted and implemented. The comprehensive system of new parks, roads, pedestrian paths, bike lanes, and future transit service would be implemented as proposed by the Draft Specific Plan. The project site would continue to be governed by the Mixed Use designation in the Benicia General Plan, the various zoning designations in the site (including Single Family Residential (RS), General Commercial (CG), Office Commercial (CO), General Industrial (IG), Public and Semi-Public (PS), and Planned Development (PD), and the provisions of the Arsenal Historic Conservation Plan.

Therefore, historic buildings in the area would continue to be protected from demolition (buildings that were not designated as historic in the Arsenal Historic Conservation Plan but are 50 years old would be evaluated for historic value prior to demolition). However, certain historic buildings (such as the Commanding Officer's Quarters and the Duplex Officers' Quarters, which are in need of restoration), would continue to deteriorate. Individual development projects could continue to be proposed for various buildable parcels in the project site. If and when proposed, these projects would be evaluated based on the applicable provisions of the City of Benicia General Plan, Zoning Ordinance, and Arsenal Historic Conservation Plan, but not on the guidelines of an area-wide plan. The individual development zones would likely evolve relatively organically, and might not develop distinct identities beyond those that already exist.

In addition, existing mixed uses on the site would intensify. The No Project alternative assumes that existing uses would intensify by approximately 20 percent, as vacant space is utilized, space-intensive industrial uses are converted to mixed uses, and residential uses become more prevalent. Therefore, under this alternative, there would be an effective net increase of approximately 105,363 square feet of redeveloped mixed uses in the site.

2. Analysis of the No Project Alternative

The No Project alternative is evaluated in terms of all of the environmental topics analyzed in this EIR.

- a. Land Use and Planning Policy.** The No Project alternative, which would accommodate parcel-by-parcel development in the site and some intensification of existing uses, would result in generally the same land use impacts as the Draft Specific Plan, but to a lesser extent. New residential development in the area could be incompatible with industrial uses at the Port of Benicia, in addition to industrial uses in the project site itself. Individual development projects would be reviewed for potential land use incompatibilities, similar to projects proposed as part of the Draft Specific Plan. However, the No Project alternative would not necessarily realize many of the land use benefits of the proposed project, including: the integration of open space and mixed uses; the creation of a distinct identity in each of the various development zones; and the creation of a land use pattern in the area that supports alternative transportation.
- b. Population, Employment and Housing.** The alternative would likely result in a slightly lower population growth rates compared to the proposed project, as residential projects are constructed on buildable parcels and live/work uses occupy former manufacturing spaces. However, without a comprehensive plan for the area, the mix of housing and jobs may not be as balanced as it would be under the Draft Specific Plan (i.e., under market conditions, and taking into account unceasing demand in the Bay Area for housing, residential uses could predominate across the Plan Area).
- c. Geology, Soils and Seismicity.** Under the No Project alternative, the project site would continue to be subject to ground shaking, shrink/swell soils, settlement, liquefaction, and landslides. The rate of building rehabilitation under the No Project alternative is expected to be lower compared to the proposed project; therefore, under the alternative, more historic buildings may be prone to collapse during the next major earthquake in the region.
- d. Hydrology and Water Quality.** Like the proposed project, the hydrology-related impacts that would result from the No Project alternative would be primarily associated with polluted storm water runoff. Individual projects proposed for the site would be required to include runoff treatment measures, consistent with Regional Water Quality Control Board standards, and the Benicia Storm Water Management Plan. As with the project, implementation of these storm water control measures would reduce impacts to water quality to a less-than-significant level. However, the No Project alternative, unlike the Draft Specific Plan, would not include area-wide storm water quality areas (and would not be quite as effective in reducing adverse impacts to storm water and improving the quality of receiving waters, such as Carquinez Strait).
- e. Hazards and Hazardous Materials.** The No Project alternative would result in less-than-significant hazards-related impacts that are very similar to those that would result from the proposed project. These impacts include: potential spills during the construction period; the potential identification of hazardous materials during the construction period; and impacts to underground pipes.
- f. Biological Resources.** Under the No Project alternative, some development would occur on the site, but not as much as would occur under the proposed project. Therefore, the alternative would result in impacts to biological resources – including the removal of trees protected under the Tree Ordinance, the fill of wetlands, potential impacts to special-status plant species, and loss of habitat for breeding birds, burrowing owl, and several bat species – but to a lesser extent compared to the proposed project.

g. Transportation and Circulation. In terms of vehicle traffic, the No Project alternative would result in less substantial impacts compared to the project. Many of the congestion-related impacts of the proposed project would be reduced, including impacts to the intersections of E. 5th Street/I-780, E. 2nd Street/Military East, Park Road/Industrial Way, and Park Road/Bayshore Road (although the operation of these intersections would remain deficient). However, the alternative would not result in the numerous transportation benefits that would result from the proposed project. These benefits include an improved circulation system that promotes the use of alternative transportation and that better connects the upper and lower portions of the site. In addition, if residential uses predominate on the site under the No Project alternative, there would be less potential for internal trip reduction due to the existence of mixed uses. Therefore, the Draft Specific Plan would be superior to the No Project alternative in terms of transportation impacts.

h. Air Quality. The No Project alternative would result in similar air quality impacts compared to the proposed project. Excavation, grading, and demolition-related air quality impacts would occur under the No Project alternative, as sites for individual development projects are prepared for construction. In addition, residential uses would continue to relocate to the Lower Arsenal, resulting in an increased cancer risk for occupants due to Port-related diesel emissions.

i. Noise. The No Project alternative would not result in significant noise increases along Adams Street, Grant Street, and Park Road, as would occur with the proposed project. However, the alternative would expose occupants of the site to high levels of construction noise (as parcels are developed with new projects). In addition, residential occupants of the site would be exposed to unacceptable noise from the Port and industrial uses within the Lower Arsenal.

j. Visual Resources. The Draft Specific Plan is highly protective of visual resources in the site. Significant viewsheds would be protected and the historic character of the area would be maintained through stringent design guidelines. Under the No Project alternative, development in the site would be governed by the Benicia General Plan, the Zoning Ordinance, and the Arsenal Historic Conservation Plan. These policy documents and regulations would offer good protection of visual resources in the site, but the protections would be neither as strong nor as comprehensive as those offered by the Draft Specific Plan. Therefore, compared to the proposed project, the No Project alternative would result in more substantial impacts to viewsheds and visual character.

k. Cultural and Paleontological Resources. Development activities undertaken as part of the No Project alternative would result in impacts to archaeological and paleontological resources, similar to the proposed project. Under the project, new roads and building would be constructed in places with great historic significance, including Jefferson Ridge. However, new construction would, in general, be highly sensitive to existing historic resources. Under the No Project alternative, development in these historically-significant areas would not be governed by an area-wide plan, and may not be as protective of existing historic resources as the proposed project. Some modern-era development in the site, including buildings along Adams Street, is out-of-character with existing historic resources in the area. Under the No Project alternative, there would be a greater potential for new construction that is incompatible with existing historic structures. Therefore, the No Project alternative could result in more substantial impacts to historic resources than the proposed project.

l. Public Services and Utilities. Like the proposed project, the No Project alternative would not result in significant impacts to public services and utilities. Under the alternative, upgrades of existing

infrastructure would occur as part of the City-wide Capital Improvement Program. However, the alternative would not result in the creation of area-wide storm water quality areas.

m. Sustainability and Energy. In terms of sustainability and energy conservation, the No Project alternative would be inferior to the proposed project. Other than via existing General Plan policies, the alternative would not emphasize: the use of alternative transportation; a balance of mixed uses; green building; and the rehabilitation of existing buildings. In the long-term, the No Project alternative would result in a less-than-optimal use of land and other non-renewable resources.

B. OPTION 1 ALTERNATIVE

1. Principal Characteristics

The Option 1 alternative could also be called the “Jefferson Ridge Preservation alternative,” in that it would preserve and rehabilitate historic buildings and landscapes within the Jefferson Ridge/Officers’ Row Zone without reintroducing new structures to the area (see Figure V-1). This alternative, which is included in the Draft Specific Plan, was designed to recognize “the historic significance of District C and its potential to function as a Heritage Tourism or other ‘destination’ campus.” It would be a feasible alternative if the privately-held land on the ridge could be purchased outright, and revenue-generating new construction would not be required.

The alternative would rehabilitate the Commanding Officer’s Quarters, which would be used for destination, conference, and/or entertainment uses. In addition, the Option 1 alternative would create formal parks between the Clocktower and Commanding Officer’s Quarters, and between the Commanding Officer’s Quarters and the Lieutenant’s Quarters. These parks would be designed in a formal style (similar to that employed in Option 2, which was part of the proposed project) that emphasizes symmetry, openness, and sight lines. This design would be consistent with the historic character of the area.

In addition, Jefferson Street would be continued east to the Clocktower. One of the key differences between the alternative and Option 2 is that the open space immediately south of Jefferson Street would be preserved in its existing condition. No new buildings or new access would be constructed in this area. The heritage cork oak trees and other vegetation in this open space would remain untouched. In addition, the open space north of the Commanding Officers’ Quarters and Officers’ Square would remain in its current condition.

2. Analysis of Option 1 Alternative

The Option 1 alternative is evaluated below for all the topics analyzed in the EIR with the exception of: Geology, Soils, and Seismicity; Hydrology and Water Quality; Hazards and Hazardous Materials; Air Quality; Noise; and Public Services and Utilities. The impacts associated with these excluded topics would be very similar for Option 1 and the following two development alternatives, and almost the same as those that would result from implementation of the proposed project.

a. Land Use and Planning Policy. The Option 1 alternative would result in the preservation of a significant amount of open space on Jefferson Ridge. This alternative, like the proposed project, would be consistent with applicable policy documents, including the Benicia General Plan, Zoning Ordinance, and Arsenal Historic Conservation Plan. Similarly, the alternative would result in no

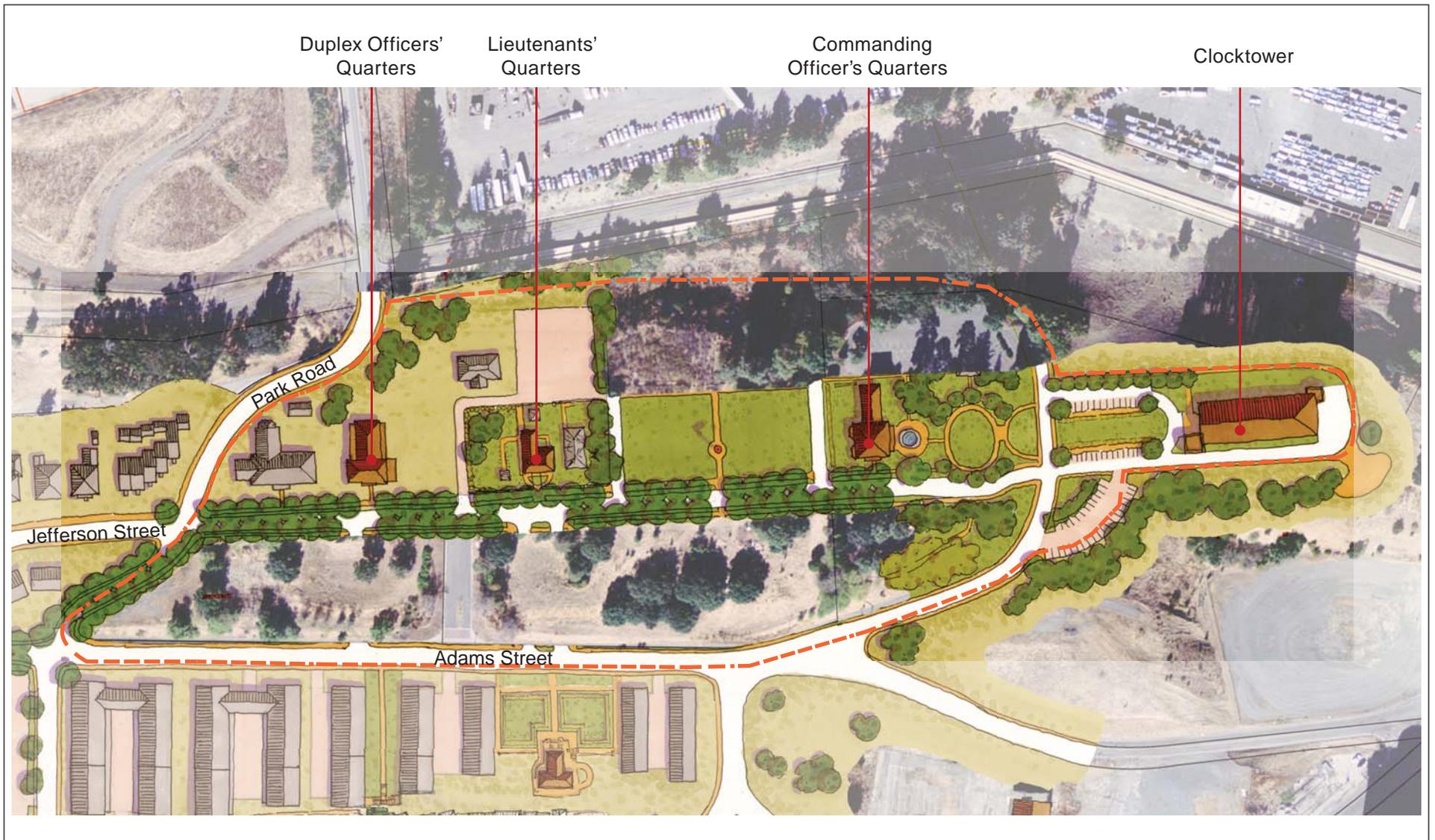
significant land use impacts, including the division of an established community or the development of incompatible uses. No new streets would be developed to connect Jefferson Street to Adams Street; therefore, pedestrian access from the Jefferson Ridge Zone to the Adams Street Zone would be slightly reduced compared to the proposed project. However, this would not be considered a significant environmental impact. The alternative and the proposed project each have their own land use merits: one would retain the open, undeveloped character of the ridge, while the other would place buildings in strategic locations and transform the existing open space into a formal park. The alternative would introduce minimal new roadway frontage to the site while the project would build three new roadways (and remove one existing roadway) to increase north/south connectivity. However, none of these merits would translate into differences in significant land use-related environmental impacts.

b. Population, Employment and Housing. The alternative would reduce development on the site by approximately 184,575 square feet of mixed uses, including institutional, office, and commercial uses (minimal to no residential uses are planned for Jefferson Ridge as part of the project). Therefore, the alternative would not substantially reduce direct population growth expected as part of the proposed project. However, employment on the site would be reduced by roughly 370 persons compared to the proposed project. This reduction in employment compared to the proposed project would not substantially change the City's or region's jobs/housing balance (although it would not contribute towards balancing the jobs/housing ratio in Benicia, which is currently heavily weighted in favor of housing). Like the proposed project, the Option 1 alternative would not divide an established community, although it would not create as many formal access ways between Jefferson Street and Adams Street as the proposed project.

c. Biological Resources. The alternative would result in fewer impacts to biological resources compared to the proposed project. Because more open space would be retained on Jefferson Ridge, direct impacts to seasonal wetlands, protected trees, and special-status plant species (which may occur on the site) would be sharply reduced. Jefferson Ridge has the most ecological value out of all the development zones. Therefore, the alternative would be environmentally superior to the proposed project in terms of the protection of biological resources.

d. Transportation and Circulation. The Option 1 alternative would reduce trips generated by the project by approximately 2,354 daily trips. While this would represent a substantial trip reduction from the project, it would not avoid any of the impacts to intersections around the site. The intersections that would be substantially affected by the project are expected to be deficient under existing and cumulative conditions without the project. Therefore, even the addition of a relatively small amount of traffic from the project site would result in a significant impact to these intersections. In addition, wear and tear on area roadways would occur with the Option 1 alternative during the construction period, although impacts would be less pronounced compared to the proposed project. Maintaining the open space south of Jefferson Street with no new roadways would slightly diminish pedestrian and bike access between Jefferson Street to Adams Street compared to the proposed project. However, this would not be considered significant.

e. Visual Resources. The Option 1 alternative, like the proposed project, would be highly protective of viewsheds and visual character. The historic setting of Jefferson Ridge would only be minimally altered as part of the alternative, and in ways that would be in keeping with the historic integrity of the area. The open space south of Jefferson Street is an important scenic feature of the



Duplex Officers' Quarters

Lieutenants' Quarters

Commanding Officer's Quarters

Clocktower

Park Road

Jefferson Street

Adams Street

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FIGURE V-1



Lower Arsenal Mixed Use Specific Plan EIR
Option I Alternative

NOT TO SCALE

SOURCE: OPTICOS, 2007

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area; as part of the alternative, this site would remain preserved in perpetuity. However, preservation of the open space in its entirety would not represent a significant visual improvement over the proposed project. The Option 1 alternative would not result in the construction of a new building on the northern side of Officers' Square that would screen views of I-780. Therefore, this beneficial aspect of the project would not be realized under the Option 1 alternative.

f. Cultural and Paleontological Resources. The alternative, which would minimize ground disturbance in Historic District C compared to the proposed project, would result in relatively fewer impacts to unidentified archaeological resources and fossils. Rehabilitation of existing buildings and the creation of formal connecting open spaces between the structures would likely improve the historic integrity of the area, similar to the proposed project. Because the alternative would not include the construction of new buildings, the potential for adverse impacts to the setting of existing historic buildings would be reduced compared to the proposed project.

g. Sustainability and Energy. The Option 1 alternative would realize most of the sustainability and energy conservation benefits of the project, although with less overall development. The alternative would protect important natural features and historic resources while accommodating new mixed uses south of the Jefferson Ridge/Officers' Row Zone. However, the accommodation of new development within the historic and ecological context of the Lower Arsenal would be considered a benefit of the project. The alternative – which would not result in the construction of new buildings on Jefferson Ridge – would not realize this beneficial impact to the extent of the project.

C. OPTION 1.5 ALTERNATIVE

1. Principal Characteristics

The Option 1.5 alternative seeks to strike a balance between the preservation ethic of Option 1 and Option 2, which would accommodate approximately 185,000 square feet of new development on Jefferson Ridge. The alternative was originally introduced by Marilyn Bardet, a Benicia resident and energetic participant in local planning matters. Key features of the alternative include the creation of an "Arsenal Memorial Park" south of Jefferson Street, consisting of existing trees, landscaping, and paths, and the construction of two new buildings: one located south of Jefferson Street, at the intersection with Park Road, and the other located behind the Commanding Officer's Quarters.

Arsenal Memorial Park would occupy most of the existing open space south of Jefferson Ridge, and would preserve significant trees. Pedestrian trails would be built through the park, and no major grading would occur. A viewing terrace would be constructed in the park, which would overlook the Guard House, the Command Post, and Carquinez Strait.

The new building at the intersection of Jefferson Street and Park Road would be permitted for commercial uses, and would consist of two wings and a maximum height of two stories. The entrance to the building would be on Park Road and/or Jefferson Street, and all parking would be screened. A new curving road would be built between Jefferson Street and Adams Street on the east side of the structure. A second new building north and east of the Commanding Officer's Quarters would be permitted, contingent on the successful restoration and reuse of the Commanding Officer's Quarters. The building would be occupied by commercial uses and would be a maximum of two stories.

As part of the Option 1.5 alternative, the Commanding Officer's Quarters would be rehabilitated. Similar to the proposed project, formal squares would be developed between the Clocktower, the Commanding Officer's Quarters, and the Lieutenant's Quarters. Unlike the proposed project, Jefferson Street vehicle flow would be only one way, and old curbs along the street would be maintained (resulting in only minimal widening). In addition, the existing road connecting Jefferson Street to Adams Street would be removed.

2. Analysis of Option 1.5 Alternative

This alternative is evaluated below for all the topics analyzed in the EIR with the exception of: Geology, Soils, and Seismicity; Hydrology and Water Quality; Hazards and Hazardous Materials; Air Quality; Noise; and Public Services and Utilities. The impacts associated with these excluded topics would be very similar for the three development alternatives, and almost the same as those that would result from implementation of the proposed project. The differences in environmental impacts between the proposed project and the Option 1.5 alternative are relatively minor. The discussion below therefore focuses on these minor differences.

- a. Land Use and Planning Policy.** The alternative would preserve most of the south side of Jefferson Street as open space, maintaining the expansive character of the zone. The two new buildings that would be added to the zone would be constructed in relatively inconspicuous places and would be compatible with existing historic uses. Proposed land uses are all complementary; therefore, no feature of the Option 1.5 alternative would result in significant land use impacts.
- b. Population, Employment and Housing.** The alternative would result in the development of two new commercial buildings on the site and the rehabilitation of the Commanding Officer's Quarters (which would also be occupied by commercial uses). The exact size of these two new buildings has not yet been determined, but based on conceptual building footprints, each would likely comprise roughly 35,000 square feet. Therefore, the alternative would reduce employment by approximately 70 persons compared to the proposed project. The only direct population growth associated with this alternative would be that associated with a live-in occupant of the Commanding Officer's Quarters. Therefore, like the proposed project, this alternative would not result in significant demographic-related environmental impacts.
- c. Biological Resources.** Like the Option 1 alternative, the Option 1.5 alternative would result in fewer impacts to biological resources compared to the proposed project. Because more open space would be retained on Jefferson Ridge (which, out of all the development zones, contains the most biological resources), direct impacts to seasonal wetlands, protected trees, and special-status plant species (which may occur on the site) would be reduced.
- d. Transportation and Circulation.** The Option 1.5 alternative would generate daily trip volumes that are intermediate between that of Option 1 and the proposed project. The intersections that would be adversely affected by the project are anticipated to operate at unacceptable levels in the existing and cumulative conditions (without the project). Although the Option 1.5 alternative would generate fewer trips than the proposed project, the number of trips would make a significant contribution to already-deficient operations. Therefore, the Option 1.5 alternative would not avoid any of the significant congestion impacts that would result from the proposed project. In addition, only one road would be built between Jefferson Street and Adams Street as part of the alternative (compared to three roads as part of the proposed project). The road that would be built as part of the alternative

would be built near the western end of the ridge and would not connect Jefferson Street and Adams Street as well as the proposed project (which would include three new roads, two of which would be in the center of the ridge). However, this circulation difference would not have significant physical environmental implications.

e. Visual Resources. The Option 1.5 alternative, like the proposed project, would be highly protective of viewsheds and visual character. The two new buildings would be placed in relatively inconspicuous locations, and would be of a scale and mass that would not detract from the historic setting of Jefferson Ridge. All proposed parks and squares would also be consistent with the historic character of the area. The new structure proposed south of Jefferson Street, at the intersection with Park Road, would not block scenic views (most existing views from the site are obscured by vegetation). All scenic views would be maintained, as they would with the proposed project. Therefore, the Option 1.5 alternative would not result in a significant impact to visual resources.

f. Cultural and Paleontological Resources. The alternative, which would result in the construction of two new buildings, could adversely affect archaeological and paleontological resources, similar to the proposed project. In addition, like the proposed project, the new structures could compromise the existing historic setting of Jefferson Ridge. However, the new buildings are expected to be designed in a way that is sensitive to the Commanding Officer's Quarters, Duplex Officers' Quarters, and other historic structures in the area. Therefore, the impacts of the Option 1.5 Alternative on cultural and paleontological resources would be almost identical to those that would result from the proposed project.

g. Sustainability and Energy. The Option 1.5 alternative would realize the same sustainability outcomes as the proposed project, including the preservation of important historic and ecological resources, the promotion of mixed-use development and alternative transportation, and respect for the public realm.

D. SENIOR HOUSING ALTERNATIVE

1. Principal Characteristics

The Senior Housing alternative is based on a current proposal by the Solano Affordable Housing Foundation to develop a 50-unit senior apartment complex and 30 market-rate townhouses on an 8-acre site in the Jefferson Ridge/Officers' Row Zone (see Figure V-2). The senior residential building would be located west and north of the Commanding Officer's Quarters (just south of the building proposed to screen the view of I-780 in the Draft Specific Plan). The structure would be two stories and would be built in a residential style. A driveway would extend around the building, and would include angled parking.

A formal square would be developed south of the senior apartment complex. This square would be slightly smaller than the one envisioned as part of the proposed project because the proposed building would be located farther to the south. The square would be designed in a formal style with two intersecting axes.

The 30 townhouses would be constructed south of Jefferson Street. Three townhouse buildings would be located south of the senior apartment complex (and across Jefferson Street), between Jefferson

Street and Adams Street. Two of these buildings would face Jefferson Street and one would face Adams Street. The remaining townhouses would occupy two buildings located on the eastern side of the ridge, on the west side of the existing street that connects Jefferson Street and Adams Street. The larger of the two buildings would face Jefferson Street; the second building would face Adams Street. A “U”-shaped driveway with two access points on Jefferson Street would provide vehicle access to the townhouse buildings in the eastern portion of the site; a driveway with one access point on the connecting Jefferson Street/Adams Street road and another access point on Jefferson Street would provide vehicle access to the townhouse buildings in the western part of the site. No new connecting streets would be built between Jefferson Street and Adams Street.

Open space on the site would consist of the square south of the senior apartment complex, and undeveloped land north of the apartment complex and around the townhouses. Storm water quality areas would be located within this open space in four separate locations (and would diverge from the storm water treatment feature locations identified in the Draft Specific Plan).

2. Analysis of Senior Housing Alternative

This Senior Housing alternative is evaluated below for all the topics analyzed in the EIR with the exception of: Geology, Soils, and Seismicity; Hydrology and Water Quality; Hazards and Hazardous Materials; Air Quality; Noise; and Public Services and Utilities. The impacts associated with these excluded topics would be very similar for the three development alternatives, and almost the same as those that would result from implementation of the proposed project.

a. Land Use and Planning Policy. The Senior Housing alternative would not result in the construction of incompatible land uses. Senior housing and townhouse uses would be generally compatible with the existing uses on Jefferson Ridge, which is quiet and relatively isolated from existing industrial uses compared to the other zones. The senior residential uses would not be well-served by existing services; most trips – to a grocery store or medical services – would require a bus or car ride, at least in the near-term. However, this lack of access would not result in significant environmental impacts. The location of the senior apartment building appears compatible with the Commanding Officer’s Quarters, although its position would result in an Officers’ Square that is smaller than the one proposed as part of the Draft Specific Plan. The five townhouse buildings would be placed conspicuously on Jefferson Ridge, and would likely detract from the character of existing open space. The alternative would require the removal of trees from the open space, and would compromise the land use character of the area.

b. Population, Employment and Housing. Compared to the proposed project, the Senior Housing alternative would increase housing on the site by approximately 80 units, and would reduce commercial space on the site by approximately 185,000 square feet. Like the proposed project, the alternative would not displace housing or divide an established community. The alternative would substantially increase the City’s supply of affordable housing, which would benefit Benicia. Based on an average household size of 2.6 persons, the alternative would increase the population of the site by approximately 208 persons (although a population increase of this magnitude would probably not be realized since the average household size of senior units would be below the City’s average). This population increase would not be considered substantial. The alternative would contribute to the City’s existing jobs/housing imbalance, and would reduce the potential for the Lower Arsenal to be a truly mixed use environment. However, these impacts would not be considered significant.



LSA

FIGURE V-2



Lower Arsenal Mixed Use Specific Plan EIR
 Senior Housing Alternative

NOT TO SCALE

c. Biological Resources. The Senior Housing alternative would result in the removal of protected trees (possibly including heritage cork oaks), and direct impacts to seasonal wetlands, sensitive plant species which may occur on the site, and breeding bird and bat habitat. Because the senior apartment building would not be built to the northern boundary of the site, some impacts to seasonal wetlands may be avoided compared to the proposed project. However, compared to the proposed project, the alternative would have more widespread impacts on the grove of trees in the southeastern portion of Jefferson Ridge (and would result in more vegetation removal overall).

d. Transportation and Circulation. The alternative would be expected to result in fewer vehicle trips than the proposed project and the Option 1.5 alternative (but more trips than the Option 1 alternative). Because the intersections that would be affected by the project would operate deficiently in the existing and cumulative condition (without the project), the Senior Housing alternative would result in significant congestion impacts. The alternative would also not increase connectivity between Jefferson Street and Adams Street, as would the proposed project.

e. Visual Resources. The Senior Housing alternative would not result in significant impacts to scenic viewsheds. Sight lines between the Commanding Officer's Quarters and the Lieutenant's Quarters and from the top of Officer's Square to the Historic Office Building would be preserved (although the viewsheds would not be as wide as under the Draft Specific Plan, and a portion of the Commanding Officers' Quarters would be cut-off from view due to the intervening senior apartment complex). However, unlike the proposed project, the alternative would result in a significant adverse effect on the visual character of the site. The following features of the Senior Housing alternative would contribute to this impact:

- the distribution of townhouse buildings along the ridge does not reflect the formal organization of existing historic buildings in Jefferson Ridge;
- the alternative would require the removal of trees in the southeastern portion of the ridge, some of which are likely heritage trees and are important components of the Lower Arsenal's history;
- townhouses would encroach on the historic heritage oaks; and
- the alternative would require extensive grading for building footprints and driveways south of Jefferson Street.

Compared to the proposed project, the Senior Housing alternative would be substantially less protective of visual resources on the site.

f. Cultural and Paleontological Resources. Like the proposed project, the alternative could result in impacts to archaeological resources and fossils during the site preparation and construction period. However, unlike the project, the alternative would likely result in more substantial impacts to the historic setting of the area due primarily to: 1) the informal and suburban-style configuration of the townhouse buildings, which is not consistent with the formal organization of historic buildings on Jefferson Ridge; 2) the location of the senior apartment building, which would partially obscure views of the Commanding Officer's Quarters from the west; 3) the need for substantial grading, which would result in significant changes to the topography of Jefferson Ridge; and 4) the removal of historic trees from the southeastern portion of the ridge. This impact would be significant and adverse. Compared to the proposed project, the Senior Housing alternative would be substantially less protective of historic resources on the site.

g. Sustainability and Energy. Because the Senior Housing alternative would be less sensitive toward protected trees, visual resources, and historic resources, it would not meet as many sustainability principles as the proposed project.

E. OTHER ALTERNATIVES CONSIDERED

The proposed project, which would restore historic buildings and promote the development of mixed uses in the Lower Arsenal, is inextricably linked to the project site. Therefore, no off-site alternatives were considered. The only potentially significant (after mitigation) impacts that would result from the proposed project involve the demolition of historically significant buildings that were not identified as such in the Arsenal Historic Conservation Plan. Impacts to these buildings would be reduced to a less-than-significant level with implementation of the mitigation measures in Section IV.K, Cultural and Paleontological Resources and preservation of significant buildings. Therefore, alternatives with different building configurations (other than those already analyzed) would not achieve substantial environmental benefits and were not considered in this analysis. Other alternatives considered include: 1) an all-residential alternative; 2) a no-residential alternative; and 3) placing the entire Lower Arsenal under a conservation easement. However, these alternatives were rejected because they were considered infeasible and/or would not meet regional environmental objectives.

F. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that the EIR identify the environmentally superior alternative. The Option 1 alternative, which would rehabilitate existing historic buildings and landscapes on Jefferson Ridge with no new development, would be the environmentally superior alternative. The Option 1 alternative would reduce the following environmental impacts of the proposed project:

- impacts to seasonal wetlands, protected trees, special-status plant species, burrowing owl and other bird habitat, and bat habitat;
- roadway congestion; and
- impacts to archaeological resources and fossils due to ground disturbance.

However, the Draft Specific Plan is also highly protective of the environment. It would result in no significant unavoidable impacts (as long as historic buildings are not demolished at the time that specific development projects are proposed), and would promote sustainability and energy conservation. Although the Option 1 alternative is environmentally superior to the proposed project, the Draft Specific Plan is, overall, environmentally sound.