7 ALTERNATIVES ANALYSIS

7.1 INTRODUCTION

The Alternatives Analysis chapter of the EIR includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required per CEQA Guidelines Section 15126.6. Generally, the chapter includes discussion of the following: the purpose of an alternatives analysis; alternatives considered but dismissed; reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts; and the environmentally superior alternative.

The range of alternatives evaluated in this EIR include the following:

1. No Project (No Build) Alternative;
2. Reduced Site Size Alternative;
3. Reduced Project Alternative;
4. Off-Site Alternative A (Davis Innovation Center Site);
5. Off-Site Alternative B (Covell Property);
6. Infill Alternative; and
7. Mixed-Use Alternative.

Chapter 8 of this EIR includes an analysis of the Mixed-Use Alternative. This Mixed-Use Alternative has been included in a separate chapter because it is evaluated at a level of detail that is equal to the analysis of the proposed project.

7.2 EXECUTIVE SUMMARY - ALTERNATIVES COMPARISON

Tables 7-1A and 7-1B, and the following descriptive text, provides a summary of the basic components of each alternative evaluated for the proposed project. Table 7-8 at the end of this chapter, provides a list of every impact statement included in the technical sections of this EIR, and indicates how each alternative's anticipated impacts compare to the proposed project's impacts. With the exception of the Mixed-Use Alternative, these impact comparisons are done qualitatively (i.e., "less", "similar", or "more").

Table 7-1A
Comparison of Alternatives Features

Project / Alternative	Acres				Square Feet				Dwelling Units			
	Total	MRIC	Mace Triangle	Alternate Site	Total	MRIC	Mace Triangle	Alternate Site	Total	MRIC	Mace Triangle	Alternate Site
Proposed Project	228.5	212.0	16.5	N/A	2,725,056	2,654,000	71,056	N/A	--	--	--	N/A
No Project (No Build) Alternative	228.5	212.0	16.5	N/A	--	--	--	N/A	--	--	--	N/A
Reduced Site Size Alternative	122.5	106.0	16.5	N/A	2,725,056	2,654,000	71,056	N/A	--	--	--	N/A
Reduced Project Alternative	66	49.5	16.5	N/A	611,056	540,000	71,056	N/A	--	--	--	N/A
Off-Site Alternative A (Davis Innovation Center Site)	207.8	--	--	207.8	2,654,000	2,654,000	--	2,654,000	--	--	--	--
Off-Site Alternative B (Covell Property)	236.0	--	--	236.0	2,654,000	2,654,000	--	2,654,000	--	--	--	--
Infill Alternative	82.0	--	--	82.0	2,654,000	2,654,000	--	2,654,000	--	--	--	--
Mixed-Use Alternative	228.5	212.0	16.5	N/A	2,725,056	2,654,000	71,056	--	850	850	--	--

Table 7-1B
Comparison of Alternatives Features

Alternative	Gross FAR	Maximum Building Height	Vehicle Miles Traveled (Daily)	Daily Vehicle Trips	Other Features
No Project (No Build) Alternative[1]	0	0	0	0	N/A
Reduced Site Size Alternative	0.77	75 feet (hotel)[2]	196,000	15,500	N/A
Reduced Project Alternative	0.38	55 Feet[3]	23,000	2,230	N/A
Off-Site Alternative A (Davis Innovation Center Site)	0.49	75 Feet	196,000[4]	15,550	N/A
Off-Site Alternative B (Covell Property)	0.49	75 Feet	196,000[4]	15,550	N/A
Mixed-Use Alternative	0.82	85 Feet	139,000	13,470	750-850 dwelling units

[1] This alternative includes existing agricultural retail development, a park-and-ride facility, and other uses that are currently operating on the Mace Triangle portion of the project site.
[2] It should be noted that the R&D buildings would be increased by 10 feet (65 feet for this Alternative versus 55 feet for the proposed project).
[3] Reduced height is due to lack of proposed hotel.
[4] These are approximate VMT estimates based upon the VMT calculated for the proposed project. The VMT may be slightly different given that these are off-site alternatives, and by putting the MRIC project on another site, the daily VMT may change.

Summary of No Project (No Build) Alternative

The No Project (No Build) Alternative is defined as continuation of existing agricultural and related uses over the entire 212 acres. The current operations on the MRIC site involve the generation of vehicle trips, use of tractors and other heavy-duty, off-road diesel equipment, water trucks, and a deep-well diesel pump for irrigation water. The site is designated and zoned by Yolo County for agricultural uses; thus, the site would continue in its current agricultural condition under the No Project (No Build) Alternative. For the No Project (No Build) Alternative, however, changes to the type of crop grown on the project site could occur at any time. In addition, various accessory structures are allowed within the A-N zone, including barns and storage sheds, grain elevators and silos, farm offices, greenhouses (up to 100,000 sf), other accessory agricultural support structures, and single family residences (minimum lot size of 80 acres). An "allowed use", such as an accessory structure, does not require a land use permit, but is still subject to permit requirements of other Yolo County divisions, such as Building, Environmental Health, and Public Works.

The 17-acre Mace Triangle site consists of three parcels located south of CR 32A. The northernmost parcel, APN 033-630-011, is partially developed with an Ikedas Market and a gravel parking lot. The southwestern parcel, APN 033-630-006, is developed with a City-owned water tank and a Park-and-Ride lot. The third and easternmost parcel, APN 033-630-012, is undeveloped but disturbed as a result of on-going agricultural operations. This eastern parcel is currently fallow. Vehicular access is provided to the Mace Triangle site by a single driveway from CR 32A.

As discussed in further detail below, implementation of the No Project (No Build) Alternative would result in fewer overall impacts compared to the proposed project. However, because the No Project (No Build) Alternative would not involve the development of innovation center uses on the MRIC site or general commercial uses on the Mace Triangle site, the Alternative would not meet the basic project objectives (see Chapter 3 Project Description).

Summary of Reduced Site Size Alternative

The Reduced Site Size Alternative is defined as the entire MRIC on approximately one half of the MRIC site with no change to the Mace Triangle component. This Alternative assumes the same buildout square footage for the MRIC as the proposed project, but on a smaller site over a smaller footprint. Specifically, the Reduced Site Size Alternative would involve development of up to 2,654,000 square feet (sf) on the southern 106-acre portion of the proposed MRIC site, located north of County Road (CR) 32A and east of Mace Boulevard. The 17-acre Mace Triangle site is also included as part of the Reduced Site Size Alternative in order to avoid the creation of a County "island" property. Thus, the Reduced Site Size Alternative site would contain a total of approximately 122.58 acres. The same development assumptions, and mitigation measures, identified for the Mace Triangle in the Project Description chapter and technical sections of this EIR, would apply for the Reduced Site Size Alternative.[1]

Due to the reduced amount of development area for the Reduced Site Size Alternative, the five-acre "Oval" and the greenways on the MRIC site are not included in the Alternative. The total open space area for the Reduced Site Size Alternative, including the courtyard plazas and the required 150-foot agricultural buffer, would be 27 acres, as compared to 64.6 acres under the proposed project. Access points to the Reduced Site Size Alternative would be similar to those proposed for the project (i.e., two access points along Mace Boulevard, and two southerly access points along CR 32A). A parking structure would be required for the Reduced Site Size Alternative in order to achieve a parking ratio compliant with City standards. Water and sewer improvements for the Reduced Site Size Alternative would be consistent with the improvements identified for the proposed project.

The research and development (R&D) buildings would have a maximum height of 65 feet and contain three to four stories. In addition, the manufacturing/research buildings would have a maximum height of 45 feet and would contain one to two stories, similar to the proposed project. Also similar to the proposed project is the hotel building, which would have a maximum height of 75 feet.

The Reduced Site Size Alternative would result in less impact overall as compared to the proposed project simply because the site size is reduced. The Reduced Site Size Alternative would, however, result in greater impacts than the proposed project related to aesthetics (i.e., increased building heights). This alternative would meet some of the objectives of the proposed

[1] The City property would be designated Public-Semi-Public to allow for the continuation of existing uses. New uses on the City property are not proposed. The Ikedas parcel and other agricultural parcel would be designated General Commercial to allow for the continuation or expansion of the existing agricultural retail (Ikedas market) and/or for the development of up to 71,056 sf of new commercial uses.

project. However, the smaller site size would make it difficult to achieve a sufficient long term land supply for the full range of projected uses including those that require larger building footprints. The smaller site would double the intensity of development over the site which would result in design challenges and may be too dense to attract some desirable R&D users. The ability to attract medium-scale and large-scale users would be affected by the small footprint and there would be less flexibility in the user space to address the specific needs of some tenants as a result.

Summary of Reduced Project Alternative

The Reduced Project Alternative is defined as development of about one quarter of the MRIC site with about one fifth of the proposed square footage, and no change to the Mace Triangle component. This Alternative assumes buildout of only the western half (approximately 49.5 acres) of the 106-acre parcel described above for the Reduced Site Size Alternative. The rest of this parcel, or approximately 56 acres, would remain as agricultural land. A maximum of 540,000 square feet of development is assumed for the Reduced Project Alternative, which would include 400,000 square feet of research/manufacturing space to accommodate the expansion needs of Schilling Robotics, and 140,000 square feet of research and development/office use, which may incorporate ground floor ancillary retail of up to 40,000 square feet.

Water and sewer improvements for the Reduced Project Alternative would be substantially consistent with the improvements identified for Phase 1 of the proposed project. Two access points would be provided for the Reduced Project Alternative: 1) a new intersection leg heading east at Mace Boulevard and Alhambra Boulevard; and 2) a new southern access point, which would connect to County Road 32A, east of the existing Park-and-Ride lot driveway. The southern access would be the principal point of entry for transport vehicles and goods movement traffic. Similar to the proposed project, the two research and development/office buildings would not exceed 55-feet in height, and the two research/manufacturing buildings would not exceed 45 feet in height. Total open space for the Reduced Project Alternative, including the required 150-foot agricultural buffer, would be approximately 17 acres.

This alternative would include the Mace Triangle site in order to avoid the creation of a County island property. The same development assumptions, and mitigation measures, identified for the Mace Triangle in the Project Description chapter and technical sections of this EIR, would apply for the Reduced Project Alternative.

This Alternative is essentially an analysis of MRIC Phase 1. The Reduced Project Alternative includes the same square footage and land uses as MRIC Phase 1, with the only difference being the layout of the proposed buildings, as can be seen by comparing Figure 7-3 with Figure 3-20 of the EIR Project Description chapter. As such, the mitigation requirements for MRIC Phase 1 of the proposed project would also be required for the Reduced Project Alternative. As a corollary, the mitigation measures not required until Phase 2 of the proposed project would not be required for the Reduced Project Alternative. The following proposed project mitigation measures would not be required for MRIC Phase 1/Reduced Project Alternative:

- MM 4.4-2(a) [VELB]
- MM 4.5-2(a) [Arch Resources]
- MM 4.7-2(b) [GHG Monitoring]
- MM 4.14-1 [Covell/Monarch Signal]
- MM 4.14-2(a) [Focused Traffic Study Requirement]
- MM 4.14-2 (b-d) [Mace Interchange Intersection Improvement Options]

The Reduced Project Alternative would result in less than 50 acres of development, just over one half million square feet, and is projected to be built out in under five years. This alternative would result in less impact as compared to the project; however, it fails to achieve the fundamental objectives of the City or the applicant to develop an integrated innovation center campus of approximately 200 acres in size, with sufficient land to meet demand over a 20 to 25 year period. As a result, this alternative would not result in a critical mass of users of various sizes sufficient to allow for a full range of research and market uses. It is also unlikely to support the necessary infrastructure and amenities to meet the City's sustainability, transportation, work environment, and fiscal/community benefit objectives. Moreover, the City would be unlikely to capture a greater share of local and regional business growth with such a small site. In addition, because the overall gross FAR for this Alternative is approximately 0.38, this Alternative would not be consistent with the City's goal of at least 0.5 FAR. Also, the lack of hotel and conference center would not be consistent with the project objectives concerning the provision of such uses.

Summary of Off-Site Alternative A (Davis IC Site)

The Off-Site Alternative A is defined as continuation of existing agriculture and related uses over the entire 229-acre project site and development of the MRIC component only at an alternate site near the Sutter Davis Hospital. The Mace Triangle component of the project would not be built under this alternative. Buildout per Off-Site Alternative A (Davis Innovation Center site) would assume development of the same proposed MRIC at an alternative site, which in this case is the 207.75-acre Davis Innovation Center (Davis IC) site, located immediately west of the City of Davis city limits in Yolo County, approximately 2.5 miles west of downtown Davis. Regional access to the Davis IC site is provided by the State Route 113/Covell Boulevard interchange, located southeast of the Davis IC Site. The Davis IC Site is identified by Assessor's Parcel Numbers (APNs) 036-060-005, and 036-020-012 thru -018. The Davis IC site, similar to the proposed project site, is currently used for agricultural purposes and is located near other existing development (to the east and south) and other agricultural uses (to the west and north).

Off-Site Alternative A (Davis IC site) would result in greater impact as compared to the project, particularly in the areas of biological resources, flooding and hydrology, and noise. This alternative would meet many of the objectives of the proposed project. However, the property is not controlled by, nor available to the applicant, and would not meet their objective related to proximity to I-80 and logical extension of the 2nd Street corridor, where existing technology businesses are located. This Alternative also would not provide an opportunity for the Mace Triangle agricultural retail business to expand as that property would remain in the County.

Summary of Off-Site Alternative B

The Off-Site Alternative B is defined as continuation of existing agriculture and related uses over the entire 229-acre project site, and development of the MRIC component only at an alternate site near the Cannery project. The Mace Triangle component of the project would not be built under this alternative. Off-Site Alternative B (Covell Property) would assume development of the proposed project at an alternative site, which in this case is the Covell Property south of drainage Channel A (APN: 035-970-033). Generally, the property is north of East Covell Boulevard, east of the Cannery Project, west of Pole Line Road, and south of the City's old landfill site.

The Off-Site Alternative B (Covell Property) acreage totals approximately 236 acres. This Alternative is anticipated to include the same approximate development area as the proposed project, including a similar amount of open space area. Access to Off-Site Alternative B (Covell Property) would be provided along Covell Boulevard and Pole Line Road. The Covell Property site has one residence and associated outbuildings. The site has historically been and is currently used for agricultural purposes (row crops), and is surrounded by the City limits and urban uses on three sides, and agriculture on the north side. The site is designated in the County General Plan and Zoning Ordinance as Specific Plan (S-P). According to the Yolo County General Plan, Specific Plan (SP) allows uses in the AG designation to continue temporarily until such time as the Specific Plan has been adopted, or the land use designation is otherwise amended. Ultimate land uses must be consistent with the adopted Specific Plan. Capital intensive agricultural uses are discouraged in lands designated Specific Plan so as not to preclude later planned uses. Identified planned uses in the County General Plan are commercial and mixed use (Yolo GP Policy 6.11f). The site is identified by LAFCO as falling within the 10-year sphere-of-influence for the City.

Off-Site Alternative B (Covell Property) would result in greater impacts, as compared to the proposed project, particularly in the areas of loss of agricultural land, biological resources, flooding, and noise. This alternative would meet many objectives of the proposed project. However, the property is not controlled by, nor available to the applicant, and would not meet their objective related to proximity to I-80 and logical extension of the 2nd Street corridor, where existing technology businesses are located. This Alternative also would not provide an opportunity for the Mace Triangle agricultural retail business to expand as that property would remain in the County.

7.3 PURPOSE OF ALTERNATIVES

The primary intent of the alternatives analysis of an EIR, as stated in Section 15126.6(a) of the California Environmental Quality Act (CEQA) Guidelines, is 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." In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Section 15126.6(f) of CEQA Guidelines states, "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." Section 15126.6(f) of CEQA Guidelines further states:

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

Furthermore, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

The CEQA Guidelines provide the following guidance for discussing alternatives to a proposed project:

- An EIR shall 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 (CEQA Guidelines Section 15126.6[a]).
- Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code 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 (CEQA Guidelines Section 15126.6[b]).
- The range of potential alternatives to the proposed 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 briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination […] Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison (CEQA Guidelines Section 15126.6[d]).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall

be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6[d]).

- The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (CEQA Guidelines Section 15126.6[e][1]).
- If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

Project Objectives

Based on the above, reasonable alternatives to the project must be capable of feasibly attaining most of the basic objectives of the project. The MRIC applicant proposes to achieve the following objectives with development of the MRIC:

Applicant Objectives

1. Expeditiously provide a suitable space in which to retain existing local businesses, such as Schilling Robotics, and to attract and grow innovative high-value added, technology oriented companies.
2. Provide sufficient land to meet the demand in Davis for innovation centers over a 25-year time horizon.
3. Utilize land immediately adjacent to the City boundary with adequate and easily-extended infrastructure, including but not limited to fiber optics for high-speed internet.
4. Provide an integrated, high-quality campus-like project offering a variety of lot sizes that will respond to the current and future needs of technology start-ups, industry leaders, research and development, and products manufacturing firms; allowing for a full range of research to market uses.
5. Develop a critical mass of users at a given location sufficient to render economically feasible the delivery of infrastructure necessary for development to occur.
6. Contribute to both job creation and tax base enhancement while supporting the University of California, Davis as a research institution.
7. Utilize a site with existing access to Interstate 80 (I-80) for the convenience and benefit of employees, collaborators, suppliers, and goods movement.
8. Support and build upon the City of Davis's existing successes by offering a logical extension to the 2nd Street technology corridor.
9. Develop an aesthetically pleasing site plan and architectural building design that incorporates energy and water efficiency, provides for non-automotive forms of transit, and is situated to receive and utilize recycled water when available.
10. Create a viable retail component, including hotel and conference center, which will primarily serve the needs of the innovation center, increase retail-related employment opportunities and contribute to tax revenue generation.

11. Encourage recreation and non-automotive modes of transportation by creating trail connections and improvements that enhance and encourage pedestrian/bicycle circulation and connectivity between the project site and surrounding areas.
12. Preserve and protect agriculture through the planning and development of property which will result in a distinct permanent urban edge.
13. Provide a business-oriented site design with a complementary mix of land uses that will encourage user interaction, collaboration, and the exchange of ideas, thereby serving as a catalyst to rapidly achieve economic growth and financial stability.
14. Reflect the feedback captured through the Innovation Park Task Force's planning, research and outreach, and incorporate as many of the consensus concepts as are feasible.

In addition, the City of Davis proposes to achieve the following objectives:

City Objectives for Innovation Centers

The City of Davis proposes to achieve the following objectives with a new innovation center. These reflect findings of the 2010 Business Park Land Strategy; Innovation Park Task Force, 2012, Davis Innovation Center Report (Studio 30); adopted 2012 Dispersed Innovation Strategy; the 2014 Davis Innovation Center Request for Expressions of Interest (RFEI) and 2014 Guiding Principles for Davis Innovation Center(s).

1. Land and Building Supply

    a. Position City to capture greater share of local/regional business growth. (Studio 30 report, Sect. 3 pgs. 15-20)

        Most remaining small, dispersed sites in the City are not adequate to meet needs of growing businesses and mid-sized companies. The Innovation Centers studied by Studio 30 for the Davis Innovation Center Report averaged around 200 acres in size and offer a variety of parcel sizes and ownership opportunities, flexible use/size of space and lease terms; and physical and virtual business support services allowing successful businesses to remain as they grow.

    b. Provide expansion capability for the City suitable in location and size for larger innovation centers with potential to accommodate commercial and research facilities. (Studio 30 & ICRFEI)
    c. Maintain a steady supply of developable land for future business development to meet needs of growing businesses and accommodate medium-scale and large scale (~150 employees) businesses over a long term 20+/- year period. (BPLS)

        A 200 acre innovation center supporting several million square feet of development could accommodate such business growth over a long term 20+/- year period (Studio 30 and RFEI).

    d. Provide a mix of building types, sizes and heights meeting needs of new startups and growing mid-sized companies, including potential for headquarter buildings. (RFEI)
    e. Increase the supply of flexible business space. (Studio 30)
    f. Take into account the specific needs of any identified or targeted tenants.

2. Density

   Due to the relative scarcity of developable land in Davis, an innovation center should focus on guidelines to maximize density to accommodate long-term business growth while taking into account the specific needs of identified tenants within the specific project where applicable. The review process must be cautious to not impose unilateral requirements solely for the sake of achieving "density", without consideration of other objectives.

   a. Maximize density to accommodate long-term business growth offering flexible space (scalability) and viable range of space options.
   b. Goal of at least 0.5 floor area ratio (FAR).
   c. Pursue opportunities for densification over time (i.e. parking structures and new buildings).

3. Sustainability

   a. Apply Low Impact Development Principles.
   b. Ensure minimal greenhouse gas (GHG) impacts at the project level.
   c. Allow flexibility and adaptation over the project lifespan and as new building techniques and energy production technologies emerge, explore opportunities to bolster the goals of the Climate Adaptation & Action Plan. (CAAP)
   d. Comply with the minimum City requirement of the CalGreen Tier 1 energy code for buildings.
   e. Mitigate with agricultural land on a 2 to 1 acre basis.
   f. Budgetary impacts of any proposed City maintenance areas will be carefully evaluated in the fiscal analysis.
   g. Utilize energy and resource efficient design, materials, operations and infrastructure.
   h. Integrate open space and habitat opportunities.
   i. Maximize the use of trees and native landscaping.

4. Transportation

   a. Establish bicycle/pedestrian connectivity.
   b. Develop partnerships with the City, UC Davis Unitrans, Yolo County Transit and Amtrak.
   c. Create a comprehensive multi-modal system and transportation plan with safe, dynamic, well-planned automobile, bicycle, pedestrian, mass transit and emergency vehicle access connections.

5. Work Environment

   a. Provide facilities and services that support innovation. (Studio 30)
      i. Provide a built environment and operations offering the ability to draw a critical mass of innovators and creative synergy enabling opportunities for ongoing formal and informal interdisciplinary connections.

ii. Provide a flexible range of desired work environments, small co-working, incubator/accelerator spaces, specialized maker-spaces, meeting/conference rooms, research and development, manufacturing facilities, larger companies and corporate headquarters.
iii. Include elements of "work, live, play" that encourage an engaged and inviting workplace, including ancillary amenities and activities that serve employees such as mixed use, cafés, coffee shop, restaurant, copy shop, recreation, fitness center, child care (as a few examples). (Studio 30)
iv. Provide shared business support services and “cutting edge” business center amenities (teleconferencing etc.) including broadband fiber connectivity.
v. Provide design elements that include dual use spaces, and shared facilities such as recreation, meeting, and gathering spaces (like amphitheater seating) that serve business needs during the weekdays and community needs during the evening and weekends.

b. Accommodate a range of lease and ownership options reflecting an array of formal and informal work styles and settings.
c. Use building designs incorporating LEED standards for healthy work environments (daylight, fresh air, good indoor air quality).

6. Uses

a. Support research and development; manufacturing facilities, larger companies and corporate headquarters.
b. Focus largely on expansion needs of research and technology development and creation of research, technology and advanced manufacturing jobs, and revenue generating uses.
c. Provide a mix of professional office, high-tech, R&D, industrial flex space, grow labs, commercial services.
d. Provide some ancillary project-serving retail and services.
e. Target hotel/conference spaces to serve the business needs of the innovation center over time.
f. Allow warehouse uses auxiliary only to research and manufacturing.
g. Discourage distribution centers, call centers or large-scale food processing plants.
h. Minimize and carefully manage heavy truck deliveries.

7. Timing and Project Phasing

a. Demonstrate sufficient resources to ensure completion of the project.
b. Phasing should meet with anticipated market demand for space and be adaptable to respond to changing market conditions over time.
c. Building density, project phasing, and total job creation must consider community growth and CEQA mitigations.
d. Phasing needs to be responsive to actual and potential tenants.

8. Fiscal Consideration and Net Community Benefit

    a. Achieve fiscal neutrality with regard to City services.
    b. Provide substantial surplus annual revenue.
    c. Provide positive economic impacts/multipliers citywide, and net community benefits (including social and environmental).

9. Partnerships

    a. Facilitate technology and business development.
    b. Facilitate collaborative partnerships.
    c. Provide opportunities for increased university and research engagement.
    d. Increase access to STEAM (science, technology, engineering, arts and agriculture, and math) and educational opportunities.

Mace Triangle Project Objectives

1. Avoid becoming an unincorporated island.
2. Avoid becoming an agricultural island.
3. Create opportunity to expand existing agricultural retail business.
4. Complement existing and future urban uses.
5. Allow for efficient master planning of infrastructure and services.

Impacts Identified in the EIR

In addition to attaining the majority of project objectives, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified environmental impacts of the proposed project. Environmental impacts of the proposed project that have been identified as less than significant after incorporation of mitigation include the following:

Less Than Significant With Mitigation

- ***Aesthetics and Visual Resources*:**
    - Impact 4.1-3: Creation of new sources of substantial light or glare that would adversely affect day or nighttime views in the area;
    - Impact 4.1-4: Impacts related to conflicting with, or creating an inconsistency with, any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to aesthetics and visual resources; and
    - Impact 5-2: Cumulative impacts related to the creation of new sources of light and glare.
- ***Biological Resources*:**
    - Impact 4.4-1: Impacts related to special-status plant species;
    - Impact 4.4-2: Impacts related to valley elderberry longhorn beetle;
    - Impact 4.4-3: Impacts related to giant garter snake;
    - Impact 4.4-4: Impacts related to burrowing owl;

- Impact 4.4-6: Impacts related to raptors, nesting birds, or other birds protected under the Migratory Bird Treaty Act (MBTA);
- Impact 4.4-7: Have a substantial effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS;
- Impact 4.4-11: Conflicts with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan; and
- Impact 4.4-12: Conflict with any applicable biological resources plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

- ***Cultural Resources*:**
  - Impact 4.5-1: Impacts to historical resources;
  - Impact 4.5-2: Impacts to archaeological resources;
  - Impact 4.5-3: Impacts to unique paleontological resources or unique geological features on the project site; and
  - Impact 4.5-4: Impacts to human remains, including those interred outside of formal cemeteries; and
  - Impact 5-7: Cumulative loss of cultural resources.
- ***Geology, Soils, and Mineral Resources*:**
  - Impact 4.6-2: Result in substantial erosion or loss of topsoil;
  - Impact 4.6-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse; and
  - Impact 4.6-4: Risks to people and structures associated with expansive soils.
- ***Greenhouse Gas Emissions and Energy*:**
  - Impact 4.7-4: Impacts related to energy associated with operations.
- ***Hazards and Hazardous Materials*:**
  - Impact 4.8-2: Creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with potential on-site tanks, well, or soil contamination.
- ***Hydrology and Water Quality:***
  - Impact 4.9-1: Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site; and
  - Impact 4.9-2: Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during construction; and
  - Impact 5-12: Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding.
- ***Land Use and Urban Decay:***
  - Impact 4.10-2: Economic and social changes and/or effects that result in urban decay; and
  - Impact 5-15: Cumulative Urban Decay.

- ***Noise and Vibration:***
  - Impact 4.11-4: Transportation noise impacts to new sensitive receptors in the project vicinity; and
  - Impact 5-17: Cumulative traffic noise effects on proposed uses.
- ***Public Services and Recreation*:**
  - Impact 4.13-4: Result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for park facilities.
- ***Transportation and Circulation*:**
  - Impact 4.14-1: Intersections outside freeway interchange areas;
  - Impact 14.4-6: Increase in vehicle miles traveled;
  - Impact 4.14-8: Impacts associated with Construction Vehicle Traffic;
  - Impact 4.14-9: Pedestrian and bicycle facilities; and
  - Impact 4.14-10: Transit services.
- ***Utilities:***
  - Impact 4.15-3: Determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; and
  - Impact 4.15-6: Adequate telecommunication facilities; and
  - Impact 5-26: Cumulative wastewater treatment and collection system impacts.

Significant and Unavoidable Impacts

Impacts of the proposed project that have been determined to remain significant and unavoidable, even after implementation of the feasible mitigation measures set forth in this EIR, include the following:

- ***Aesthetics and Visual Resources*:**
  - Impact 4.1-2: Substantially degrade the existing visual character or quality of the project site and its surroundings; and
  - Impact 5-1: Cumulative impacts related to long-term changes in visual character of the region.
- ***Agriculture and Forest Resources*:**
  - Impact 4.2-1: Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands) to non-agricultural use, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency;
  - Impact 4.2-3: Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use;
  - Impact 4.2-4: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use; and
  - Impact 5-3: Impacts related to cumulative loss of agricultural land.

- ***Air Quality*:**
  - Impact 4.3-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation during operations, and a conflict with or obstruction of implementation of applicable air quality plans; and
  - Impact 5-4: A cumulatively considerable net increase of any criteria pollutant.
- ***Biological Resources:***
  - Impact 4.4-5: Impacts to Swainson's hawk; and
  - Impact 5-5: Cumulative loss of habitat in the City of Davis area for special-status species.
- ***Greenhouse Gas Emissions and Energy*:**
  - Impact 4.7-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;
  - Impact 4.7-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; and
  - Impact 5-9: Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.
- ***Population and Housing:***
  - Impact 4.12-1: Induce substantial population growth; and
  - Impact 5-18: Cumulative population and housing impacts.
- ***Public Services and Recreation*:**
  - Impact 5-19: Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.
- ***Transportation and Circulation*:**
  - Impact 4.14-2: Impacts to Intersections within the Mace Boulevard Interchange Area;
  - Impact 4.14-5: Impacts to local neighborhood street traffic;
  - Impact 5-21: Cumulative impacts to intersections within the freeway interchange area;
  - Impact 5-22: Cumulative impacts to roadway segments; and
  - Impact 5-23: Cumulative impacts to local area freeway segments.

7.4 ALTERNATIVES CONSIDERED BUT DISMISSED

Consistent with CEQA, primary consideration was given to alternatives that could reduce significant impacts, while still meeting most of the project objectives. Any alternative that would have impacts identical to or more severe than the proposed project, and/or that would not meet any or most of the project objectives were dismissed from further consideration. One project alternative was considered but dismissed from further analysis in this EIR for the reasons set forth below.

Infill Alternative

This Alternative would consist of development of the same project components as the proposed project over multiple off-site parcels within the City of Davis. According to the City of Davis, as of May 2015, there are approximately 153 net acres remaining within 32 properties or

undeveloped portions of partially developed properties, which include sites that are zoned for office/flex and industrial building types and other commercial sites suitable for business growth (see Figure 7-1, City of Davis Undeveloped Land).

According to the vacant land information, out of the 32 properties, only 24 vacant sites, totaling approximately 82 acres, are currently available for development, meaning these 24 vacant sites are appropriately zoned for office and industrial building types, are available on the market, and do not currently have development plans. Of the 24, the majority (19) are small sites under four acres in size, with 14 of these under two acres in size. Because only 82 acres of vacant land is available for development, consisting primarily of parcels four acres or less, development of the project at the proposed buildout intensity on infill parcels would be infeasible. As such, for the Infill Alternative to be implemented, a reduced form of the project would need to be implemented or multiple high-rise structures would need to be developed throughout the City.

Although other vacant land occurs in the area, the land may not be designated or zoned appropriately for a business center or industrial project and/or may not be within the City limits or Sphere of Influence (SOI). For example, while the Signature Site, inside the Mace Curve, would be listed here, the property is designated Agriculture and is not within the City limits. In addition, other vacant parcels in the City or vicinity are not currently owned by the project applicant, and acquisition of the number of parcels sufficient to develop the proposed project would be difficult. Overall, undeveloped parcels of similar size to the proposed project site, which are designated and zoned appropriately for the project, do not exist in the City.

As the infill alternative would involve multiple small locations throughout the City, it does not meet the fundamental objectives of the City or the applicant to develop an integrated innovation center campus of approximately 200 acres in size, with sufficient land to meet demand over a 20 to 25 year period, and a critical mass of users of various sizes sufficient to support the necessary infrastructure and amenities to allow for a full range of research and market uses. Moreover, the City would not realize the benefits of an agglomeration of development, instead having a disconnected patchwork of development spread out in various sites. As a result the City would be unlikely to capture a greater share of local and regional business growth.

Among the concerns with this form of development is difficulty finding a consistent way to finance infrastructure geared to tech users. It is also unlikely the interaction would occur between and among various users that would otherwise take place in an innovation center. This alternative, without centralized management, is also unlikely to meet the City's objective to "Facilitate Collaborative Partnerships and Provide Opportunities for Increased University and Research Engagement." Additionally, the ability of one centrally developed and managed center to produce net community benefits in the form of fiscal benefits, economic multiplier effects, and surplus annual revenue is greater than that of many individual small users/sites. Furthermore, centralized management would not be effective with the infill alternative. This would lead to the inability or inefficiencies in implementing GHG reduction measures, VMT reduction measures, and incubator facilities.

Figure 7-1
City of Davis Undeveloped Land

Source: City of Davis, 2015.

Depending on the location and development on each site, impacts related to noise and vibration could potentially be greater than the proposed project based on the location of the nearest sensitive receptor and/or nearest high-traffic roadway. Similarly, impacts related to transportation and circulation could potentially be greater than the proposed project based on the consideration that all of the sites making up the Infill Alternative would not have easy access to I-80; therefore, trips would be distributed throughout the City, sometimes along local collectors.

Because the majority of the vacant parcels are not currently used for agricultural purposes, depending on the existing conditions at each site, impacts related to agricultural resources would likely be less under the Infill Alternative as compared to the proposed project. In addition, as the vacant parcels shown in Figure 7-1 are considered infill sites, which are surrounded by existing urban development, the likelihood for the parcels to contain or disturb sensitive biological resources or known cultural resources would be less than that of the proposed project.

Overall, adequate vacant land designated and zoned appropriately for the project and owned, or available for acquisition by the project applicant does not exist to develop the proposed project. In support of this, the UC Davis Studio 30 report determined that the current isolated and dispersed sites within the City that are available and appropriately zoned are not adequate in terms of size, location, or configuration (and related constraints) to address the emerging market need of an Innovation Center.[2] Based on absorption projections, Studio 30 estimated Davis needs at least 200 acres for business development and expansion over a 20+/- year time horizon.

Rather, it was concluded that, a combined approach of a close-in hub, with a larger, less constrained edge site offers the right mix of University proximity and expansion capability for the City. This is referred to as a "Dispersed Innovation Strategy." On November 13, 2012, the Davis City Council adopted Innovation Park Task Force recommendations. The recommendations aim to pursue a Dispersed Innovation Strategy, offering flexible space (scalability) supporting needs of growing and new businesses, , and maximizing increased development potential from infill opportunity sites as one of the Strategy elements.

Therefore, the Infill Alternative would not be considered a feasible alternative to the proposed project and has been dismissed from further evaluation.

7.5 ALTERNATIVES CONSIDERED IN DETAIL

The following alternatives are considered feasible alternatives to the project, and are considered in further detail and evaluated in this section:

- No Project (No Build) Alternative;
- Reduced Site Size Alternative;
- Reduced Project Alternative;
- Off-Site Alternative A (Davis Innovation Center Site); and
- Off-Site Alternative B (Covell Property).

[2] Studio 30 UC Davis Extension. *City of Davis Innovation Center Study*. 2012, p. ix.

Each of the project alternatives is described in detail below, with a corresponding analysis of each alternative's impacts in comparison to the proposed project. In addition, the Mixed Use Alternative is analyzed in Chapter 8 at a level of detail equal to that of the project. A comparison of the environmental impacts resulting from the considered alternatives and the proposed MRIC Project is provided in Table 7-8.

It is important to note that similar to the proposed project, on-site alternatives #2 and #3 would include the Mace Triangle in order to avoid the creation of a County island property. The same development assumptions described for the Mace Triangle in the Project Description chapter of this EIR would apply for the Reduced Site Size Alternative and Reduced Project Alternative.[3]

Explanation of Comparative Terminology

The chapter qualitatively compares the various alternatives to the project. While an effort has been made in this section to include quantitative data for certain analytical topics, where possible, the analysis evaluates impacts from the alternatives relative to the impacts of the project. The following terminology is used:

- "Less" = Less than Proposed Project;
- "Similar" = Similar to Proposed Project; and
- "More" = Greater than Proposed Project.

When the term "less" is used, the reader should not necessarily equate this to elimination of significant impacts identified for the proposed project. For example, in many cases, an alternative would reduce the relative intensity of an impact identified for the proposed project, but the impact would still be expected to remain significant under the alternative, thereby requiring mitigation. To take a specific example, the proposed project was determined to have significant incremental contribution to a cumulative impact to five freeway segments. The Reduced Project Alternative would reduce the intensity of the proposed project's cumulative impact to the freeway segments, given the substantial reduction in vehicle trips that would result from the Reduced Project Alternative; however, Fehr & Peers has determined that there is still a potential for this alternative to have a significant incremental contribution to all five freeway segments. Therefore, in this case, the characterization of "less" impacts may mean a reduction in the intensity of a significant impact identified for the proposed project.

In other cases, the use of the term "less" may mean the actual elimination of an impact identified for the proposed project altogether. For example, the proposed project was determined to have a significant impact at the East Covell Boulevard/Monarch Lane intersection. Impacts from the Reduced Project Alternative would be less than the project. Fehr & Peers has determined that the Reduced Project Alternative would not result in a significant impact based on an analysis of

[3] The City property would be designated Public-Semi-Public to allow for the continuation of existing uses. New uses are not proposed. The Ikedas parcel and other agricultural parcel would be designated General Commercial to allow for the continuation or expansion of the existing agricultural retail (Ikedas Market) and/or for the development of up to 71,056 sf of new commercial uses.

MRIC Phase 1 of the proposed project, which is consistent with the Reduced Project Alternative. Therefore, in this case, it would be stated that the alternative avoids an impact to the East Covell Boulevard/Monarch Lane intersection; and thus, the alternative would have "less" traffic impacts than the proposed project. This would be an example of when "less" impacts may mean actual elimination of a significant impact identified for the proposed project.

No Project (No Build) Alternative

CEQA requires the evaluation of the comparative impacts of the "No Project" alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative "… shall discuss […] existing conditions […] 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." (*Id.*, subd. [e][2]) "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the 'no project' alternative is the circumstance in which the project does not proceed. Here the discussion compares the environmental effects of the property remaining in its existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed. In certain instances, the no project alternative means 'no build,' wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (*Id.*, subd. [e][3][B]).

The No Project (No Build) Alternative is defined in this section as the on-going utilization of the 212-acre MRIC site for agricultural operations, consistent with the site's Yolo County zoning designation of Agricultural Intensive (A-N). Similarly, the approximately 16.49-acre Mace Triangle is assumed to continue in existing uses.

The recent tomato farming operations consisted of the following: spray operations in the beginning of the year; opening of tomato beds, incorporation of herbicides, and transplanting of tomato plants in March; starting diesel pump for drip irrigation and spaying for aphids and worms in April; hoeing of weeds in May; high cropping the tomato beds in June; training tomato vines, high cropping tomato beds, discing the headlands in July; and harvesting, working ground, and shaping tomato beds in August. The current operations on the MRIC Site involve the generation of vehicle trips, use of tractors and other heavy-duty, off-road diesel equipment, water trucks, and a deep-well diesel pump for irrigation water. The site is designated and zoned by Yolo County for agricultural uses; thus, the site would continue in its agricultural condition under the No Project (No Build) Alternative. For the No Project (No Build) Alternative, however, changes to the type of crop grown on the project site could occur at any time. In addition, various accessory structures are allowed within the A-N zone, including barns and storage sheds, grain elevators and silos, farm offices, greenhouses (up to 100,000 sf), other accessory agricultural support structures, and single family residences (minimum lot size of 80 acres). An "allowed use", such as an accessory structure, does not require a land use permit, but

is still subject to permit requirements of other Yolo County divisions, such as Building, Environmental Health, and Public Works.

As discussed in further detail below, implementation of the No Project (No Build) Alternative would result in fewer overall impacts compared to the proposed project. For a summary of the impacts resulting from the No Project (No Build) Alternative in comparison with the proposed project and the other project alternatives, see Table 7-8.

Because the No Project (No Build) Alternative would not involve the development of innovation center uses on the site, the Alternative would not meet the basic project objectives identified by the applicant and the City (see Project Objectives cited earlier in this chapter).

Comparative discussion of impacts in each environmental resource area as a result of implementation of the No Project (No Build) Alternative in comparison to that of the proposed project are presented below.

Aesthetics and Visual Resources

The impacts related to aesthetics and visual resources as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.1-1 Substantial adverse effect on a scenic vista.

As discussed in Section 4.1, Aesthetics and Visual Resources, a scenic vista, is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. Federal and State agencies have not designated any such locations within the City of Davis for viewing and sightseeing. Similarly, the City of Davis, according to the City of Davis General Plan Program EIR, has determined that the Planning Area of the General Plan has no officially designated scenic highways, corridors, vistas, or viewing areas. Because established scenic vistas are not located on or adjacent to the project site, the impact conclusion would be the same for the proposed project and this Alternative, that is, impacts to scenic vistas would not occur.

4.1-2 Substantially degrade the existing visual character or quality of the project site or its surroundings.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, consistent with the site's A-N zoning designation. While the County's A-N zoning allows a variety of crop types, the change in crop type, and possibly the intensity of farming operations at the site, would not be considered a substantial degradation of the existing visual character or quality of the site and its surroundings, as would be the case for the proposed project. Also under the site's current A-N zoning, accessory structures could be built, subject to County building permit approval. The potential level of agricultural-related development on the project site is not expected to be comparable to the proposed project, largely based upon the reasonable assumption that the property owner will seek to maximize the amount

of land area being farmed for economic reasons. Therefore, the No Project (No Build) Alternative would have less impacts than the proposed project.

4.1-3 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Sources of light and glare are not currently located on the project site. As the No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, new sources of light or glare would not be introduced to the site, unless accessory structures or a few allowable rural residences are built on-site that include outdoor lighting. Any such sources of light or glare would not be expected to be substantial, and would likely be located internal to the project site, and not adjacent to developed areas of the City. Accordingly, impacts related to light and glare would be less than the proposed project

4.1-4 Conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and visual resources.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. Unlike the proposed project, this Alternative would not require mitigation to ensure that it complies with the City's design-related policies, such as policies related to street trees and high quality design materials. Rather, any activities at the project site, under this Alternative, would be subject to Yolo County's applicable plans, policies and regulations. Therefore, similar to the conclusion reached for the project, the No Project (No Build) Alternative would have no or less-than-significant impacts with respect to conflicting, or creating inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and visual resources. Through the Alternative's compliance with Yolo County plans, policies, and regulations, and the proposed project's compliance with the City of Davis' plans, policies, and regulations, less-than-significant impacts would occur.

Agriculture and Forest Resources

The impacts related to agriculture and forest resources as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

The project site is designated by the California Department of Conservation as Prime Farmland, Potential Local Farmland, and Farmland of Statewide Importance. The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. As such, impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands) would

not occur under the No Project (No Build) Alternative, and the No Project (No Build) Alternative would result in less impacts compared to the proposed project.

4.2-2 Impacts related to conflicting with existing zoning for agricultural use.

The project site is currently located within Yolo County and is zoned by Yolo County as A-N. The project site would continue to be used for agricultural purposes, consistent with existing agricultural zoning, under the No Project (No Build) Alternative. Therefore, impacts related to conflicting with existing zoning for agricultural use would be less than the proposed project.

4.2-3 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. As such, agricultural or forest land would not be converted to non-forest or non-agricultural use, and associated impacts would not occur under the No Project (No Build) Alternative. Therefore, impacts would be less than the proposed project.

4.2-4 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. Unlike the operation of the proposed project, continued agricultural operations at the project site would not require the adjacent property owner to restrict aerial application of pesticides to within 500 feet of the property line. For the proposed project, during times when aerial application of pesticides is deemed necessary by the adjacent farmer, the proposed innovation center will indirectly result in what might be considered "induced" conversion of off-site agricultural land by disrupting the ability to farm a portion of the adjacent property that must serve as a buffer during aerial spraying. As such, the No Project (No Build) Alternative would not involve changes to the existing environment, and conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use would not occur. Therefore, impacts associated with such would be less than the proposed project.

4.2-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. Unlike the proposed project, this Alternative would not require mitigation to ensure that it complies with the City's agricultural-related policies, such as policies related to agricultural buffers and urban agricultural transition areas. Rather, any activities at the project site, under this Alternative, would be subject to Yolo County's applicable plans, policies and regulations. Therefore, the No Project (No Build) Alternative would have impacts similar to

the project with respect to conflicting, or creating inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources. Through the Alternative's compliance with Yolo County plans, policies, and regulations, and the proposed project's compliance with the City of Davis' plans, policies, and regulations, less-than-significant impacts would occur.

Air Quality

The impacts related to air quality as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.3-1 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.

On-going agricultural operations at the project site, under this Alternative, would result in the periodic generation of dust and noise. For example, the recent tomato farming operations consisted of the following: spray operations in the beginning of the year; opening of tomato beds, incorporation of herbicides, and transplanting of tomato plants in March; starting diesel pump for drip irrigation and spaying for aphids and worms in April; hoeing of weeds in May; high cropping the tomato beds in June; training tomato vines, high cropping tomato beds, discing the headlands in July; and harvesting, working ground, and shaping tomato beds in August. These operations involve the generation of vehicle trips, use of tractors and other heavy-duty, off-road diesel equipment, water trucks, and a deep-well diesel pump for irrigation water.

While construction is not expected to occur under the No Project (No Build) Alternative, with the possible exception of accessory structures pursuant to the site's A-N zone, the on-going agricultural operations, and its air quality effects through land disturbance, has similar characteristics to the site preparation and grading, which would be carried out during construction of the proposed project. However, construction sites are disturbed for a limited period, and subject to dust control measures of the YSAQMD. Agricultural activities are not subject to dust control. Therefore, impacts related to air quality violations during construction could be more than the proposed project.

4.3-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during operations, and a conflict with or obstruction of implementation of applicable air quality plans.

The current farming operations involve activities that result in emissions of criteria air pollutants. For example, emissions from vehicle trips, discing, and harvesting would result in emissions of criteria air pollutants. Due to the low intensity of current operations, such emissions would be less intensive under the No Project (No Build) Alternative than what could occur under the proposed project. In addition, the No Project (No Build) Alternative would not involve a substantial number of vehicles trips as compared to the proposed project, as the trips resulting from this Alternative would be restricted primarily to the planting and harvesting seasons, agricultural retail activity at Ikedas, and use of the Park-and-Ride lot. Therefore, the No Project

(No Build) Alternative would result in emissions of air pollutants, but any potential impacts associated with such would be less than what is expected for the proposed project.

4.3-3 Expose sensitive receptors to substantial pollutant concentrations.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. The potential for the Alternative to cause localized carbon monoxide (CO) emission impacts would be less than the proposed project because CO emissions would not be generated, and concentrated, in any given area for a sustained period of time, as could be the case if vehicles are idling for extended periods of time at a congested intersection. With respect to toxic air contaminants (TAC), operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy truck traffic or idling. The existing on-site well diesel pump, used for irrigation water, would generate TACs, though it would do so over a relatively short duration. Methodologies for conducting health risk assessments are associated with long-term exposure periods to TACs (e.g., over a 70-year lifetime). Overall, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be similar under the No Project (No Build) Alternative as compared to the proposed project.

4.3-4 Create objectionable odors affecting a substantial number of people.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. Agricultural uses have a tendency to be associated with odors, which is typically associated with exhaust fumes from use of heavy equipment and overspray of chemicals. The No Project (No Build) Alternative could result in a change in the type of crop grown on the site, which could increase the amount of pesticide use on the site. Odors associated with potential pesticide odor related to agricultural operations are addressed by the Yolo County Agricultural Commissioner. If an odor complaint is reported, a biologist representing the Yolo County Agricultural Commissioner investigates the complaint and is required to determine if a nearby pesticide application has caused the odor and if a nearby farmer has violated pesticide permit conditions. The Yolo County Agricultural Commissioner would ensure that any issue is rectified.

The proposed project would include, among other uses, light manufacturing uses, which could consist of assembly or packaging of products, including but not limited to electrical, pharmaceutical, and biomedical and food products and devices, as well as associated warehousing and distribution. Depending on the product, the manufacturing process could involve operations that may produce objectionable odors. However, the nearest sensitive receptors to the site are located approximately 660 feet to the west of the site, and the proposed project would include buffer areas along the perimeter of the project site that would further separate the future on-site uses from the nearest sensitive receptors. In addition, YSAQMD is responsible for enforcing the provisions of California Health and Safety Code Section 41700, which prohibits the discharge of anything that could endanger the comfort or health of the public. Nuisance odors are regulated by this section, although certain odors are exempted, such as odors from agricultural activities and composting facilities. The YSAQMD enforces Section 41700 through Rule 2.5 (Nuisance), which is based on complaints. If complaints are received, the

YSAQMD is required to investigate the complaint, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications.

Overall, because complaint-driven rules and regulations are in place for both agricultural odors and operational odors associated with the R&D/manufacturing uses of the project, impacts related to objectionable odors associated with the No Project (No Build) Alternative would be similar to the proposed project.

4.3-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to air quality.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. This Alternative, like the proposed project, would be subject to the rules and regulations of the YSAQMD. In addition, agricultural operations conducted under this Alternative would be subject to the Yolo County Agricultural Commissioner's rules conditions related to aerial pesticide application. As assumed for the project, compliance with YSAQMD rules and regulations would ensure that impacts would be less than significant.

Biological Resources

The impacts related to biological resources as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.4-1 Impacts related to Special-status plant species.

The same potential for special-status plant species to be present at the project site occurs under the No Project (No Build) Alternative as the proposed project. In addition, the current farming operations have the potential to disturb such species. Although development of the site for urban uses would not occur under the No Project (No Build) Alternative, the existing agricultural operations disturb the site multiple times per year. Thus, any potential impacts related to special-status plant species would be similar under the No Project (No Build) Alternative as compared to the proposed project.

4.4-2 Impacts to Valley elderberry longhorn beetle.

The same potential for valley elderberry longhorn beetle to be present at the project site occurs under the No Project (No Build) Alternative as the proposed project. However, development of the site for urban uses would not occur under the No Project (No Build) Alternative. Two elderberry shrubs exist in the MRIC study area: along the western MRIC site boundary, in the northwest portion of the site; and along the west side of CR 104 along the northern sewer alignment alternative. Sewer improvements would not be required for the No Project (No Build) Alternative. Therefore, impacts to the shrub along the west side of CR 104 would not occur. In addition, the single shrub along the western MRIC site boundary is adjacent to an existing utility pole and generator, and thus is not within an area which is currently impacted by agricultural

operations. Thus, any potential impacts related to valley elderberry longhorn beetle would be less under the No Project (No Build) Alternative as compared to the proposed project.

4.4-3 Impacts to Giant garter snake.

The EIR determined that, while suitable habitat for GGS within the Mace Drainage Channel (MDC) is currently lacking, according to the City's Wildlife Resource Specialist, suitable habitat has been present in the past. The existing conditions within the MDC are likely the result of the on-going drought conditions in the region. The possibility exists that more favorable habitat conditions may return during average rainfall years, or with a change in crop type and associated irrigation runoff on adjacent fields, which may occur over the long-term buildout of the proposed project. In addition, a significant GGS source population exists within the Yolo Bypass and Willow Slough Bypass, which increases the possibility of the snake being present, whether resident or vagrant, in the MDC. Unlike the proposed project, which includes proposed modifications to the MDC, it is anticipated that ongoing agricultural operations at the project site would not result in, or require, modifications to the MDC. Furthermore, the City of Davis owns the MDC; therefore, any improvements to the MDC, could not occur without prior approval by the City of Davis. Thus, any potential impacts related to giant garter snake would be less under the No Project (No Build) Alternative as compared to the proposed project.

4.4-4 Impacts to Burrowing owl.

The same potential for burrowing owl to be present at the project site occurs under the No Project (No Build) Alternative as the proposed project. In addition, the current farming operations have the potential to disturb such species. Development of the site for urban uses would not occur under the No Project (No Build) Alternative. Under the No Project (No Build) Alternative, on-going site disturbance would occur due to agricultural operations. The disturbance could minimize opportunities for burrowing owls to roost or nest on-site. Conversely, if the site is left fallow for any period of time, burrowing owl could move onto the project site. Compared to the proposed project, which could result in impacts to burrowing owl through habitat conversion, the No Project (No Build) Alternative would be expected to have less impacts to burrowing owl, depending upon the type of farming practices conducted on the project site in the future.

4.4-5 Impacts to Swainson's hawk.

Although development of the site for urban uses would not occur under the No Project (No Build) Alternative, on-going site disturbance would occur due to agricultural operations. The type of farming methods conducted at the project site in the future would dictate whether or not Swainson's hawks can utilize the project site for foraging habitat. For example, if orchards are planted on-site, which would be permissible under the current Yolo County A-N zoning, then the site would not provide foraging habitat for Swainson's hawk. Yet, if alfalfa or other row crops are grown on-site, Swainson's could forage on-site, especially during disking, when rodent populations are disturbed. Thus, potential impacts related to Swainson's hawk could be less under the No Project (No Build) Alternative, as compared to the proposed project, depending upon the type of farming practices conducted in the future.

4.4-6 Impacts to raptors, nesting birds, and other birds protected under the MBTA.

The same potential for raptors, nesting birds, or other birds protected under the MBTA to be present at the project site occurs under the No Project (No Build) Alternative as the proposed project. Under the No Project (No Build) Alternative, on-going site disturbance would occur due to agricultural operations. The disturbance could minimize opportunities for birds to nest on-site. However, some species prefer agricultural sites for foraging and/or nesting, such as the burrowing owl. While a few trees are located on the MRIC site, most of these trees are located in the MDC, and therefore could not be removed by the farmer without prior approval by the City of Davis, per their existing agreement with the CDFW for MDC maintenance.

With respect to the project, wildlife-friendly habitat would be created within the buffer and open space areas, which would provide potential habitat for nesting migratory birds. Overall, it is anticipated that potential impacts related to raptors, nesting birds, or other birds protected under the MBTA would be similar for the No Project (No Build) Alternative and the proposed project.

4.4-7 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

The only feature within the project site that contains sensitive natural habitats, albeit limited in nature, is the MDC. Vegetation in the MDC is dominated by cattail, bulrush, annual saltmarsh aster, nutsedge, and smartweed. Unlike the proposed project, which includes proposed modifications to the MDC, it is anticipated that ongoing agricultural operations at the project site would not result in, or require, modifications to the MDC. Furthermore, the City of Davis owns the MDC; therefore, any improvements to the MDC, could not occur without prior approval by the City of Davis. Therefore, impacts related to such would be less under the No Project (No Build) Alternative as compared to the proposed project.

4.4-8 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Based on the analysis below, the impact is less than significant.

Sycamore Consultants conducted a wetland delineation for the 212-acre project site. It was determined that no jurisdictional waters, including the MCD, occur on the MRIC site. Therefore, similar to the proposed project, the No Project (No Build) Alternative would not result in impacts to federally protected wetlands.

4.4-9 Movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site, which is currently used for farming purposes. Because development of the site for urban uses would not occur under the No Project (No Build) Alternative, movement of wildlife on the project site and in the vicinity would not be affected by

the No Project (No Build) Alternative. Therefore, impacts associated with such would be less under the No Project (No Build) Alternative, similar to the proposed project, though temporary disruption of local wildlife movements could occur during on-site farming operations.

4.4-10 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. The trees on the project site are primarily confined to the MDC, the detention basin on the MRIC site, and along Mace Boulevard. The tree along Mace Boulevard is outside of the agricultural area of disturbance. As noted previously, the MDC could not be altered by the farmer without prior approval by the City of Davis. Because the removal of trees would not be expected to occur, the No Project (No Build) Alternative would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, impacts associated with such would be less under the No Project (No Build) Alternative as compared to the proposed project.

4.4-11 Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

Because development of the site for urban uses would not occur as part of the No Project (No Build) Alternative, activities associated with this Alternative would not be subject to any of the mitigation/conservation requirements of the draft Yolo Natural Heritage Program (YNHP), which is anticipated to be adopted by May 2017. Because the Alternative would not be subject to the requirements of the YNHP, even if the project site was planted in orchards, thus rendering the site unsuitable as Swainson's hawk foraging habitat, habitat conservation through the YNHP would not be required. In contrast, the proposed project would be required to comply with the mitigation and conservation requirements of the YNHP, as well as implementation of avoidance measures for potential species during construction of the project. Therefore, impacts related to a conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan would be potentially greater under the No Project (No Build) Alternative.

4.4-12 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to biological resources.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. Unlike, the proposed project, which would be subject to City of Davis policies regarding the protection of biological resources, activities under the Alternative would be subject to Yolo County's policies. The No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to biological resources, and impacts would be similar to the proposed project.

Cultural Resources

The impacts related to cultural resources as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.5-1 Cause a substantial adverse change in the significance of a historical resource.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. Under this Alternative, the historic-period Wright Farm, located northeast of the project site, along CR 104, would not be located within the No Project (No Build) Alternative area because the off-site sewer pipe improvements would not be required for this Alternative. Thus, the potential historical resources impact identified for the proposed project would not occur under this Alternative. Impacts related to a substantial adverse change in the significance of a historical resource would be less under the No Project (No Build) Alternative.

4.5-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which would involve disturbance of soils through planting, disking, etc. Disturbance of soils through agricultural operations is, in some ways, similar to the construction activities that would occur as part of the proposed project. However, unlike the agricultural operations, construction of the proposed project would involve excavation work associated with installation of utility infrastructure, including water, sewer, and fiber optic lines. Such excavation work would require a greater depth of disturbance than the agricultural operations. For example, installation of the off-site sewer line may require excavation of a 20-foot deep trench. This additional depth of disturbance would increase the likelihood of encountering previously unknown cultural resources. Therefore, impacts related to a substantial adverse change in the significance of an archaeological resource would be less under the No Project (No Build) Alternative.

4.5-3 Directly or indirectly destroy a unique paleontological resource or unique geologic feature on the project site.

As determined in Section 4.5, the site is geologically mapped as Holocene, the deposits of which are too young to be considered fossils. However, because construction of the proposed project would involve excavation for utility installation, a mitigation measure was identified, requiring cessation of work if fossils are encountered during construction. As discussed above, because continued agricultural operations at the site are not expected to involve the same depth of soil disturbance as the project, the potential for unique paleontological resource or unique geologic features to be impacted as a result of agricultural operations would be less under the No Project (No Build) Alternative.

4.5-4 Disturb any human remains, including those interred outside of formal cemeteries.

Development of the site for urban uses would not occur and construction activities such as excavation would not be necessary for the No Project (No Build) Alternative. In addition, unlike the proposed project, this Alternative would not require off-site soil disturbance associated with utility installation. As noted previously, the excavation required for the proposed project would be deeper than is required for typical agricultural operations. Therefore, the potential to disturb any human remains, including those interred outside of formal cemeteries, would be less under the No Project (No Build) Alternative as compared to the proposed project.

4.5-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to cultural resources.

While activities under the No Project (No Build) Alternative would not be subject to City of Davis policies related to the protection of cultural resources, should any resources be encountered during agricultural operations, such as disking, the property owner would still be subject to State regulations regarding protection of such resources. For example, the Health and Safety Code requires work to halt in the event that human remains are found. Therefore, the No Project (No Build) Alternative would have impacts similar to the project with respect to conflicting, or creating inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to cultural resources. Through the Alternative's compliance with State regulations, and the proposed project's compliance with the City of Davis' plans, policies, and regulations, as well as the State's regulations, less-than-significant impacts would occur.

Geology, Soils, and Mineral Resources

The impacts related to geology, soils, and mineral resources as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.6-1 Risks to people and structures associated with seismic activity, including ground shaking and ground failure.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. Given the site's A-N zoning, accessory structures, such as barns, greenhouses, silos, etc. could be constructed on-site, subject to obtaining a building permit through the County. The County building permit review process would ensure that any accessory structures built at the site would be designed in accordance with California Building Code standards. Such would be the case for the project structures as well, though their compliance with CBC would be ensured by the City of Davis Building Department. However, given the consideration that the proposed project structures would be occupied on a regular basis, unlike any accessory agricultural structures, and the project would include substantially more structures than the Alternative, impacts related to risks to people and structures associated with seismic activity, would be less than the proposed project, though potentially similar.

4.6-2 Result in substantial soil erosion or loss of topsoil.

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site, which is currently used for farming purposes. The crop type or intensity on the project site could change with this Alternative. Should the crop type or intensity change, the additional topsoil could be temporarily exposed and could result in soil erosion. In addition, annual tilling would temporarily expose the topsoil, and regulations for erosion control during these agricultural processes do not exist. In contrast to ongoing agricultural operations, disturbance of topsoils as a result of project construction, would not occur over an indefinite period of time. And, the project would be subject to the State's NPDES permit process, requiring implementation of a stormwater pollution prevention plant (SWPPP). Therefore, impacts related to risks associated with substantial erosion or loss of topsoil would be more under the No Project (No Build) Alternative.

4.6-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse.

Given the site's A-N zoning, accessory structures, such as barns, greenhouses, silos, etc. could be constructed on-site, subject to obtaining a building permit through the County. The County building permit review process would ensure that any accessory structures built at the site would be designed in accordance with CBC standards, which would minimize risks of structures to effects from unstable soils. Such would be the case for the project structures as well, though their compliance with CBC would be ensured by the City of Davis Building Department. However, given the consideration that the proposed project structures would be occupied on a regular basis, unlike any accessory agricultural structures, and the project would include substantially more structures than the Alternative, impacts related to risks to people and structures associated with unstable soils, including liquefaction, would be less than the proposed project, though potentially similar.

4.6-4 Be located on expansive soil, as defined in Table 118-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

The EIR determined that expansive soils occur at the project site. Similar to the reasons discussed in Impact 4.6-3, impacts related to risks to people and structures associated with expansive soils would be less than the proposed project, though potentially similar.

4.6-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology, soils, and mineral resources.

Any structures built under the No Project (No Build) Alternative, or for the proposed project, would be subject to the CBC standards, as the City of Davis and Yolo County require compliance with the CBC. Therefore, the No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of

avoiding or mitigating environmental effects related to geology and soils, and impacts would be less than significant, similar to the proposed project.

Greenhouse Gas Emissions, and Energy

The impacts related to GHG emissions and energy as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.7-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

The current farming operations involve activities that result in emissions of GHG. As discussed in Section 4.7 of this EIR, the overall GHG emissions associated with the existing site conditions would be a positive value of 267.69 metric tons of CO_2 equivalents ($MTCO_2e$) per year, due to the emissions associated with the farming operations and the carbon sequestration from the crops. Due to the low intensity of current operations, such emissions would be much less intensive under the No Project (No Build) Alternative than what could occur under the proposed project. On-site agricultural activities could be modified under the No Project (No Build) Alternative. However, any potential increases in farming intensity at the site would still generate substantially less GHG emissions than the proposed project, due to the project's increase in daily trips of approximately 17,000 trips per day. Therefore, the No Project (No Build) Alternative would result in less impacts related to the generation of GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

4.7-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The City's CAAP and State-level policies have set certain targets for GHG reduction. Individual development projects need to address their GHG emissions during the environmental review process to determine consistency with local and state regulations. The proposed project is required to reduce its GHG emissions over time, consistent with these GHG reduction targets; however, it is uncertain as to whether the proposed project will be able to achieve the City's 2050 goal of carbon neutrality. Unlike the proposed project, this Alternative is not expected to result in additional development, beyond accessory uses, or rural single family dwellings, allowable under current County A-N zoning. Furthermore, the City's CAAP does not include policies aimed at reducing GHG emissions from agricultural equipment operations. Overall, this Alternative would result in less impacts than the proposed project; and the project's significant and unavoidable impact for this category would be eliminated.

4.7-3 Impacts related to energy associated with construction.

Development of the site for urban uses would not occur and construction activities would not be necessary for the No Project (No Build) Alternative. Therefore, impacts related to energy associated with construction would be less under the No Project (No Build) Alternative.

4.7-4 Impacts related to energy associated with operations.

The current farming operations on-site involve the use of heavy-duty diesel equipment, which contributes to energy demand and consumption associated with the use of oil in the form of gasoline and diesel fuels. However, due to the low intensity of current operations, such energy consumption would be much less intensive under the No Project (No Build) Alternative than what could occur under the proposed project. On-site activities would not be modified under the No Project (No Build) Alternative. Therefore, the No Project (No Build) Alternative would result in less impacts as compared to the proposed project related to the energy associated with operations.

4.7-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to GHG emissions and energy conservation.

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. Modifications to the project site that could result in impacts related to GHG emissions and energy conservation would not occur under the No Project (No Build) Alternative. Therefore, the No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to GHG emissions and energy conservation, and impacts would be less than significant, similar to the proposed project.

Hazards and Hazardous Materials

The impacts related to hazards and hazardous materials as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.8-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

The continuation of agricultural operations at the project under the No Project (No Build) Alternative would involve the routine use of fuels and other agricultural chemicals, which if not handled properly, could result in exposure of the environment to hazardous materials. Crop type or intensity of agricultural operations at the site could also change with this Alternative, which depending upon the operations, could result in an increase in the amount of agri-chemicals used at the project site. Should the amount of pesticide use on the project site increase in the future as part of the No Project (No Build) Alternative as a result of changing crop types, the use of such materials would be regulated by the Yolo County Agricultural Commissioner, as is currently the case.

Potential hazardous materials use as part of the proposed project would be limited to any on-site businesses involving use of such materials. The California Fire Code would serve as the regulatory vehicle by which the Fire Department would review business license applications, and any tenant improvements, to determine whether all aspects of hazardous materials use and storage would comply with Fire Code requirements. This would include Fire Department review

of the proposed on-site fire suppression system, as fire suppression system requirements are specific to the type of chemicals that would be utilized on-site.

Therefore, impacts related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials would be potentially greater under the No Project (No Build) Alternative, as compared to the proposed project.

4.8-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with the existing on-site wells, canals, nearby uses, or soil contamination.

The continuation of agricultural operations at the project under the No Project (No Build) Alternative would involve the routine use of fuels and other agricultural chemicals, which if not handled properly, could result in exposure of the environment to hazardous materials during an accident condition. With respect to the proposed project, certain potential accident conditions exist that do not exist for the Alternative. This includes abandonment of irrigation wells and potential exposure of construction workers to contaminated soils and unknown fill material debris. Overall, impacts related to a reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment would be similar under the No Project (No Build) Alternative as compared to the proposed project.

4.8-3 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Modifications to the existing conditions and/or operations at the project site are not likely to occur as a result of the No Project (No Build) Alternative, with the possible exception of planting different crop types. Any such changes in on-site agricultural operations would not be expected to impair emergency response plans. As such, the Alternative would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, similar to the proposed project, impacts would be less than significant.

4.8-4 Expose people or structure to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

While accessory structures could be built on-site per current A-N zoning, uses that would involve an increase in the number occupied structures at the site are not expected to occur as a result of the No Project (No Build) Alternative. Therefore, the No Project (No Build) Alternative would not expose people to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and impacts would less than the proposed project.

4.8-5 Conflict, or create an inconsistency, with applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to hazards and hazardous materials.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. Use of agricultural chemicals is required to comply with local, state, and federal regulations, similar to any hazardous materials use associated with the proposed project, though the types of chemicals used would be different. The No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hazards and hazardous materials, similar to the proposed project.

Hydrology and Water Quality

The impacts related to hydrology and water quality as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.9-1 Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site, which is currently used for farming purposes. As noted previously, the MDC could not be altered by the farmer without prior approval by the City of Davis, per their existing agreement with the CDFW for MDC maintenance. Should the crop type or intensity change in the future, any resulting drainage alterations to the project site would not result in a substantial increase in peak flows from the site, which would exceed the capacity of existing stormwater drainage systems, as the amount of impervious surfaces would not increase. In contrast, the proposed project would result in the development of approximately 147 acres of the project site with impervious surfaces. Therefore, impacts related to substantially altering the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems would be less as a result of the No Project (No Build) Alternative.

4.9-2 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality through erosion during construction.

The No Project (No Build) Alternative would not involve construction activities that could lead to erosion, with the possible exception of construction of barns and storage sheds, grain elevators and silos, farm offices, greenhouses (up to 100,000 sf), and/or other accessory agricultural support structures. Any development at the site under this Alternative would be substantially less than the proposed project. Therefore, the potential for construction activities to lead to erosion, under this Alternative, would be less than the proposed project.

4.9-3 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. From an operational standpoint, water discharges from agricultural operations in California include irrigation runoff, flows from tile drains, and storm water runoff. These discharges can affect water quality by transporting pollutants, including pesticides, sediment, nutrients, salts (including selenium and boron), pathogens, and heavy metals, from cultivated fields into surface waters. Many surface water bodies are impaired because of pollutants from agricultural sources. Groundwater bodies have suffered pesticide, nitrate, and salt contamination.

To prevent agricultural discharges from impairing the waters that receive these discharges, the State's Irrigated Lands Regulatory Program (ILRP) regulates discharges from irrigated agricultural lands. This is done by issuing waste discharge requirements (WDRs) or conditional waivers of WDRs (Orders) to growers. These Orders contain conditions requiring water quality monitoring of receiving waters and corrective actions when impairments are found.

For the proposed project, each phase of development will be required to comply with the BMPs and criteria established in Chapter 30 of the Davis Municipal Code. Through the preparation of improvement and grading plans, these measures will be refined so that they will functionally minimize stormwater quality impacts. Consistency with the City of Davis Manual of Stormwater Quality Control Standards for New Development and Redevelopment, Municipal Code, and implementation of the BMPs included in the proposed project Planned Development Guidelines will ensure that the proposed would have a less-than-significant impact on long-term stormwater quality.

While regulations exist to remove minimize pollutants from both agricultural and urban runoff, because the proposed project would increase the amount of runoff coming from the project site, and consequently, urban pollutants, this Alternative could have less impacts than the project regarding violations of water quality standards or waste discharge requirements, providing substantial additional sources of polluted runoff, or otherwise substantially degrading water quality during operations.

4.9-4 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g, the production rate or preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. Under this Alternative, the crop type or intensity of farming could change. A change in crop type could result in either an increase or decrease in water use as compared to the existing sunflower crops. For example, the project site could be utilized for dry farming, which would decrease water usage and thus groundwater supplies. Conversely, the project site could be utilized for a more water-intensive crop type, such as almond trees. A reasonable range of irrigation demand at the site can be estimated by considering low- and high-level water demand crop types. On the lower

end of the water demand scale, is sunflowers, which typically requires approximately 2 acre-feet/year. On the higher end of the water demand scale, is almond trees, which typically requires approximately 4 acre-feet/year. Assuming that the entire 212-acre project site is farmed, which is overly conservative given that perimeter roads will need to be on-site, the total yearly irrigation water demand range could be expected to be from 424 acre-feet/year to 848 acre-feet/year. This equates to a range of approximately 138 to 276 million gallons per year, or possibly less, if drip irrigation were to be used.[4] It is anticipated that farming operations on-site would continue to use groundwater from existing on-site wells.

In contrast, while the proposed project would also utilize groundwater from the City's potable system, the City of Davis plans to reduce the amount of groundwater use and only use the deep aquifer wells once surface water becomes available. The City is now under contract to purchase wholesale surface water from the Woodland Davis Clean Water Agency to use in combination with groundwater from deep wells. It is anticipated that surface water deliveries will begin in 2017. The proposed project is anticipated to result in a water demand of approximately 312,000 gallons per day, or 114 million gallons per year, per Table 4.15-15 of the Utilities section of this EIR, which is less than that which is predicted for the No Project (No Build) Alternative.

Therefore, in terms of groundwater supply depletion, the possibility exists that the No Project (No Build) Alternative would have more impacts to groundwater supplies than the proposed project.

4.9-5 Place structure within a 100-year flood hazard as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or flood hazard delineation map; or place within a 100-year floodplain structures which would impede or redirect flood flows; or expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

As determined in Section 4,9, Hydrology and Water Quality, the entire 212-acre project site is located in Zone X on the applicable FEMA flood insurance rate maps. Zone X is not considered a Special Flood Hazard Area. Zone X includes areas determined to be outside the 0.2 percent annual chance floodplain. As such, the entire project site is not located within the regulatory floodplain. Therefore, even though this Alternative could result in the construction of structures on-site, such as barns and storage sheds, grain elevators and silos, farm offices, greenhouses (up to 100,000 sf), and/or other accessory agricultural support structures, the site is not located within the floodplain.

While the proposed project would introduce a greater number of structures to the project site, as compared to the Alternative, this is of no consequence from a flood damage perspective because the site is outside of a 100-year flood hazard area. Overall, impacts related to the placement of structures within a 100-year flood hazard area or which could impede or redirect flood flows; or expose people or structures to significant risk of loss, injury or death involving flooding,

[4] 1 acre-foot = 325,900 gallons. An acre-foot of water is enough to cover one acre of land one foot deep.

including flooding as a result of the failure of a levee or dam would be the similar for the No Project (No Build) Alternative and the proposed project.

4.9-6 Impacts related to conflicts, or creation of an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. Unlike, the proposed project, which would be subject to City of Davis policies regarding the water quality and runoff detention, activities under the Alternative would be subject to Yolo County's policies, as well as the State's. The No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality, and impacts would be similar to the proposed project.

Land Use and Urban Decay

The impacts related to land use and urban decay as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.10-1 Physical division of an established community.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. While development under this Alternative could result in barns and storage sheds, grain elevators and silos, farm offices, greenhouses (up to 100,000 sf), and/or other accessory agricultural support structures, the site is located at the periphery of the City of Davis, with urban development to the south and west, and agricultural uses to the north and east. The No Project (No Build) Alternative, similar to the proposed project, would not cause a physical division of an established community.

4.10-2 Economic and social change and/or effect that result in urban decay.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which would not have an effect on City of Davis businesses related to urban decay. In contrast, the EIR determined that the proposed MRIC would require mitigation to ensure that adverse urban decay effects would not result from the proposed project. As a result, the No Project (No Build) Alternative would result in less urban decay impacts than the proposed project.

4.10-3 Conflict, or create an inconsistency, with any applicable land use and urban decay plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. The existing on-site land use is consistent with the current Yolo County and City of Davis agricultural general plan

land use designations for the site. While the proposed project involves amendments to the City's General Plan and Zoning Ordinance, should these amendments be approved by the Davis decision-makers, the EIR has determined that it would be possible for the decision-makers to make a finding of consistency that the proposed project is consistent with Davis' adopted plans and policies. Therefore, the No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to land use and urban decay, and impacts would be similar to the proposed project.

Noise and Vibration

The impacts related to noise and vibration as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.11-1 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. Agricultural operations could result in substantial temporary or periodic increases in ambient noise levels during certain periods of the year, such as disking and harvesting. Agricultural operations and their allowable hours, unlike construction activities proposed for the project, are not subject to the City's Noise Ordinance. Therefore, because the on-site agricultural operations are not regulated by the City's Noise Ordinance, impacts related to a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project could be more under the No Project (No Build) Alternative.

4.11-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

For the same reasons as stated above for impact 4.11-1, the No Project (No Build) Alternative may result in more impacts related to exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels, as compared to the proposed project. It should be noted, however, that agricultural operations at the project site would not be expected to generate excessive groundborne vibration and/or noise levels.

4.11-3 Transportation noise impacts to existing sensitive receptors in the project vicinity.

The No Project (No Build) Alternative would maintain the agricultural operations at the project site. An increase in the amount of traffic on area roadways from existing levels would not occur under the No Project (No Build) Alternative, unless the level of farming intensity increases at a future date. Even if such a scenario were to take place under this Alternative, the amount of traffic would be substantially less than the vehicle trips generated by the proposed project. As a result, transportation noise impacts to existing sensitive receptors in the project vicinity would be less for the No Project (No Build) Alternative, as compared to the proposed project.

4.11-4 Transportation noise impacts to new sensitive receptors in the project vicinity.

The No Project (No Build) Alternative would not introduce any new sensitive receptors to the project site or vicinity for a sustained period of time. Transportation noise impacts to new sensitive receptors in the project vicinity would not occur as a result of the No Project (No Build) Alternative. Therefore, the impacts would be less than the proposed project, for which a mitigation measure was required in the EIR to ensure this impact would be less than significant.

4.11-5 Operational noise.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. The current farming operations involve activities that result in operational noise (e.g., from use of heavy-duty diesel equipment). However, because the utilization of farming equipment, having the potential to generate noise, is not ongoing throughout the year, but rather dependent upon the particular time of year (harvesting, disking, etc.), the amount of operational noise resulting from the No Project (No Build) Alternative would be expected to be less than the proposed project, which has the potential to generate ongoing stationary noises throughout the year, as discussed in Section 4.11 of the EIR.

4.11-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise.

The City of Davis policies related to noise would not be applicable to this Alternative, as the site would remain within the County. As such, ongoing agricultural operations would be required to comply with Yolo County noise policies and regulations. The No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise and vibration; therefore, impacts would be similar to the proposed project.

<u>Population and Housing</u>

The impacts related to population and housing as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.12-1 Induce substantial population growth.

As the No Project (No Build) Alternative would involve the continuation of agricultural operations on the project site, a substantial increase in population or housing would not occur. Under current Yolo County Agricultural-Intensive (A-N) zoning, up to 1 single family dwelling can be constructed on a minimum lot size of 80 acres of land, if irrigated and cultivated. Therefore, there is a de minimus potential for population growth to occur on-site as a result of this Alternative. Accordingly, the No Project (No Build) Alternative would not induce substantial population growth; therefore, impacts related to such would be less than the proposed project.

4.12-2 Conflict, or create an inconsistency, with any applicable population and housing plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Under the No Project (No Build) Alternative, the site would remain within Yolo County, and therefore be subject to Yolo County's plans and policies regarding population and housing. However, because the project site is designated for agricultural uses in the Yolo County General Plan, population and housing policies and regulations of Yolo County are generally not applicable to the project site.

The EIR determined that the proposed project would not conflict with any City of Davis plans and policies related to population and housing. Overall, the No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable population and housing plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; therefore, impacts would be similar to the proposed project.

Public Services and Recreation

The impacts related to public services and recreation as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.13-1 Result in substantial adverse physical impacts associated with the provisions of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection facilities.

The No Project (No Build) Alternative would not involve a substantial increase in population or housing in the area, as discussed above, and would not introduce new land uses which could necessitate significant additional fire protection services. Although structures such as barns and storage sheds, grain elevators and silos, farm offices, greenhouses (up to 100,000 sf), and other accessory agricultural support structures could be built on-site per existing County agricultural zoning, the fire protection demands related to structural fires would not be as great as the proposed project, which includes over 2.5 million square feet of building space. The project site is currently within the East Davis County Fire Protection District. The Davis Fire Department has contractual agreements with the East Davis County Fire Protection District, the Springlake Fire Protection District, and the No Man's Land Fire Protection District to provide emergency response to these areas. Therefore, the Davis Fire Department would ultimately provide services to the site under this Alternative scenario, and the proposed project scenario. Overall, impacts related to adequate fire protection services under the No Project (No Build) Alternative would be less than the proposed project.

4.13-2 Result in substantial adverse physical impacts associated with the provisions of new or physically altered police protection facilities, and/or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police protection facilities.

The No Project (No Build) Alternative would not involve a substantial increase in population or structures in the area, as discussed above, and would not introduce any new land uses that could necessitate a significant increase in the demand for police protection services. Police protection services are currently provided to the project area by the Yolo County Sheriff's Department. Impacts related to adequate police protection services under the No Project (No Build) Alternative would be less than the proposed project.

4.13-3 Result in substantial adverse physical impacts associated with the provisions of new or physically altered school facilities, and/or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for school facilities.

Because the No Project (No Build) Alternative would not involve an increase in population or housing in the area, with the possible exception of up to two farm dwellings per parcel potentially, as allowable under current County agricultural zoning, as discussed above, an increase in the number of students in the project area requiring new or physically altered school facilities would not occur. Therefore, impacts related to adequate school capacity under the No Project (No Build) Alternative would be less than the proposed project.

4.13-4 Result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for park facilities.

Because the No Project (No Build) Alternative would not involve an increase in population or housing in the area, with the possible exception of a few single family residences, as allowable under current County agricultural zoning, as discussed above, an increase in the demand upon existing parks and recreation facilities would be minimal to none under this Alternative. Therefore, impacts related to an increased demand for parks and recreation facilities under the No Project (No Build) Alternative would be less than the proposed project.

4.13-5 Result in substantial adverse physical impacts associated with the provisions of new or physically altered other public facilities, and/or the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.

Under the No Project (No Build) Alternative, services to the project site would be provided by Yolo County, rather than the City of Davis. Demands for other Yolo County public facilities are not be expected to increase under this Alternative as agricultural operations would continue at the project site. An increase in population or housing in the area would not occur under the No Project (No Build) Alternative, with the possible exception of a few single family residences, as allowable under current County agricultural zoning. New land uses that could increase the use of, or demand for, other Yolo County public facilities or services would not occur under the No Project (No Build) Alternative. Therefore, impacts related to an increased demand for other public facilities under the No Project (No Build) Alternative would be less than the proposed project.

4.13-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public services and recreation.

Under the No Project (No Build) Alternative, the site would remain within Yolo County, and therefore be subject to Yolo County's plans and policies regarding public services and recreation. Implementation of this Alternative would not be expected to result in any conflicts with existing Yolo County plans and policies regarding public services. Given the potential for only a de minimus population increase associated with the project, demands upon public services and recreation facilities would be minimal.

The EIR determined that the proposed project would not conflict with any City of Davis plans and policies related to population and housing. Overall the No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public services and recreation, and impacts would be similar to the proposed project.

<u>Transportation and Circulation</u>

The impacts related to transportation and circulation as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.14-1 Impacts to Intersections Outside Freeway Interchange Areas.

The No Project (No Build) Alternative would maintain the agricultural operations at the project site. An increase in the amount of traffic on area roadways from existing levels would not occur under the No Project (No Build) Alternative, unless the level of farming intensity increases at a future date. Even if such a scenario were to take place under this Alternative, the amount of traffic would be substantially less than the vehicle trips generated by the proposed project. As

also discussed above, a few single family residences could be built on-site under current A-N County zoning. However, 2-3 single family residences would result in a small contribution of new trips to the project area (approximately 20-30 daily trips).

This impact statement primarily concerns local intersections within the City of Davis, or the near vicinity (i.e., CR 32A). Based upon the above considerations, the No Project (No Build) Alternative would not substantially contribute to additional traffic on local intersections, as would be the case for the proposed project. In conclusion, impacts associated with such would be less than the proposed project.

4.14-2 Impacts to Intersections within the Mace Boulevard Interchange Area.

The No Project (No Build) Alternative would maintain the agricultural operations at the project site. An increase in the amount of traffic on intersections within the Mace Boulevard Interchange area from existing levels would not be expected to occur under the No Project (No Build) Alternative. Should the level of farming intensity at the site increase at a future date, the primary effects of such increased operations would be expected along local roadways if tractors and other mobile equipment increase along vicinity roads, and to a lesser extent, the Mace Boulevard Interchange area via movement of goods from the site. Even if such a scenario were to take place under this Alternative, the amount of traffic would be substantially less than the vehicle trips generated by the proposed project. As also discussed above, a few single family residences could be built on-site under current A-N County zoning. However, 2-3 single family residences would result in a small contribution of new trips to the project area (approximately 20-30 daily trips).

This impact statement primarily concerns freeway intersections within the City of Davis, or the near vicinity (i.e., CR 32A). Based upon the above considerations, the No Project (No Build) Alternative would not substantially contribute to additional traffic to Mace Boulevard Interchange intersections, as would be the case for the proposed project. In conclusion, impacts associated with such would be less than the proposed project, and the proposed project significant and unavoidable impact would be eliminated.

4.14-3 Impacts to Regional Roadways.

The EIR determined that proposed project traffic would result in no significant impacts at any of the regional roadway segments. All but one segment operates at LOS C or better with proposed project traffic, and one segment, Elkhorn East of SR 70/99 operates at LOS E with and without the project. Using the rural LOS standard of LOS D, this segment operates below the standard. However, MRIC traffic does not increase the v/c ratio by more than 0.05, so the project's impact is less than significant. The No Project (No Build) Alternative would result in substantially less vehicle traffic on the roadway system. Increases in traffic on the regional network would be expected to be limited to the movement of goods associated with agricultural operations. Overall, this Alternative has the potential to result in less traffic impacts to regional facilities than the proposed project.

4.14-4 Impacts to Freeways.

The freeway facilities evaluated for the No Project (No Build) Alternative are, for the most part, "local" freeway facilities, including I-80, from approximately SR 113 to the Causeway; and SR 113 from Hutchinson Drive to CR 27. As discussed above, implementation of this Alternative would not contribute vehicle trips to these freeway facilities, with the possible exception additional trips associated with the movement of goods should agricultural operations intensity on the project site at a future date. Thus, the No Project (No Build) Alternative would have less impacts to the freeway facilities studied in the EIR than the proposed project.

4.14-5 Impacts to Local Neighborhood Street Traffic.

Unlike the proposed project, implementation of the No Project (No Build) Alternative would not result in a substantial increase in local neighborhood traffic. This Alternative may contribute some local traffic if 2-3 dwellings were constructed at the site, as is allowable, or farming operations increase in intensity. However, any increase in local traffic associated with this Alternative would be substantially less than the proposed project. Thus, the No Project (No Build) Alternative have less impacts to neighborhood traffic than the proposed project.

4.14-6 Increase in Vehicle Miles Traveled

The proposed project will generate substantial new travel demand related to commuting and other trip purposes associated with the industrial and retail uses on-site. The proposed project is projected to generate 196,000 daily VMT at build-out. As such, it would increase City-generated VMT, not reduce them. In contrast the No Project (No Build) Alternative would not increase VMT unless farming intensity increases at the site, which could result in additional employee trips to/from the project site, some of which may occur from outside of the region. However, any such increase in VMT would be substantially less than the proposed project's increase in VMT.

4.14-7 Impacts to Emergency Vehicle Access.

The No Project (No Build) Alternative would maintain the agricultural operations at the project site. Modifications to the roadway network would not occur as a result of the No Project (No Build) Alternative. Therefore, impacts to emergency vehicle access under the No Project (No Build) Alternative would be similar to the proposed project, for which the EIR determined impacts would be less than significant.

4.14-8 Impacts associated with Construction Vehicle Traffic.

Increased development activity could occur at the project site under this Alternative through the construction of barns, silos, greenhouses, accessory structures, or 2-3 single family homes. However, any construction activity at the project site would be expected to be substantially less than the construction activities associated with the project, which are expected to occur over a 17-year period. As such, short-term increases in traffic related to construction activities under the No Project (No Build) Alternative would be less than the proposed project.

4.14-9 Impacts to Pedestrian and Bicycle Facilities.

The No Project (No Build) Alternative would not involve an increase in population or housing in the area, with the possible exception of a few houses/residents, as would be allowable under the site's current A-N zoning. Such a potential small increment in population would not result in a substantial increase in the demand for pedestrian and bicycle facilities, as compared to the proposed project. Therefore, impacts to pedestrian and bicycle facilities under the No Project (No Build) Alternative would be less than the proposed project.

4.14-10 Impacts to Transit Services.

The No Project (No Build) Alternative would not involve an increase in population or housing in the area, with the possible exception of a few houses/residents, as would be allowable under the site's current A-N zoning. Such a potential small increment in population would not result in a substantial increase in the demand for transit services, as compared to the proposed project. Therefore, impacts to transit services/facilities under the No Project (No Build) Alternative would be less than the proposed project.

4.14-11Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to transportation/traffic.

The City of Davis policies related to traffic and transportation would not be applicable to this Alternative, as the site would remain within the County. As such, City VMT reduction objectives, or work-trip reduction programs, would not pertain to ongoing agricultural operations at the project site. On the other hand, movement of tractors and other mobile equipment on local City of Davis roads would be required to comply with City speed and safety regulations. Overall, the No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to traffic; therefore, impacts would be similar to the proposed project.

<u>Utilities</u>

The impacts related to utilities as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

4.15-1 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. To prevent agricultural discharges from impairing the waters that receive these discharges, agricultural runoff is regulated by the State's Irrigated Lands Regulatory Program. Modifications to the current conditions or operations at the project site that could result in an exceedance of the wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB) would not

occur. Therefore, impacts related to such would be less under the No Project (No Build) Alternative.

4.15-2 Would the project have sufficient water supplies available to serve the project from existing entitlement and resources, or are new or expanded entitlements needed.

The EIR determined that adequate water supply exists to serve existing and future projected water demand within the City's service area, including the proposed project. As discussed in the Hydrology section for this Alternative (Impact 4.9-4), a reasonable range of irrigation demand at the site can be estimated by considering low- and high-level water demand crop types. On the lower end of the water demand scale, is sunflowers, which typically requires approximately 2 acre-feet/year. On the higher end of the water demand scale, is almond trees, which typically requires approximately 4 acre-feet/year. Assuming that the entire 212-acre project site is farmed, which is overly conservative given that perimeter roads will need to be on-site, the total yearly irrigation water demand range could be expected to be from 424 acre-feet/year to 848 acre-feet/year. This equates to a range of approximately 138 to 276 million gallons per year.[5] It is anticipated that farming operations on-site would continue to use groundwater from existing on-site wells. Given the historic agricultural uses at the site, it is anticipated that groundwater supply would continue to be adequate to serve this Alternative (i.e., continue agricultural operations).

Therefore, in terms of sufficient water supply, the No Project (No Build) Alternative would have similar impacts as compared to the proposed project.

4.15-3 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. An increase in population or housing in the area would not occur under the No Project (No Build) Alternative, with the possible exception that 2-3 single family dwellings could be constructed at the site. However, these residences would be within the County and would be expected to utilize septic. In contrast, the proposed project would require wastewater treatment services from the City of Davis to treat approximately 0.11 mgd. Therefore, impacts related to adequate capacity to serve projected wastewater treatment demands would be less under the No Project (No Build) Alternative.

4.15-4 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. Farming activities can sometimes use landfills to dispose of product packaging, containers, old appliances/equipment, etc. In addition, agricultural operations can require disposal of crop residues, clippings, and other

[5] 1 acre-foot = 325,900 gallons. An acre-foot of water is enough to cover one acre of land one foot deep.

vegetative materials. Although a landfill could be utilized to accommodate the Alternative's solid waste disposal needs, an increase in population or housing in the area would not occur under the No Project (No Build) Alternative, and new land uses that could substantially increase the generation and demand for disposal of solid waste in the project area would not occur under the No Project (No Build) Alternative, as compared to the proposed project. Therefore, impacts related to sufficient permitted capacity to accommodate solid waste disposal needs under the No Project (No Build) Alternative would be less than the proposed project.

4.15-5 Gas and electric facilities.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. The current operations on the project site involve the use of a diesel pump for irrigation water. The amount of diesel gasoline utilized by the diesel pump would be significantly less than the gasoline and electricity required for project operation. Therefore, impacts related to gas and electric facilities under the No Project (No Build) Alternative would be less than the proposed project.

4.15-6 Adequate telecommunication facilities.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. An increase in population or housing in the area would not occur under the No Project (No Build) Alternative, with the possible exception of 2-3 single family dwellings. In addition, should agricultural offices and other accessory structures be built on-site, there may be a need for telecommunication facilities at the site. However, unlike the proposed project, the need for high speed fiber optic will not be an integral part of any agricultural operations conducted at the site. Therefore, impacts related to adequate telecommunication facilities under the No Project (No Build) Alternative would be less than the proposed project.

4.15-7 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to utilities.

Under the No Project (No Build) Alternative, the site would remain within Yolo County, and therefore, utility services would be subject to Yolo County policies and regulations. For example, if septic was installed at the site for rural dwellings, the septic system would be required by Yolo County to comply with its Environmental Health regulations. Similar to the proposed project, the No Project (No Build) Alternative would not conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to utilities.

Cumulative Impacts

For conservative analysis purposes, this cumulative impact comparison is based upon the CEQA Cumulative Scenario.

The cumulative impacts as a result of implementation of the No Project (No Build) Alternative in comparison to the proposed project are presented below.

5-1 Cumulative impacts related to long-term changes in visual character of the region.

The No Project (No Build) Alternative would consist of the continuation of agricultural lands on the project site. The incremental contribution to a cumulative impact related to long-term changes in visual character of the region, as a result of this Alternative, would not be cumulatively considerable. While some level of development could occur on the project site under the site's current A-N zoning designation, the aesthetics of the site would continue to be agrarian rather than urban, as would be the case with the proposed project. Therefore, this Alternative's incremental contribution to cumulative impacts associated with long-term changes in visual character would be less than the proposed project.

5-2 Cumulative impacts related to the creation of new sources of light or glare associated with development of the proposed project in combination with future buildout in the City of Davis.

As the No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, substantial new sources of light or glare would not be introduced to the site. Should a change in crop type or farming intensity result in the necessity for nighttime harvesting, lighting would temporarily increase on-site. However, any resultant lighting on the site would be focused at the harvest area, and would be temporary in nature, unlike the proposed project's lighting. Accordingly, the project's incremental contribution to cumulative increases in light and glare would be less than the proposed project.

5-3 Impacts related to cumulative loss of agricultural land.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. As such, agricultural land would not be converted to non-agricultural use, as part of this Alternative, and associated impacts under the No Project (No Build) Alternative would be less than the proposed project. It is anticipated that the proposed project's significant and unavoidable impact related to farmland conversion would be eliminated under this Alternative. Notwithstanding this, under current County A-N zoning, agricultural structures and/or a few single family dwellings could be built on-site, which would remove agricultural land from production; however, any conversion under this Alternative would be substantially less than the farmland conversion resulting from the proposed project.

5-4 A cumulatively considerable net increase of any criteria air pollutant.

The current farming operations involve activities that result in emissions of criteria air pollutants. Due to the low intensity of current operations, such emissions would be less intensive under the No Project (No Build) Alternative than what could occur under the proposed project. Although agricultural activities are not subject to YSAQMD dust control measures, the No Project (No Build) Alternative would result in substantially fewer mobile trips, and thus, operational emissions. Therefore, within the cumulative context, the No Project (No Build) Alternative

would result in emissions of air pollutants, but any potential impacts associated with such would be less than what is expected for the proposed project. The proposed project's significant and unavoidable impact related to cumulative air quality emissions would be eliminated under this Alternative.

5-5 Cumulative habitat loss in the City of Davis Area for special-status species.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site. Urban development of the site would not occur under the No Project (No Build) Alternative. As such, modifications that have the potential to affect or convert any habitat permanently may not occur with the No Project (No Build) Alternative. However, should the project site be converted from row crops to an orchard, Swainson's hawk foraging habitat, and other special-status bird habitat (e.g., burrowing owl), could be eliminated, without requiring replacement mitigation, as would be the case for the proposed project. If such a scenario was to occur, the orchards could be removed at a future date, and the site replanted with row crops. Therefore, if orchards were planted, this may only result in temporary impacts to special-status species habitat. Implementation of the proposed project, however, would result in permanent removal of special-status species habitats.

Overall, it is anticipated that this Alternative's incremental impact to cumulative habitat loss in the Davis area would be less than the proposed project. However, impacts under this Alternative could be greater if crops are planted that are less preferable than for special-status species.

5-6 Cumulative impacts to movement corridors in the City of Davis area.

Movement of wildlife on the existing project site in the east-to-west direction is limited by the existing Mace Boulevard roadway on the western boundary of the site. In addition, movement of wildlife on the project site in the north-to-south direction is limited by the existing Interstate 80 roadway on the southern boundary of the site. Urban development of the site would not occur under the No Project (No Build) Alternative. Should the project site be converted from row crops to an orchard in the future, wildlife species would be able to continue to move around within the project site and surrounding area. If agricultural-related structures are built on the site, or rural dwellings, the level of development would be less than that which is proposed for the project. Thus, this Alternative's incremental contribution to cumulative movement corridor impacts would be less than the proposed project's contribution.

5-7 Cumulative loss of cultural resources.

Because urban development of the site, including utility trench excavation, would not occur under this Alternative, less impacts to cultural resources would result from this Alternative as compared to the proposed project. For example, the excavation required for the proposed project's off-site sewer improvements would be substantially deeper (a maximum depth of approximately 20 feet) as compared to typical agricultural operations.

As noted in Chapter 5 of this EIR, however, cultural resources impacts are typically site-specific, and not cumulative in nature.

5-8 Cumulative increase in the potential for geological related impacts and hazards.

As noted in Chapter 5 of this EIR, while some geologic features may affect regional construction practices, such as seismicity or soil elasticity, impacts and mitigation measures are site-specific and project-specific. For example, impacts resulting from development on expansive soils or undocumented fill at one project site are not worsened by impacts from development on expansive soils or undocumented fill at another project site. Rather, the soil conditions, and the implications of those conditions for each project, are independent. As discussed above, project-level geology and soils impacts resulting from this Alternative would be less than the proposed project, with the exception of soil erosion impacts.

5-9 Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.

GHG impacts are cumulative in nature. As discussed in Section 4.7 of this EIR, the overall GHG emissions associated with the existing site conditions would be a positive value of 267.69 $MTCO_2e$ per year, due to the emissions associated with the farming operations and the carbon sequestration from the crops. Due to the low intensity of current operations, such emissions would be much less intensive under the No Project (No Build) Alternative than what could occur under the proposed project. Therefore, the No Project (No Build) Alternative would result in less cumulative impacts related to GHG emissions and climate change.

5-10 Cumulative impacts related to energy.

The current farming operations on-site involve the use of heavy-duty diesel equipment, which contributes to energy demand and consumption associated with the use of oil in the form of gasoline and diesel fuels. However, due to the low intensity of current operations, such energy consumption would be less intensive under the No Project (No Build) Alternative than what could occur under the proposed project. Any accessory structures built on-site to support ongoing agricultural operations would be expected to use substantially less energy than the energy required to operate the proposed innovation center. Therefore, this Alternative incremental contribution to cumulative impacts related to energy would be less than the proposed project.

5-11 Increase in the number of people who could be exposed to potential hazards or hazardous materials and an increase in the transport, storage, and use of hazardous materials due to development of the proposed project in combination with future buildout in the City of Davis.

Hazardous materials and other public health and safety issues are generally site-specific and/or project-specific, and would not be significantly affected by other development inside or outside of the City. Other cumulative development would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community. As discussed above, this Alternative would be expected to have similar, or more, site-specific hazardous impacts than the proposed project.

5-12 Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area.

The No Project (No Build) Alternative would consist of the continuation of agricultural operations on the project site, which is currently used for farming purposes. Because the No Project (No Build) Alternative would not involve any modifications to the current conditions at the project site, the existing drainage pattern of the site or area would not be altered. Should the crop type or intensity change in the future, any resulting drainage alterations to the project site would not result in a substantial increase in peak flows from the site as the amount of impervious surfaces would not increase. New urban structures or buildings would not be placed at the site; thus, an increase in impervious surfaces on the site is not expected to occur as a result of the No Project (No Build) Alternative. Therefore, cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area would be less as a result of the No Project (No Build) Alternative.

5-13 Cumulative impacts to water quality within the City of Davis.

Similar to the proposed project, whose incremental water quality impacts would be addressed via compliance with City of Davis and State of California construction and operational water quality requirements, runoff discharge from this Alternative would be regulated under the State's Irrigated Lands Regulatory Program (ILRP). This is done by issuing waste discharge requirements (WDRs) or conditional waivers of WDRs (Orders) to growers. These Orders contain conditions requiring water quality monitoring of receiving waters and corrective actions when impairments are found.

5-14 Cumulative land use incompatibilities.

Land use conflicts are site-specific and would not result in a cumulative impact. Incompatibility issues are addressed and mitigated on a project-by-project basis.

5-15 Cumulative urban decay.

The No Project (No Build) Alternative would not result in effects that would combine with other businesses to create urban decay within the City of Davis. Agricultural operations would not compete with retail businesses. The proposed project's retail space has the potential to compete with existing retail businesses in Davis, depending upon the rate by which the project's retail space builds out relative to the proposed project's office and industrial space. This Alternative's incremental contribution to cumulative urban decay impacts would be less than the proposed project's contribution.

5-16 Cumulative impacts on noise-sensitive receptors.

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site, which is currently used for farming purposes. Because development of the site for urban uses would not occur and construction activities would not be

necessary, any increase in ambient noise levels in the project vicinity above existing levels would not occur as a result of the No Project (No Build) Alternative. However, agricultural operations, unlike construction activities proposed by the project, are not subject to the City's Noise Ordinance. Therefore, cumulative impacts related to noise-sensitive receptors would be more under the No Project (No Build) Alternative on a temporary basis during peak agricultural operations.

5-17 Cumulative traffic noise effects on proposed uses.

The No Project (No Build) Alternative would not introduce any new sensitive receptors or new uses to the project site or vicinity. Transportation noise impacts to new sensitive receptors in the project vicinity would not occur as a result of the No Project (No Build) Alternative. Therefore, cumulative transportation noise impacts to proposed uses would be less as a result of the No Project (No Build) Alternative.

5-18 Cumulative population and housing impacts.

As the No Project (No Build) Alternative would involve the continuation of agricultural operations at the project site an increase in population or housing would not occur, with possible exception of those few residents that may be introduced to the site if rural dwellings are constructed per current County A-N zoning. Accordingly, unlike the proposed project, the No Project (No Build) Alternative would not induce substantial population growth or require new housing, and cumulative impacts related to such would be less than the proposed project.

5-19 Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.

This EIR has determined that the proposed project would exacerbate the existing response time deficiency experienced in certain areas of the City of Davis by precluding Station 33 from being able to provide back-up to already impacted areas. The proposed project's impact, then, should be considered a secondary, or indirect cumulative impact, to fire protection services.

Unlike the proposed project, which would introduce many new structures and employees to the City of Davis, resulting in increased demands on the Davis Fire Department, the No Project (No Build) Alternative would not substantially increase demands for fire protection services, as current County agricultural zoning does not permit urban development on the site. Therefore, cumulative impacts to fire protection services from the Alternative, in combination with future developments in the City of Davis, would be less than the proposed project.

5-20 Cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis.

The No Project (No Build) Alternative would not involve an increase in population or housing in the area, as discussed above, and would not introduce any new land uses which would increase the use of or demand for public services, parks, and recreation facilities in the project area. The possible exception to this would be if 2-3 rural dwellings were built on-site, as is allowable under

current County A-N zoning. Therefore, cumulative impacts to public services and recreation from the proposed project, in combination with existing and future developments in the City of Davis, would be less under the No Project (No Build) Alternative.

5-21 Cumulative Impacts to Intersections Within the Freeway Interchange Area.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. The maximum vehicle trips associated with agricultural operations occurs during the harvest period. Under the No Project (No Build) Alternative, the crop type or intensity could change. Should the crop type or intensity change, any resulting increase in agricultural equipment would be anticipated to remain on-site or in the vicinity of the site. In addition, should the crop intensity increase, resulting in more employees, the increase in trips would be substantially less than the trips resulting from the proposed project. Thus, the No Project (No Build) Alternative's incremental contribution to cumulative impacts to intersections within the freeway interchange area would be less than the proposed project. It is anticipated that the significant and unavoidable cumulative impact identified for the proposed project would be eliminated for this Alternative.

5-22 Cumulative Impacts to Roadway Segments.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. The maximum vehicle trips associated with the existing operations occurs during the harvest period. Under the No Project (No Build) Alternative, the crop type or intensity could change. However, as noted previously, any potential increase in trips would be substantially less than the trips resulting from the proposed project. Thus, the No Project (No Build) Alternative's incremental contribution to cumulative roadway segment impacts would be less than the proposed project. It is anticipated that the significant and unavoidable cumulative impact identified for the proposed project would be eliminated for this Alternative.

5-23 Cumulative Impacts to Local Area Freeway Segments.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. The maximum vehicle trips associated with the existing operations occurs during the harvest period. Under the No Project (No Build) Alternative, the crop type or intensity could change. However, as noted previously, any potential increase in trips would be substantially less than the trips resulting from the proposed project. Thus, the No Project (No Build) Alternative's incremental contribution to local freeway segments would be less than the proposed project. It is anticipated that the significant and unavoidable cumulative impact identified for the proposed project would be eliminated for this Alternative.

5-24 Cumulative Impacts to Regional Transportation Facilities.

For this impact statement, which is focused on regional facilities, the proposed project's effects on regional employment needs to be considered. Buildout of the MRIC Project in 2035 is

projected to result in reallocation of regional employment growth within the SACOG region for the 2008-2035 period.[6] BAE predicted that buildout of the proposed project could lead to reallocation of regional employment growth projected by SACOG for 2008-2035 by approximately 4.0 percent. The projected reallocation is shown in the below table. Under the cumulative scenario (SACOG 2035 projections + Nishi Gateway + Davis IC + proposed project), approximately 13.3 percent of the regional employment growth would be reallocated.

Office and Industrial Employment Growth Projections and Reallocation Under Various Scenarios

Jurisdiction	SACOG Office and Industrial Employment Projection (2008-2035)	Reallocated Employment for MRIC by 2035
City of Placerville	204	196
Unincorporated El Dorado County	7,059	6,779
El Dorado County Total	**7,263**	**6,975**
City of Auburn	537	515
City of Colfax	213	205
City of Lincoln	-177	-170
Town of Loomis	181	1741
City of Rocklin	1,243	1,194
City of Roseville	9,755	9,367
Unincorporated Placer County	9,367	8,995
Placer County Total	**21,119**	**20,281**
City of Citrus Heights	2,198	2,111
City of Elk Grove	6,347	6,095
City of Folsom	3,080	2,958
City of Galt	1,270	1,219
City of Isleton	36	34
City of Rancho Cordova	12,737	12,232
City of Sacramento	30,590	29,375
Unincorporated Sacramento County	24,993	24,000
Sacramento County Total	**81,250**	**78,024**

(Continued on next page)

[6] BAE Urban Economics. *City of Davis Economic Evaluation of Innovation Park Proposals.* May 11, 2015, p. 52, Table F2.

Live Oak	-134	-129
Yuba City	3,893	3,738
Unincorporated Sutter County	1,326	1,273
Sutter County Total	**5,085**	**4,883**
City of Davis	2,230	7,555
City of West Sacramento	12,004	11,527
City of Winters	401	385
City of Woodland	3,269	3,139
Unincorporated Yolo County	623	598
Yolo County Total	**18,527**	**23,205**
Marysville	228	219
Wheatland	48	46
Unincorporated Yuba County	2,813	2,702
Yuba County Total	**3,089**	**2,966**
Regional Total	**136,333**	**136,333**

Source: BAE Urban Economics. City of Davis Economic Evaluation of Innovation Park Proposals. May 11, 2015.

As can be seen from the table, in most cases, buildout of the proposed project within the City of Davis by 2035 would result in lesser levels of employment in other SACOG jurisdictions due to reallocations over the next 17 years. Similarly, the proposed project, in combination with other cumulative development, would result in an even greater reduction in regional employment levels in 2035. It is reasonable to assume that there would be reduced congestion levels on some roadways in other jurisdictions under the 2035 plus MRIC scenario (particularly on roads near land zoned for employment growth). This is because the proportionate share of regional employment represented by the MRIC Project would attract trips to Davis that would otherwise be expected to occur in different SACOG jurisdictions by 2035.

Overall, this Alternative has the potential to result in more traffic impacts to regional facilities than the proposed project.

5-25 Cumulative water system impacts.

The EIR determined that adequate water supply exists to serve existing and future projected cumulative water demand within the City's service area, including the proposed project. As discussed in the Hydrology section for this Alternative (Impact 4.9-4), a reasonable range of irrigation demand at the site can be estimated by considering low- and high-level water demand crop types. On the lower end of the water demand scale, is sunflowers, which typically requires approximately 2 acre-feet/year. On the higher end of the water demand scale, is almond trees, which typically requires approximately 4 acre-feet/year. Assuming that the entire 212-acre project site is farmed, which is overly conservative given that perimeter roads will need to be on-site, the total yearly irrigation water demand range could be expected to be from 424 acre-feet/year to 848 acre-feet/year. This equates to a range of approximately 138 to 276 million

gallons per year, or possibly less, if drip irrigation were to be used on-site.[7] It is anticipated that farming operations on-site would continue to use groundwater from existing on-site wells.

The proposed project is anticipated to result in a water demand of approximately 312,000 gallons per day, or 114 million gallons per year, per Table 4.15-15 of the Utilities section of this EIR, which is less than that which is predicted for the No Project (No Build) Alternative. The incremental contribution of this Alternative to cumulative water demands, is expected to be similar to, though greater than, the proposed project's incremental water demand. Therefore, in terms of cumulative water system impacts, the No Project (No Build) Alternative would have similar incremental impacts as compared to the proposed project.

5-26 Cumulative wastewater treatment and collection system impacts.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. An increase in population or housing in the area would not occur under the No Project (No Build) Alternative, and new land uses that could increase the generation of wastewater in the project area would not occur under the No Project (No Build) Alternative. The possible exception would be related to construction of rural dwellings and other accessory uses on the site, which are allowable under current Yolo County agricultural zoning. These facilities, however, would likely be on septic. Therefore, this Alternative's incremental contribution to cumulative wastewater treatment and collection system impacts would be less than the proposed project.

5-27 The project may contribute to cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications.

The No Project (No Build) Alternative would maintain the existing conditions and operations at the project site, which currently consist of farming activities. An increase in population or housing in the area would not occur under the No Project (No Build) Alternative, and new land uses that could increase the generation and demand for disposal of solid waste, natural gas, electric, or telecommunication facilities in the project area would not occur under the No Project (No Build) Alternative. The possible exception would be related to construction of rural dwellings and other accessory uses on the site, which are allowable under current Yolo County agricultural zoning, though public services demands from these uses would be less than the proposed project. Therefore, cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications would be less under the No Project (No Build) Alternative.

Reduced Site Size Alternative

The Reduced Site Size Alternative assumes the same buildout square footage as the proposed project, but on a smaller site over a smaller footprint. Specifically, the Reduced Site Size Alternative would involve development of up to 2,654,000 square feet (sf) on the southern 106-acre portion of the proposed MRIC site, located north of County Road (CR) 32A and east of

[7] 1 acre-foot = 325,900 gallons. An acre-foot of water is enough to cover one acre of land one foot deep.

Mace Boulevard. Figure 7-2 presents the development summary for the Reduced Site Size Alternative for the MRIC only. The 16.49-acre Mace Triangle site is also included as part of the Reduced Site Size Alternative in order to avoid the creation of a County "island" property. Thus, the Reduced Site Size Alternative site would contain a total of approximately 122.58 acres. The same development assumptions described for the Mace Triangle in the Project Description chapter of this EIR would apply for the Reduced Site Size Alternative.[8]

Due to the reduced amount of development area for the Reduced Site Size Alternative, the five-acre "Oval" and the greenways on the MRIC site are not included in the Alternative. The total open space area for the Reduced Site Size Alternative, including the courtyard plazas and the required 150-foot agricultural buffer, would be 27 acres, as compared to 64.6 acres under the proposed project. Access points to the Reduced Site Size Alternative would be similar to those proposed for the project (i.e., two access points along Mace Boulevard, and two southerly access points along CR 32A). A parking structure would be required for the Reduced Site Size Alternative in order to achieve a parking ratio compliant with City standards. Water and sewer improvements for the Reduced Site Size Alternative would be consistent with the improvements identified for the proposed project, as shown in Figures 4.15-7 and 4.15-9, respectively.

The research and development (R&D) buildings would have a maximum height of 65 feet and contain three to four stories. In addition, the manufacturing/research buildings would have a maximum height of 45 feet and would contain one to two stories, similar to the proposed project. Also similar to the proposed project is the hotel building, which would have a maximum height of 75 feet.

With respect to density, the intensification of development for this Alternative, in order to maintain the same square footage as the proposed project, is evidenced by a comparison of FARs. The proposed project would have an overall FAR of 0.49, whereas the Reduced Site Size Alternative would have an overall FAR of 0.77. [9]

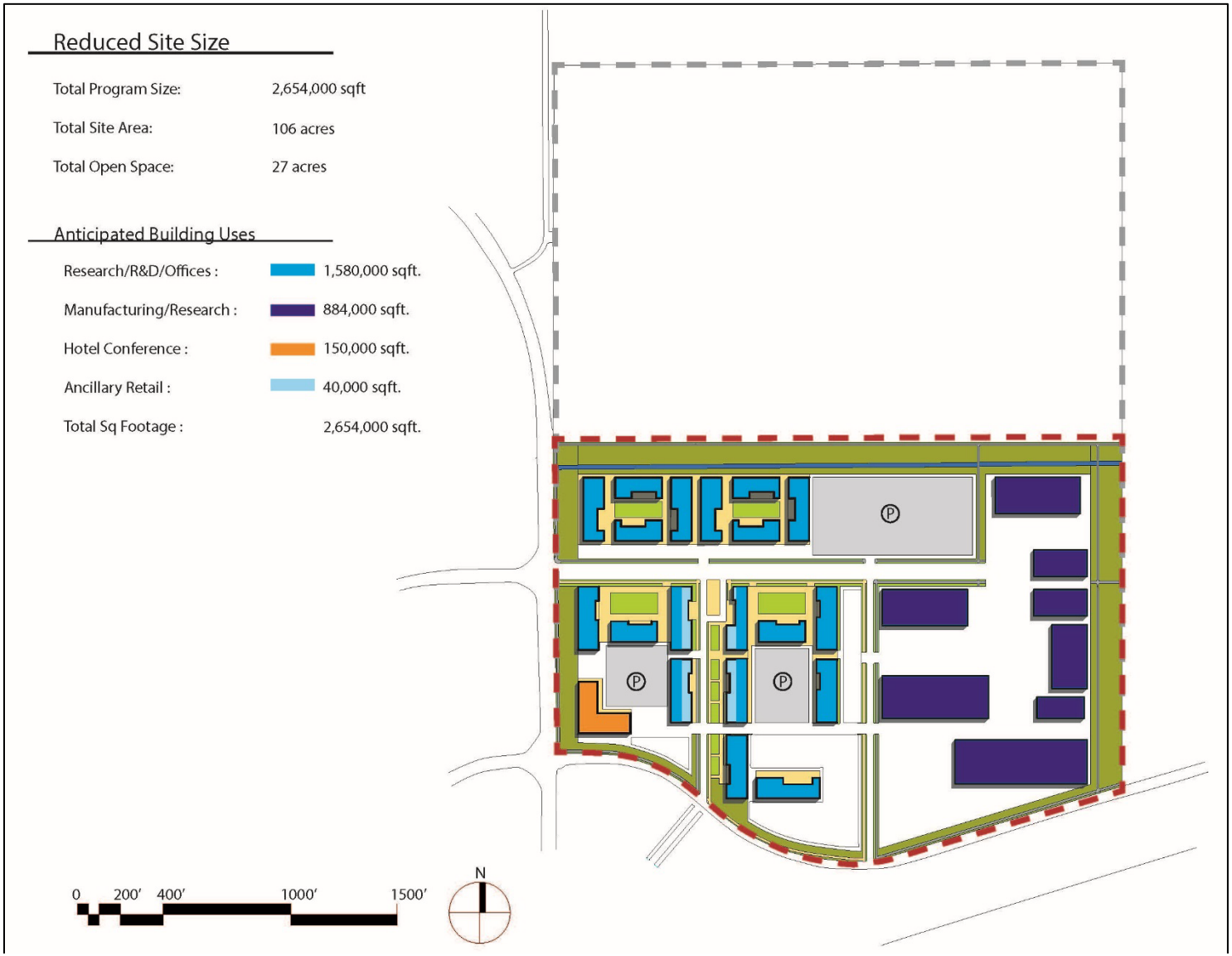
This alternative would meet some of the objectives of the proposed project. However, the smaller site size would make it difficult to achieve a sufficient long term land supply for the full range of projected uses including those that require larger building footprints. The smaller site would double the intensity of development over the site which would result in design challenges and may be too dense to attract some desirable R&D users. The ability to attract medium-scale and large-scale users would be affected by the small footprint and there would be less flexibility in the user space to address the specific needs of some tenants as a result.

As a reminder, this Alternative includes the Mace Triangle; therefore, any mitigation measures identified in the EIR for the Mace Triangle, are applicable for this Alternative.

[8] The City property would be designated Public-Semi-Public to allow for the continuation of existing uses. New uses on the City property are not proposed. The Ikedas parcel and other agricultural parcel would be designated General Commercial to allow for the continuation or expansion of the existing agricultural retail (Ikedas market) and/or for the development of up to 71,056 sf of new commercial uses.

[9] 106 acres – 27 acres (total open space) x 43,560 sf per ac = 3,441,240 sf
2,654,000 ÷ 3,441,240 sf = 0.77 FAR

Figure 7-2
Reduced Site Size Alternative



Detailed discussions of impacts to each environmental resource area as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

Aesthetics and Visual Resources

The impacts related to aesthetics and visual resources as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.1-1 Substantial adverse effect on a scenic vista.

There are no officially designated scenic highways, corridors, vistas, or viewing areas within the City's planning area and there are no established scenic vistas located on or adjacent to the site. This impact was determined to be less-than-significant for the proposed project. The same finding would apply to this alternative.

4.1-2 Substantially degrade the existing visual character or quality of the project site and/or the site's surroundings.

For the Reduced Site Size Alternative, only half of the 212-acre project site would be developed. This would serve to retain more open agricultural lands within the viewshed of many viewer types, including motorists and bicyclists along Mace Boulevard and I-80, and residents to the west. However, in order to achieve the same non-residential densities on a smaller footprint, the building heights would need to be increased, as compared to the proposed project.

The proposed research/office/R&D buildings for the Reduced Site Size Alternative would be a maximum of four stories, or 65 feet, whereas the proposed R&D buildings for the project would be approximately 10 feet lower at 55 feet. Because the floor plates are smaller than the proposed project's R&D buildings, the building heights needed to be increased to achieve the same average square footage.

The manufacturing buildings, ranging from 1 to 2 stories, would have a maximum height of 45 feet, similar to the proposed project; and the proposed hotel would be 75 feet tall under both scenarios.

With respect to density, the intensification of development for this Alternative, in order to maintain the same square footage as the proposed project, is evidenced by a comparison of FARs. The proposed project would have an overall FAR of 0.49, whereas the Reduced Site Size Alternative would have an overall FAR of 0.77.

Overall, due to the clustered nature of this Alternative, and the 10-foot height increase for the R&D buildings, the developed portion of the site could be considered to have more aesthetic impacts when compared to the proposed project. However, because only 50 percent of the 212-acre project site would be developed under this Alternative, aesthetic impacts associated with urbanization of open agricultural lands, and the resultant changes in visual character, would be

less, compared to the proposed project. Notwithstanding this, the significant and unavoidable impact identified for the proposed project would remain under the Reduced Site Size Alternative.

4.1-3 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Creation of new sources of light and glare per the Reduced Site Size Alternative would occur similar to the proposed project. The intensity of light associated with the site may be considered higher at the nearest sensitive visual receptors to the west due to the Reduced Site Size Alternative's increased FAR and R&D building heights. However, only the heights of the R&D buildings would be increased for this Alternative, and this increase would be only 10 feet in overall building height. Similar to the proposed project, the Reduced Site Size Alternative would be required to comply with the City's Municipal Code and the MRIC Design Guidelines; thus, the Alternative would not be expected to generate light or glare that would adversely affect day or nighttime views in the area. However, a lighting plan would still be required to be prepared and submitted for review and approval to ensure that any light and glare impacts would be reduced to less than significant. Overall, the Reduced Site Size Alternative would result in similar impacts related to light and glare as the proposed project and similar mitigation would be required.

4.1-4 Conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and visual resources.

General Plan consistency as related to aesthetics policies would be similar to the conclusion reached for the proposed project. Impacts were determined to be less-than-significant.

Agriculture and Forest Resources

The impacts related to agriculture and forest resources as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

The majority of the Reduced Site Size Alternative is designated as Prime Farmland (approximately 90 acres). The on-site detention basin is considered Potential Local Farmland. The overall 212-acre site contains approximately 159 acres (or 76.1 percent of the MRIC site) of Prime Farmland, approximately 39 acres (or 18.7 percent of the MRIC site) of Farmland of Statewide Importance, and approximately 11 acres (or 5.3 percent of the MRIC site) of Farmland of Local Importance. Based upon these figures, it can be seen that the proposed project would convert more acres of Prime Farmland and Farmland of Statewide Importance, compared to the Reduced Site Size Alternative. Therefore, impacts related to farmland conversion would be less

under this Alternative, as compared to the proposed project, though this Alternative would still result in a significant and unavoidable impact.

4.2-2 Impacts related to conflicting with existing zoning for agricultural use.

Similar to the proposed project, the Reduced Site Size Alternative would require prezoning to the City's Planned Development (P-D) zone, which would be consistent with the proposed new Davis General Plan land use designation of Innovation Technology Center for the project site. However, while implementation of the proposed project would rezone 212 acres of agriculturally-zoned land, this Alternative would rezone half of this amount, approximately 106 acres. Therefore, impacts related to conflicting with existing zoning for agricultural use would be less under the Reduced Site Size Alternative, as compared to the proposed project.

4.2-3 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use.

Implementation of the Reduced Site Size Alternative would result in the conversion of active agricultural lands to non-agricultural uses. Although conversion of agricultural lands would still occur, the amount of land converted from agricultural uses to non-agricultural uses would be approximately 106 acres less under the Reduced Site Size Alternative, as compared to the proposed project. Thus, the impacts associated with agriculture and forest resources under the Reduced Site Size Alternative would be less than the proposed project. Nonetheless, because active agricultural land would still be permanently converted to urban uses, a significant and unavoidable impact would remain under the Reduced Site Size Alternative.

4.2-4 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Similar to the proposed project, the Reduced Site Size Alternative would incorporate agricultural buffers along the northern and eastern perimeters of the site. While these buffers would help minimize conflicts with adjacent agricultural operations, Yolo County's 500-foot aerial spraying restrictions for pesticides would still require a spray buffer to encroach onto the adjacent farmer's land. Therefore, during times when aerial application of pesticides is deemed necessary by the adjacent farmer, the proposed innovation center will indirectly result in what might be considered "induced" conversion of off-site agricultural land by disrupting the ability to farm a portion of the adjacent property. However, the reduced size of this Alternative would mean that the potential effects on adjacent farming operations would be proportionally reduced.

In addition, the Alternative would, similar to the proposed project, be required to comply with existing law, including provision of a deed restriction per the City's Municipal Code. Therefore, the Reduced Site Size Alternative would result in less impacts as compared to the proposed project related to other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. This Alternative would still result in a significant and unavoidable impact.

4.2-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.

Both the project and this alternative would result in conversion of agricultural land on the periphery of the current city limits. This alternative would limit converted agricultural land to about one half of that which would be converted with the project. In order to ensure compatibility with City ordinance regulations, similar to the proposed project, a minimum 150-foot agricultural buffer would be required along the northern and eastern site perimeters, and a deed restriction, informing prospective buyers or leasees that agricultural operation would continue adjacent to the site, is required. The provision of a deed restriction is required by the Municipal Code and any future project applicant for the Reduced Site Size Alternative would be required to comply with all of the applicable Municipal Code regulations. Therefore, impacts related to consistency with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources would be less than what would result from the proposed project.

Air Quality

The impacts related to air quality as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.3-1 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.

Due to the smaller area of disturbance associated with development of the Reduced Site Size Alternative in comparison to the proposed project, the associated air pollutant emissions would be less than what is projected from the proposed project. Comparatively, impacts related to a violation of air quality standards or a substantial contribution to an existing or projected air quality violation during construction would be decreased by approximately one half as compared to the proposed project.

4.3-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during operations, and a conflict with or obstruction of implementation of applicable air quality plans.

Because the Reduced Site Size Alternative includes generally the same buildout square footage and employment-generating land uses as the proposed project, the operational criteria air pollutant emissions would be similar to those estimated for the proposed project. As a result, the Reduced Site Size Alternative would result in similar impacts as the proposed project associated with a violation of air quality standards or substantial contribution to an existing or projected air quality violation during operations, and a conflict or obstruction of implementation of applicable air quality plans. As such, the significant and unavoidable impact related to air quality identified for the proposed project would remain under the Reduced Site Size Alternative.

4.3-3 Expose sensitive receptors to substantial pollutant concentrations.

Because the Reduced Site Size Alternative would involve generally the same buildout square footage and employment-generating land uses as the proposed project, the same number of associated vehicle trips and VMT would occur. As such, similar traffic conditions would be expected on area roadways. Thus, the potential for sensitive receptors to be exposed to localized CO concentrations per the Reduced Site Size Alternative could be similar to that of the proposed project. Similarly, nearby sensitive receptors to the west may be exposed to similar concentrations of TACs associated with construction activities and traffic operations, due to the same buildout square footage over a concentrated area. Overall, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be similar under the Reduced Site Size Alternative as the proposed project.

4.3-4 Create objectionable odors affecting a substantial number of people.

As the Reduced Site Size Alternative would involve generally the same buildout square footage and land uses as the proposed project, impacts associated with objectionable odors would be similar under the Reduced Site Size Alternative as the proposed project.

4.3-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to air quality.

General Plan consistency as related to air quality policies would be similar between the two projects.

Biological Resources

The impacts related to biological resources as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.4-1 Impacts to Special-status plant species.

The Reduced Site Size Alternative would result in the disturbance of approximately half the site area that would be disturbed by the proposed project, during construction activities. The disturbance of approximately 106 acres, as compared to 212 acres, would result in a concomitant reduction in the likelihood of impacting special-status plant species should they be found on-site. The reconnaissance level surveys conducted at the project site by Sycamore did not detect any special-status plants, with the exception of Parry's rough tarplant on the Triangle site.[10] Overall, impacts related to special-status plant species could be less, though similar to, the proposed project under the Reduced Site Size Alternative.

[10] Mitigation Measure 4.4-1 requires future Triangle applicant(s) to conduct preconstruction surveys and implement propagation measures, should special-status plants be found on the Triangle.

4.4-2 Impacts to Valley elderberry longhorn beetle.

Unlike the proposed project, the single elderberry shrub on the western boundary of the MRIC site would be avoided by the Reduced Site Size Alternative. However, as is the case for the proposed project, the clump of elderberry shrubs located along the west side of CR 104 could be impacted as part of the Reduced Site Size Alternative if the northern sewer alignment alternative is selected. As such, the same mitigation measures as the proposed project would be required for the Reduced Site Size Alternative in order to protect such species and ensure impacts are less than significant. Impacts associated with valley elderberry longhorn beetle would be similar under the Reduced Site Size Alternative as the proposed project.

4.4-3 Impacts to Giant garter snake.

While the Reduced Site Size Alternative would disturb 106 fewer acres than the proposed project, development of the Reduced Site Size Alternative would also be expected to involve improvements to the Mace Drainage Channel (MDC), similar to the proposed project. As discussed in the EIR, while suitable habitat for GGS within the MDC is currently lacking, according to the City's Wildlife Resource Specialist,[11] suitable habitat has been present in the past. The possibility exists that more favorable habitat conditions may return during average rainfall years, or with a change in crop type and associated irrigation runoff on adjacent fields, which may occur over the long-term buildout of the proposed project. In addition, a significant GGS source population exists within the Yolo Bypass and Willow Slough Bypass, which increases the possibility of the snake being present, whether resident or vagrant, in the MDC.

Therefore, impacts related to giant garter snake would be similar to the proposed project under Reduced Site Size Alternative.

4.4-4 Impacts to Burrowing owl.

Although the Reduced Site Size Alternative would disturb 106 fewer acres than the proposed project, development of the Reduced Site Size Alternative could still disturb potential burrowing owl habitat on the site. Notwithstanding this, because this Alternative would disturb approximately half of the area that would be disturbed by the proposed project during construction, impacts related to burrowing owl would be less than the proposed project.

4.4-5 Impacts to Swainson's hawk.

The 212-acre MRIC Site contains eight trees along the MDC, along Mace Boulevard, and near the on-site detention basin. Swainson's hawks are unlikely to utilize the young trees in the MRIC site for nesting. Large trees in the eucalyptus groves located east and north (i.e., along the northerly sewer pipe alignment) of the MRIC site occur within 500 feet of potential construction disturbance areas and could be used for nesting. Thus, the Reduced Site Size Alternative would

[11] Personal email communication with Nick Pappani, Vice President of Raney Planning & Management, Inc. and John T. McNerney, Wildlife Resource Specialist, City of Davis, February 27, 2015.

have the same potential to cause direct effects on the species during tree removal, if required, or if construction occurs during the nesting season and active Swainson's hawk nests are present.

In addition, the Reduced Site Size Alternative site would, similar to the proposed project site, provide suitable foraging habitat for Swainson's hawk. However, the Reduced Site Size Alternative would disturb 106 fewer acres than the proposed project. Therefore, this Alternative's impacts related to Swainson's hawk would be less than the proposed project, but still significant and unavoidable.

4.4-6 Impacts to raptors, nesting birds, or other birds protected under the MBTA.

The Reduced Site Size Alternative would disturb 106 fewer acres than the proposed project, some of which could provide habitat for ground-nesting birds, though these 106 acres are regularly disturbed by farming activities. This Alternative's impacts related to raptors, nesting birds, or other birds protected under the MBTA would be less than the proposed project.

4.4-7 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

The only feature within the Reduced Site Size Alternative site that contains sensitive natural habitats, albeit limited in nature, is the MDC. The existing MDC, which transverses the northern boundary of the Reduced Site Size Alternative site, would remain in place and continue to serve drainage flows from the Reduced Site Size Alternative site. Similar to the proposed project, improvements to the MDC are included as part of the Reduced Site Size Alternative. Therefore, similar impacts would occur with this Alterative as compared to the proposed project related to riparian habitat or other sensitive natural communities.

4.4-8 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Based on the wetland delineation report prepared by Sycamore Environmental Consultants on December 10, 2014, Sycamore determined that the MDC is a non-navigable, man-made storm water drainage ditch maintained by the City of Davis. The MDC is excavated in uplands and drains only uplands. It is not a realigned natural channel, nor does the MDC contain relatively permanent flow of water. For these reasons, the MDC is not jurisdictional; thus, impacts related to wetlands would be similar for the Reduced Site Size Alternative and the proposed project.

4.4-9 Interfere substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.

Because the Reduced Site Size Alternative would have a smaller development footprint, the potential to interfere with the movement of species would be less than the proposed project. In addition, similar to the proposed project, the Reduced Site Size Alternative would include agricultural buffers along the perimeter of the site and open space areas within the site, which

could allow for wildlife movement. Furthermore, the adjacent agricultural uses would provide space for the movement of wildlife. Overall, the Reduced Site Size Alternative would result in less impacts than the proposed project related to interfering substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.

4.4-10 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The City of Davis Municipal Code requires permits for the removal of some species and sizes of trees pursuant to Chapter 37 of Davis Municipal Code. The Reduced Site Size Alternative would be required to comply with the requirements of the City's Municipal Code. Because all of the on-site trees would be located within the Reduced Site Size Alternative footprint (along and within the MDC), the number of protected trees necessary for removal would be similar to that of the proposed project. Accordingly, similar impacts related to a conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, would occur under the Reduced Site Size Alternative in comparison to the proposed project.

4.4-11 Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

The Yolo Natural Heritage Program (YNHP) is anticipated to be adopted by May 2017. The Reduced Site Size Alternative would be subject to the same mitigation/conservation requirements of the future YNHP as would the project. Therefore, impacts related to a conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan would be similar.

4.4-12 Conflict, or create an inconsistency, with any applicable biological resources plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Because the Reduced Site Size Alternative would involve buildout of the same project, over a smaller area, and would be within the same jurisdictional area as the proposed project, any on-site development shall be subject to City of Davis policies and plans regarding biological resources. For example, per policy HAB 1.2, the buffer/open space areas of the Reduced Site Size Alternative and the proposed project would be required to be wildlife friendly. Impacts related to consistency with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to biological resources would be similar to the proposed project.

Cultural Resources

The impacts related to cultural resources as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.5-1 Cause a substantial adverse change in the significance of a historical resource.

The Archaeological Survey Report prepared for the proposed project identified one potential historic resource in close proximity to the proposed project's off-site northerly sewer pipe alignment – The Wright Farm. This Alternative, like the proposed project, would require off-site sewer pipe improvements, which could adversely affect the Wright Farm should the northern off-site sewer alignment be selected. Thus, compared to the proposed project, similar impacts to historic resources would occur under the Reduced Site Size Alternative.

4.5-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

The overall area of disturbance for development of the Alternative would be 106 acres less than that of the proposed project. As a result, less acreage, potentially containing unknown archaeological resources, would be affected during ground disturbing activities. As compared to the proposed project, the impact would be less under this Alternative; however, similar mitigation measures would be required under the Reduced Site Size Alternative in order to ensure impacts are reduced to less than significant.

4.5-3 Directly or indirectly destroy a unique paleontological resource or unique geologic feature on the project site.

The overall area of disturbance for development of the Alternative would be 106 acres less than that of the proposed project. As a result, less acreage, potentially containing unique paleontological resources or unique geologic features, would be affected during ground disturbing activities. As compared to the proposed project, the impact would be less under this Alternative; however, similar mitigation measures would be required under the Reduced Site Size Alternative in order to ensure impacts are reduced to less than significant.

4.5-4 Disturb any human remains, including those interred outside of formal cemeteries.

The overall area of disturbance for development of the Alternative would be 106 acres less than that of the proposed project. As a result, less acreage, potentially containing human remains, would be affected during ground disturbing activities. As compared to the proposed project, the impact would be less under this Alternative; however, similar mitigation measures would be required under the Reduced Site Size Alternative in order to ensure impacts are reduced to less than significant.

4.5-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to cultural resources.

Because the Reduced Site Size Alternative would involve buildout of the same project, over a smaller area, and would be within the same jurisdictional area as the proposed project, impacts related to consistency with any applicable plan, policy, or regulation adopted for the purpose of

avoiding or mitigating environmental effects related to cultural resources would be similar to the proposed project.

Geology, Soils, and Mineral Resources

The impacts related to geology, soils, and mineral resources as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.6-1 Risks to people and structures associated with seismic activity, including ground shaking and ground failure.

Because the Reduced Site Size Alternative would involve buildout on a portion of the same site as the proposed project, the same geological conditions would be expected to occur on the Reduced Site Size Alternative site. Risk of exposure to geologic effects such as seismic activity, including ground shaking and ground failure, would be identical as that of the proposed project, but over a smaller site. However, the Reduced Site Size Alternative is expected to include development of a similar number of structures, as the proposed project. Thus, the Reduced Site Size Alternative would result in similar impacts as compared to the proposed project related to risks to people and structures associated with seismic activity, including ground shaking and ground failure.

4.6-2 Result in substantial erosion or loss of topsoil.

The Reduced Site Size Alternative would involve buildout on 106 acres of the 212-acre proposed project site. Accordingly, the same geological conditions would be expected to occur on the Reduced Site Size Alternative site. However, because the Alternative would involve buildout on a smaller area, the potential for substantial erosion or loss of topsoil, would be less than that of the proposed project. Therefore, the Reduced Site Size Alternative would result in less impacts than the proposed project related to risks associated with substantial erosion or loss of topsoil.

4.6-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse.

Because the Reduced Site Size Alternative would involve buildout on 106 acres of the 212-acre proposed project site, the same geological conditions would be expected to occur on the Reduced Site Size Alternative site. This Alternative is expected to involve buildout of a similar number of buildings on a smaller area, though, in some cases, at increased heights in order to build the same square footage proposed for the project. Therefore, the Reduced Site Size Alternative would result in similar impacts to the proposed project related to structures being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse.

4.6-4 Be located on expansive soil, as defined in Table 118-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Because the Reduced Site Size Alternative would involve buildout on 106 acres of the 212-acre proposed project site, the same geological conditions would be expected to occur on the Reduced Site Size Alternative site. This Alternative is expected to involve buildout of a similar number of buildings on a smaller area, though, in some cases, at increased heights in order to build the same square footage proposed for the project. Therefore, the Reduced Site Size Alternative would result in similar impacts than the proposed project related to risks to people and structures associated with expansive soils.

4.6-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology and soils.

General Plan consistency as related to geology and soils policies would be similar under this alternative as compared to the proposed project.

Greenhouse Gas Emissions and Energy

The impacts related to GHG emissions and energy as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.7-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Because the Reduced Site Size Alternative includes the same buildout square footage and land uses as the proposed project, the operational GHG emissions would be similar to those estimated for the proposed project. As a result, the Reduced Site Size Alternative would result in similar impacts as the proposed project associated with the generation of GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The significant and unavoidable impact identified for the proposed project would remain under the Reduced Site Size Alternative.

4.7-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The Reduced Site Size Alternative includes the same buildout square footage and land uses as the proposed project, over a smaller footprint. Thus, as stated above, the operational GHG emissions associated with the Reduced Site Size Alternative would be similar to those estimated for the proposed project. Implementation of Mitigation Measure 4.7-2 sets GHG reduction targets and accountability for the proposed project, but it would not guarantee reductions that show that the development would be able to achieve the City's carbon neutral target by 2050. This mitigation measure would also be applicable to the Reduced Site Size Alternative.

Therefore, this impact would be significant and unavoidable for both the proposed project and the Reduced Site Size Alternative.

4.7-3 Impacts related to energy associated with construction.

The Reduced Site Size Alternative would consist of buildout of the same square footage as the proposed project, but over a smaller area. In order to accommodate the same overall square footage as the proposed project on a site roughly half the size of the proposed project (106 acres vs. 212 acres), the R&D buildings will be 10 feet higher than the proposed project's R&D buildings (65 ft versus 55 ft). Tall buildings generally require more energy for their construction in comparison to lower rise buildings. While this is generally the case, a differential of 10 feet may not result in a substantial change in the energy demand during construction of the Reduced Site Size Alternative and the proposed project. Overall, it is expected that impacts related to energy associated with construction would be similar to the proposed project under the Reduced Site Size Alternative.

4.7-4 Impacts related to energy associated with operations.

The Reduced Site Size Alternative includes the same buildout square footage and land uses as the proposed project, over a footprint roughly half the size as the proposed project. The taller R&D buildings, and more dense nature of the Alternative layout, could result in some energy savings because people would not need to travel as far throughout the campus to get from one location to another. In addition, taller buildings have more surface area, which can be used for passive heating and cooling, if designed appropriately. Overall, impacts related to operational energy demand would be similar to the proposed project, or somewhat less, under the Reduced Site Size Alternative.

4.7-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to GHG emissions and energy conservation.

General Plan consistency as related to greenhouse gas emissions policies would be similar under this alternative as compared to the project.

<u>Hazards and Hazardous Materials</u>

The impacts related to hazards and hazardous materials as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.8-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Because the Reduced Site Size Alternative includes the same buildout square footage and land uses as the proposed project, similar on-site operations would be expected. Any businesses that may involve the use and/or storage of hazardous materials would be required to use and store all

materials in accordance with applicable state and local regulations, including California Fire Code regulations. Accordingly, similar impacts related to the routine transport, use, or disposal of hazardous materials would occur under the Reduced Site Size Alternative as the proposed project.

4.8-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with the existing on-site wells, canals, nearby uses, or soil contamination.

Two active wells, and one inactive well, are located on the 212-acre proposed project site. One of these active wells is located on the Reduced Site Size Alternative site. In addition, the backfilled canal, the contents of which are not documented, is located within both the proposed project and Reduced Site Size Alternative site areas. Therefore, similar impacts related to a reasonably foreseeable upset or accident condition involving the release of hazardous materials into the environment associated with wells would occur under the Reduced Site Size Alternative as compared to the proposed project; and similar mitigation measures would be required to ensure impacts are reduced to less than significant.

4.8-3 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Similar to the proposed project, the Reduced Site Size Alternative would not involve any operations or changes to the existing roadway network that would impair implementation or physically interfere with the County's Emergency Operations Plan or Multi-Hazard Mitigation Plan (MHMP). The proposed project was determined to have a less-than-significant impact related to emergency response plans. Therefore, impacts related to such would be similar to the proposed project under the Reduced Site Size Alternative.

4.8-4 Expose people or structure to a significant risk of loss, injury, or death involving widland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

According to Cal Fire maps for Yolo County, the City of Davis, including the proposed project site, is not within a State or local fire hazard severity zone. Because the Reduced Site Size Alternative involves buildout on a portion of the same site as the proposed project, similar potential for wildland fires would occur, which is low. Therefore, the Reduced Site Size Alternative would result in similar impacts, as the proposed project, related to exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.8-5 Conflict, or create an inconsistency, with applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to hazards and hazardous materials.

General Plan consistency as related to hazards and hazardous materials policies would be similar under this alternative as compared to the project.

Hydrology and Water Quality

The impacts related to hydrology and water quality as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.9-1 Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

The overall development footprint area of the Reduced Site Size Alternative would be approximately half that of the proposed project (106 acres vs. 212 acres). Accordingly, the overall amount of new impervious surfaces would be less than that of the proposed project. This would result in a reduced potential to alter the drainage pattern of the site or area, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage system. Thus, as compared to the proposed project, the impacts related to such would be less under the Reduced Site Size Alternative.

4.9-2 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality through erosion during construction.

As construction activities would occur over a smaller disturbance area, the Reduced Site Size Alternative would result in the a lesser potential than the proposed project to create or contribute additional sources of polluted runoff, violate water quality standards or waste discharge requirements, or otherwise degrade water quality during construction. Thus, impacts related to violating water quality standards or waste discharge requirements, providing substantial additional sources of polluted runoff, or otherwise substantially degrading water quality through erosion during construction would be less under the Reduced Site Size Alternative as compared to the proposed project.

4.9-3 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations.

The Reduced Site Size Alternative includes the same buildout square footage and land uses as the proposed project. As such, the same potential for sources of polluted runoff would occur for the Reduced Site Size Alternative. However, due to the reduced amount of new impervious

surfaces under the Reduced Site Size Alternative, as compared to the proposed project, the overall amount of runoff associated with the developed site would be expected to be less. As such, the Reduced Site Size Alternative would result in less impacts than the proposed project related to violating water quality standards or waste discharge requirements, providing substantial additional sources of polluted runoff, or otherwise substantially degrading water quality during operations. Similar to the proposed project, each phase of development for this Alternative will be required to comply with the BMPs and criteria established in Chapter 30 of the Municipal Code. Through the preparation of improvement and grading plans, these measures will be refined so that they will functionally minimize stormwater quality impacts.

4.9-4 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).

The Reduced Site Size Alternative would develop 106 fewer acres as compared to the proposed project. Because the amount of acres developed, and thus impervious surfaces, would be less than that of the proposed project, the amount of land maintained for potential contribution towards groundwater recharge would be more than that of the proposed project.

Similar to the proposed project, this Alternative is expected to install a new irrigation well on-site to meet approximately 80 percent of the Alternative's non-potable, irrigation water needs, the rest of which will be provided by the City's potable system. Existing irrigation wells are already utilized to irrigate crops on the site each year. Therefore, utilization of groundwater at the site to meet a portion of this Alternative's irrigation demand would not be a new occurrence, which would be expected to lower the groundwater table and affect the production rate of preexisting wells.

Overall, impacts related to groundwater recharge would be similar under the Reduced Site Size Alternative in comparison to the proposed project.

4.9-5 Place structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or flood hazard delineation map; or place within a 100-year floodplain structures which would impede or redirect flood flows; or expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Similar to the proposed project, the footprint of the Reduced Site Size Alternative not would be within a FEMA-designated Special Flood Hazard Area. As such, similar impacts as the proposed project related to flooding would occur.

4.9-6 Impacts related to conflicts, or creation of an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality.

Because the Reduced Site Size Alternative would involve buildout of the same project, over a smaller area, and would be within the same jurisdictional area as the proposed project, impacts related to consistency with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality would be similar to the proposed project.

Land Use and Urban Decay

The impacts related to land use and urban decay as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.10-1 Physical division of an established community.

The Reduced Site Size Alternative site is located within Yolo County, just outside the eastern City limits of Davis. The Reduced Site Size Alternative would result in development of predominately vacant land adjacent to urbanized areas of Davis to the west and south. As a result, similar to the proposed project, the Reduced Site Size Alternative would not result in division of an established community and a less-than-significant impact would occur.

4.10-2 Economic and social change and/or effect that result in urban decay.

Because the Reduced Site Size Alternative includes the same buildout square footage and land uses as the proposed project, the same potential for urban decay to occur would result from the Reduced Site Size Alternative as the proposed project. Therefore, impacts related to economic and social changes and/or effects that result in urban decay would be similar to the proposed project under the Reduced Site Size Alternative.

4.10-3 Conflict, or create an inconsistency, with any applicable land use and urban decay plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

General Plan consistency as related to land use designations on the City's adopted land use exhibit would be achieved with approval of the requested project approvals. General Plan consistency as related to land use policies could be considered improved under this Alternative, as compared to the project, due to more efficient use of the land. The Reduced Site Size Alternative would impact a total of 106 acres, 50_percent fewer than the project.

Noise and Vibration

The impacts related to noise and vibration as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.11-1 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project.

Because the Reduced Site Size Alternative would involve buildout of the same square footage and land uses as the proposed project, but over a smaller footprint, the overall area of disturbance for development of the Alternative would be less than that of the proposed project. As a result, although the level of construction-related noise would be similar to the proposed project, because the Reduced Site Size Alternative would be located further away from some of the nearby receptors identified for the proposed project, the potential for such noise to affect nearby receptors would be less than the proposed project. Therefore, impacts related to a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project would be less than the proposed project under the Reduced Site Size Alternative.

4.11-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. As discussed above, construction of the Reduced Site Size Alternative would occur over a smaller area of disturbance than the proposed project and would be located further away from some of the nearby receptors identified for the proposed project. Consequently, although the groundborne vibration generated by the Reduced Site Size Alternative would be similar to the proposed project, the potential for such to affect nearby receptors would be less than the proposed project. Therefore, impacts related to exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be less than the proposed project under the Reduced Site Size Alternative.

4.11-3 Transportation noise impacts to existing sensitive receptors in the project vicinity.

As the same buildout square footage and land uses would occur under the Reduced Site Size Alternative as the proposed project, the same number of associated vehicle trips and VMT would occur. Consequently, similar traffic conditions would be expected on area roadways, which would result in similar traffic-related noise in the area, as compared to the proposed project. Thus, impacts under the Reduced Site Size Alternative would be similar to the proposed project associated with transportation noise and effects to existing sensitive receptors.

4.11-4 Transportation noise impacts to new sensitive receptors in the project vicinity.

The primary sensitive receptor location for the proposed project would be associated with the proposed hotel use. Generally the types of uses associated with the proposed project (offices, laboratories, light manufacturing, commercial, retail, etc.) are not considered to be sensitive to noise. However, the proposed project includes various green space outdoor use areas. Therefore, the EIR examines transportation noise levels at these outdoor areas. The EIR determined that traffic noise on surrounding roadways would not adversely impact the proposed hotel or outdoor use areas. The Reduced Site Size Alternative would include the same types of

uses as the proposed project, and would be expected to be subject to similar traffic noise levels. Thus, impacts under the Reduced Site Size Alternative would be similar to the proposed project associated with transportation noise at new sensitive receptors.

4.11-5 Operational noise.

As the Reduced Site Size Alternative would involve similar development as the proposed project, over a smaller building footprint, impacts related to operational noise would be expected to be similar as well. It should be noted, however, that the Reduced Site Size Alternative would be located further from the residential uses to the northwest; thus, the Reduced Site Size Alternative would reduce any impacts identified for the proposed project related to noise levels at the residential area. Consequently, although the operational noise generated by the Reduced Site Size Alternative would be similar to the proposed project, the potential for such to affect nearby receptors would be less than the proposed project.

4.11-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise.

General Plan consistency as related to noise policies would be similar under this alternative as compared to the project.

Population and Housing

The impacts related to population and housing as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.12-1 Induce substantial population growth.

The Reduced Site Size Alternative would consist of buildout of the same square footage and land uses as the proposed project, but over a smaller area. Because, similar to the proposed project, the Reduced Site Size Alternative would not involve a direct increase in population or housing, impacts related to inducing substantial population growth would be similar to the proposed project under the Reduced Site Size Alternative.

4.12-2 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating environmental effects related to population and housing.

General Plan consistency as related to population and housing policies would be similar under this alternative as compared to the proposed project.

Public Services and Recreation

The impacts related to public services and recreation as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.13-1 Result in substantial adverse physical impacts associated with the provisions of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection facilities.

Buildout of the Reduced Site Size Alternative would result in the same square footage and land uses as the proposed project, including the same square footage and employees, but over roughly half the area. As such, this Alternative would have similar demands, as the proposed project, for fire protection services. While the R&D buildings would be taller by 10 feet under this Alternative, a ladder truck would already be needed to reach the taller buildings proposed for the project. Thus, the increased R&D building heights would not necessarily increase impacts to the DFD, and similar impacts as the proposed project related to adequate fire protection services would occur for the Reduced Site Size Alternative.

4.13-2 Result in substantial adverse physical impacts associated with the provisions of new or physically altered police protection facilities, and/or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police protection facilities.

Buildout of the Reduced Site Size Alternative would result in the same square footage and land uses as the proposed project, including the same square footage and employees, but over a smaller area. As such, similar demands as the proposed project for police protection services would occur under the Reduced Site Size Alternative. Thus, similar impacts as the proposed project related to adequate police protection services would occur under the Reduced Site Size Alternative.

4.13-3 Result in substantial adverse physical impacts associated with the provisions of new or physically altered school facilities, and/or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for school facilities.

Similar to the proposed project, while this Alternative would not introduce housing that could directly lead to greater demands on local schools, children of people who work in Davis may be eligible to attend Davis schools through an interdistrict school transfer. If a parent/guardian of a student is employed in Davis a minimum of 10 hours per week, they are eligible for the transfer based upon parent/guardian employment. Therefore, this Alternative, similar to the proposed project, would not generate additional students within the DJUSD unless the District approves interdistrict transfer students.

In addition, the Davis Joint Unified School District (DJUSD) collects $0.47 per square foot for commercial and industrial uses, which would include the Reduced Site Size Alternative's uses. Pursuant to State law (SB 50), payment of school impact fees is deemed to be full and

satisfactory mitigation for development projects. Overall, similar impacts as the proposed project related to adequate school capacity would occur under the Reduced Site Size Alternative.

4.13-4 Result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for park facilities.

Similar to the proposed project, the Reduced Site Size Alternative, based upon its lack of housing, is not strictly subject to the City's parkland dedication requirements (Section 36.08.040(L) of Davis Municipal Code, *Not Applicable to Certain Subdivisions*). However, the employees, whom would be accommodated from the Alternative at buildout, are expected to have impacts on local parks and recreation if sufficient facilities are not provided on-site. The Reduced Site Size Alternative employees would be within the City for five or more days per week for at least 8 to 12 hours per day.

Due to the reduced size of the Alternative, approximately 27 acres of open space/parks would be provided on-site, whereas the proposed project would include approximately 65 acres of open space/parks. The EIR determined, based upon the employee estimates for the proposed project that 64 acres of parklands and facilities would need to be provided. Because the Reduced Site Size Alternative would generate the same number of employees, the same amount of open space/park acreage would need to be provided. Due to the reduced size of the Alternative site, the applicant would need to satisfy their requirements off-site, via in-lieu fees, or a combination of both. Given this, the Alternative may be considered to have more impacts to parks and recreation facilities, as compared to the proposed project.

4.13-5 Result in substantial adverse physical impacts associated with the provisions of new or physically altered other public facilities, and/or the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.

Buildout of the Reduced Site Size Alternative would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but over a smaller area. Consequently, similar demands as the proposed project for other public facilities, such as libraries or community centers, would occur under the Reduced Site Size Alternative. Thus, similar impacts as the proposed project related to increased demand for other public facilities would occur under the Reduced Site Size Alternative.

4.13-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public services and recreation.

For the reasons identified above, General Plan consistency as related to public services and recreation policies would be similar under this alternative as compared to the project

Transportation and Circulation

The impacts related to transportation and circulation as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.14-1 Impacts to Intersections Outside Freeway Interchange Areas.

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employees, but over a smaller development footprint. Because the same square footage and number of employees as the proposed project would be expected for the Reduced Site Size Alternative, the same number of associated vehicle trips and VMT would occur. Consequently, similar traffic conditions would be expected on area roadways as a result of the Reduced Site Size Alternative. Therefore, impacts to intersections outside freeway interchange areas would be similar to the proposed project under the Reduced Site Size Alternative.

4.14-2 Intersections Within the Mace Boulevard Interchange Area.

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employees, but over a smaller development footprint. Because the same square footage and number of employees as the proposed project would be expected for the Reduced Site Size Alternative, the same number of associated vehicle trips and VMT would occur. Consequently, similar traffic conditions would be expected on area roadways as a result of the Reduced Site Size Alternative. Therefore, impacts to intersections within the freeway interchange area would be similar to the proposed project under the Reduced Site Size Alternative. Accordingly, the significant and unavoidable impact identified for the proposed project would still occur under the Reduced Site Size Alternative.

4.14-3 Impacts to Regional Roadways.

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employees, but over a smaller development footprint. Because the same square footage and number of employees as the proposed project would be expected for the Reduced Site Size Alternative, the same number of associated vehicle trips and VMT would occur. Consequently, similar traffic conditions would be expected on regional roadways as a result of the Reduced Site Size Alternative. Therefore, impacts to regional roadways would be similar to the proposed project under the Reduced Site Size Alternative.

4.14-4 Impacts to Freeways.

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employees, but over a smaller development footprint. Because the same square footage and number of employees as the proposed project would be expected for the Reduced Site Size Alternative, the same number of associated vehicle trips and VMT would occur. Consequently, similar traffic conditions would be expected on freeway facilities as a result of the Reduced Site

Size Alternative. Therefore, impacts to freeways as a result of the Reduced Site Size Alternative would be similar to what is anticipated for the proposed project.

4.14-5 Impacts to Local Neighborhood Street Traffic.

For the same reasons discussed above, impacts to local neighborhood street traffic would be similar to the proposed project under the Reduced Site Size Alternative. Accordingly, the significant and unavoidable impact identified for the proposed project would still occur under the Reduced Site Size Alternative.

4.14-6 Increase in Vehicle Miles Travelled

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employees, but over a smaller development footprint. Because the same square footage and number of employees as the proposed project would be expected for the Reduced Site Size Alternative, the same number of associated vehicle trips and VMT would occur. Therefore, impacts related to VMT as a result of the Reduced Site Size Alternative would be similar to what is anticipated for the proposed project.

4.14-7 Impacts to Emergency Vehicle Access.

The proposed project was found to have less-than-significant impacts related to the provision of emergency vehicle access points. This finding would apply to the Reduced Site Size Alternative as well.

4.14-8 Impacts associated with Construction Vehicle Traffic.

Buildout of the Reduced Site Size Alternative would result in the same land uses as the proposed project, including the same square footage and employees, but over a smaller area. Therefore, the associated short-term construction-related traffic conditions would likely be similar under the Reduced Site Size Alternative as compared to the proposed project.

4.14-9 Impacts to Pedestrian and Bicycle Facilities.

The EIR determined that the proposed project would result in significant impacts with respect to bicycle safety along CR 32A, and the need for enhanced connectivity in the immediate vicinity (e.g., path connection along the inside of the Mace Curve). Given that the Reduced Site Size Alternative would result in the same number of anticipated vehicle trips as the proposed project, similar bicycle impacts would be expected to occur as a result of this Alternative.

4.14-10 Impacts to Transit Services.

Buildout of the Reduced Site Size Alternative would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but over a smaller area. Because the Reduced Site Size Alternative would involve the same number of employees, the same potential to increase future transit riders and demand for transit services would occur.

Therefore, impacts to transit services would be similar to the proposed project under the Reduced Site Size Alternative, and similar mitigation would be required.

4.14-11 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to transportation/traffic.

General Plan consistency as related to the City's adopted circulation exhibit and applicable transportation and circulation policies would be similar under this alternative as compared to the proposed project.

Utilities

The impacts related to utilities as a result of buildout of the site per the Reduced Site Size Alternative, in comparison to that of the proposed project, are presented below.

4.15-1 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

This impact was found to be less-than-significant for the proposed project. The same finding would apply to this alternative.

4.15-2 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Buildout of the Reduced Site Size Alternative would result in the same square footage and employees, but over a smaller area. As such, similar demands as the proposed project for domestic water supply and delivery would occur for the Reduced Site Size Alternative. Therefore, impacts related to sufficient water supplies available to serve the project would be similar to the proposed project under the Reduced Site Size Alternative.

4.15-3 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Because the Reduced Site Size Alternative would involve the same building square footage and number of employees as the proposed project, the amount of wastewater generation associated with the Reduced Site Size Alternative would be expected to be similar as well. Therefore, impacts related to whether the wastewater treatment provider which serves or may serve the project has adequate capacity to serve the project's projected demand would be similar to the proposed project under the Reduced Site Size Alternative, and similar mitigation would be required.

4.15-4 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Because the Reduced Site Size Alternative would involve the same building square footage and number of employees as the proposed project, the amount of solid waste generation associated with the Reduced Site Size Alternative would be expected to be similar as well. Therefore, impacts related to whether the project could be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs would be similar to the proposed project under the Reduced Site Size Alternative.

4.15-5 Gas and electric facilities.

Buildout of the Reduced Site Size Alternative would result in the same square footage and number of employees, but over a smaller area. As such, similar demands as the proposed project for gas and electric services and facilities would be occur for the Reduced Site Size Alternative. Thus, impacts related to gas and electric facilities would be similar to the proposed project under the Reduced Site Size Alternative.

4.15-6 Adequate telecommunication facilities.

Buildout of the Reduced Site Size Alternative would result in the same square footage and number of employees, but over a smaller area. As such, similar demands as the proposed project for telecommunication services and facilities would occur for the Reduced Site Size Alternative. Thus, impacts related to adequate telecommunication facilities would be similar to the proposed project under the Reduced Site Size Alternative.

4.15-7 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to utilities.

For the reasons identified above, General Plan consistency as related to utilities policies would be similar under this alternative as compared to the proposed project.

Cumulative Impacts

For conservative analysis purposes, this cumulative impact comparison is based upon the CEQA Cumulative Scenario.

The Reduced Site Size Alternative's incremental contributions to cumulative impacts, in comparison to the proposed project's incremental contributions to cumulative impacts, are presented below.

5-1 Cumulative impacts related to long-term changes in visual character of the region associated with development of the proposed project in combination with future buildout in the City of Davis.

Impacts to aesthetics and visual resources resulting from the Reduced Site Size Alternative would combine with related impacts resulting from development of the Davis IC Project, the Nishi Gateway Project, and buildout of the Davis General Plan. The combined effects of this cumulative development scenario would lead to a significant cumulative impact on aesthetics and visual resources. Because development of the Reduced Site Size Alternative would consist of the same development square footage as the proposed project, but located on a smaller site, the contribution of the Reduced Site Size Alternative towards the cumulative effects on aesthetics would be similar to the proposed project. Similar to the project, the Reduced Site Size Alternative would comply with the City's General Plan policies, Municipal Code, and the MRIC Design Guidelines. However, due to the substantial change to the existing setting of the site, the Reduced Site Size Alternative's incremental contribution related to long-term changes in visual character of the region would be similar to the proposed project. As such, the cumulatively considerable and significant and unavoidable impact identified for the proposed project would remain under the Reduced Site Size Alternative.

5-2 Cumulative impacts related to the creation of new sources of light or glare associated with development of the proposed project in combination with future buildout in the City of Davis.

Because the Reduced Site Size Alternative would involve the same development as the proposed project on a smaller site, the new sources of light and glare resulting from the Reduced Site Size Alternative would be similar to the proposed project. Similar to the proposed project, the Reduced Site Size Alternative would be required to comply with the City's Outdoor Lighting Control regulations, which are designed to minimize effects on the night sky. The City requires each project to comply with these regulations. As such, similar to the proposed project, this Alternative's incremental contribution to cumulative night sky effects resulting from new sources of light and glare would be less than cumulatively considerable.

5-3 Impacts related to cumulative loss of agricultural land

Similar to the proposed project, this Alternative, in combination with other planned development, would result in a significant and unavoidable cumulative impact associated with the permanent conversion of agricultural land. However, because this Alternative would convert roughly half the amount of agricultural land as the proposed project, this Alternative's incremental contribution toward this significant cumulative impact would be less.

5-4 A cumulatively considerable net increase of any criteria pollutant.

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Air pollution is largely a cumulative impact. Consequently, the YSAQMD's approach to cumulative thresholds of significance is relevant to whether a project's

individual operational emissions would result in a cumulatively considerable contribution to the SVAB's existing cumulative impacts related to air quality conditions. If a project's operational emissions would be less than YSAQMD applicable thresholds, the project would not be expected to result in a cumulatively considerable contribution to a significant cumulative impact. Because the Reduced Site Size Alternative would involve the same development as the proposed project, but over a smaller area, similar criteria air pollutant emission would be generated by operation of the Alternative. Accordingly, the Reduced Site Size Alternative would result in the same cumulatively considerable net increase of criteria pollutants, and related impacts would be similar to the proposed project. Therefore, buildout of the Reduced Site Size Alternative in conjunction with buildout of the General Plan, Davis IC, and Nishi Gateway would result in a substantial increase in regional emissions from what has been anticipated for the area, and the cumulatively considerable and significant and unavoidable impact identified for the proposed project would remain under the Reduced Site Size Alternative.

5-5 Cumulative habitat loss in the City of Davis Area for special-status species.

The habitat loss resulting from the Reduced Site Size Alternative would combine with related impacts resulting from development of the Davis IC Project, the Nishi Gateway Project, and buildout of the Davis General Plan. The combined effects of the cumulative development scenario would lead to a significant cumulative impact on habitat loss within the cumulative geographic setting. The Reduced Site Size Alternative, in combination with other cumulative development, would be required to implement mitigation measures to minimize the effects of habitat loss. Overall, the cumulative impact, as well as the Reduced Site Size Alternative's incremental contribution, would be less than the proposed project due to the fact that this Alternative would convert approximately 50 percent less habitat than the proposed project. However, the significant and unavoidable impact identified for the proposed project would remain under the Reduced Site Size Alternative.

5-6 Cumulative impacts to movement corridors in the City of Davis area..

The impacts associated with movement corridors resulting from the Reduced Site Size Alternative would combine with related impacts resulting from development of the Davis IC Project, the Nishi Gateway Project, and buildout of the Davis General Plan. The Reduced Site Size Alternative's incremental effects to movement corridors, in combination with related effects of other cumulative development, would be less than the proposed project due to the fact that this Alternative would disturb 106 acres of potential species habitat, as compared to 212 acres under the proposed project scenario.

5-7 Cumulative loss of cultural resources.

While some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site are generally not made worse by impacts from another project to a cultural resource at another site. Rather the resources and the effects upon them are generally independent. Similar to the proposed project, site-specific impacts to cultural resources

would be avoided during construction of this Alternative, via implementation of standard mitigation measures.

5-8 Cumulative increase in the potential for geological related impacts and hazards.

Potentially adverse environmental effects associated with geologic or soils constraints, topographic alteration, and erosion, are usually site-specific and generally would not combine with similar effects that could occur with other projects in Davis. Furthermore, all projects in the cumulative scenario would be required to comply with the California Building Code, the City of Davis's General Plan, and other applicable regulations. Consequently, the Reduced Site Size Alternative, similar to the proposed project, would generally not be affected by, nor would it affect, other development approved by the City of Davis. Therefore, Alternative impacts related to a cumulative increase in the potential for geological related impacts and hazards would be less than cumulatively considerable, similar to the proposed project.

5-9 Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.

GHG is a cumulative impact. Therefore, similar to the conclusion for impacts 4.7-1 and 4.7-2, this Alternative's incremental contribution to GHG emissions would be similar to the proposed project's incremental contribution, and both scenarios would result in significant and unavoidable impacts. Implementation of Mitigation Measure 4.7-2 sets GHG reduction targets and accountability for the proposed project, but it would not guarantee reductions that show that the development would be able to achieve the City's carbon neutral target by 2050. This mitigation measure would also be applicable to the Reduced Site Size Alternative. Therefore, this impact would be significant and unavoidable for both the proposed project and the Reduced Site Size Alternative.

5-10 Cumulative impacts related to energy.

Similar to the proposed project, buildout of the Reduced Site Size Alternative in conjunction with buildout of the General Plan, Davis IC, and Nishi Gateway would result in a substantial increase in demand on energy resources from existing levels that would represent a large commitment of non-renewable resources. As noted in impact 4.7-4 above, the more compact nature of this Alternative, as well as the taller R&D buildings, could result in reduction in total operational energy demand as compared to the proposed project, though this would depend upon the final design and layout of each building. Although cumulative buildout would cause an irreversible consumption of energy, because each project, similar to the proposed project, would be required to comply with all applicable regulations for reducing energy demand, cumulative development would not be expected to result in an inefficient, wasteful, and unnecessary consumption of energy. Overall, this Alternative's incremental contribution to cumulative impacts on energy would be similar to the proposed project, or somewhat less.

5-11 Increase in the number of people who could be exposed to potential hazards or hazardous materials and an increase in the transport, storage, and use of hazardous materials due to development of the proposed project in combination with future buildout in the City of Davis.

Project-specific impacts related to hazards and hazardous materials under the Reduced Site Size Alternative would be similar to the proposed project, which were found to be less-than-significant with implementation of mitigation measures. In addition, the Reduced Site Size Alternative and surrounding development would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community, including potential effects, if any, on the project site. Compliance with all applicable regulations would ensure that development of the Reduced Site Size Alternative in conjunction with the Davis IC, Nishi Gateway, and buildout of the City's General Plan would not result in any substantial increases in the potential for people to be exposed to hazards or hazardous materials due to an increase in the transport, storage, and use of hazardous materials. Therefore, the Reduced Site Size Alternative would result in similar impacts as the proposed project related to such.

5-12 Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area.

The Reduced Site Size Alternative would involve the same development as the proposed project, but on a 106-acre site versus the proposed project's 212-acre site. Accordingly, the Alternative's overall amount of new impervious surfaces would be roughly half that of the proposed project, which would result in a reduced potential to alter the drainage pattern of the site or area, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage system.

The combined effects of the Reduced Site Size Alternative and other cumulative development, however, would contribute to potential regional flooding issues. Similar to the proposed project, it is anticipated that this project will need to detain its incremental runoff on-site, or at an off-site location, such that low-level ponding does not increase downstream, when the Yolo Bypass culvert flapgate is blocked due to high flows in the Bypass. Due to the reduced impervious surface area, and concomitant reduction in runoff volume, the incremental contribution to cumulative runoff volume impacts of the Reduced Site Size Alternative would be less than the proposed project.

5-13 Cumulative impacts to water quality within the City of Davis.

Continued development within the City of Davis, including the Reduced Site Size Alternative, would result in additional stormwater runoff and entry of pollutants into receiving waters via construction and operation of future projects. However, the Reduced Site Size Alternative would result in fewer impervious surfaces than the proposed project, which could in turn lead to a reduced amount of urban pollutants entering the receiving storm drainage system during storm events. Each future development at the Alternative site, would be required to comply with the

City's regulatory stormwater documents, standards, and requirements. Similar to the proposed project, Reduced Site Size Alternative would integrate Low Impact Development measures throughout the project to provide stormwater quality treatment. Overall, the incremental contribution to cumulative water quality effects resulting from the Alternative would be less than the proposed project's incremental contribution.

5-14 Cumulative land use incompatibilities.

Land use conflicts are site-specific and would not result in a cumulative impact. Incompatibility issues are addressed and mitigated on a project-by-project basis. The proposed project has been designed to be consistent with applicable aspects of the City's General Plan, and as described in this EIR, the project would not result in incompatibilities with any of the surrounding land uses. The same conclusion would apply to the Reduced Site Size Alternative.

5-15 Cumulative urban decay.

Because Reduced Site Size Alternative would involve the same development as the proposed project, but at a smaller site, the Alternative would result in a similar contribution to cumulative urban decay impacts. Therefore, while the Reduced Site Size Alternative would result in effects to urban decay, in combination with related effects of other cumulative development, that would be considered significant, the Alternative's contribution to the significant cumulative impact would be less than cumulatively considerable, similar to the proposed project.

5-16 Cumulative impacts on noise-sensitive receptors.

Because the Reduced Site Size Alternative would involve the same development as the proposed project, but at a smaller site, the Alternative would be expected to result in a similar contribution as the proposed project to the cumulative noise environment. As such, cumulative impacts on noise-sensitive receptors would be similar to the proposed project under the Reduced Site Size Alternative, which would be less than cumulatively considerable.

5-17 Cumulative traffic noise effects on proposed uses.

Because Reduced Site Size Alternative would involve the same land uses as the proposed project, but at a smaller site, and cumulative traffic volumes on nearby roadways would be the same for this Alternative scenario and the proposed project scenario, impacts related to cumulative traffic noise effects on proposed uses would be similar to the proposed project under the Reduced Site Size Alternative, which would be less than cumulatively considerable with similar mitigation measures as required for the proposed project.

5-18 Cumulative population and housing impacts.

According to the Sacramento Area Council of Governments (SACOG), the Davis IC, MRIC, Mace Triangle, and the Nishi Gateway Project would not exceed SACOG's regional employment projections. Therefore, the employee household demand from the Davis IC, MRIC,

Mace Triangle, and the Nishi Gateway Project is already accounted for in the MTP/SCS projections.

Physical environmental impacts associated with these indirect increases in population and housing are addressed in the other sections of this EIR, and throughout this cumulative analysis. In many cases the indirect physical effects resulting from the project's increase in population and housing demand, in combination with the related effects of other projects, would not result in significant environmental impacts. In other cases, such as air quality, greenhouse gas emissions, public services, and traffic, the indirect physical effects resulting from the project's increase in population and housing demand, in combination with other cumulative development, would result in significant and unavoidable cumulative impacts. Because the Reduced Site Size Alternative would involve the same development as the proposed project, but at a smaller site, the Alternative would also indirectly result in similar cumulatively considerable physical impacts.

5-19 Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.

Because Reduced Site Size Alternative would involve the same development as the proposed project, but at a smaller site, the Alternative would result in similar demand for fire protection services as the proposed project, which was determined to be adequately serviced by Davis Fire Department Station 33. However, similar to the proposed project, the concern arises when one considers a scenario during which Station 33 would not able to provide needed back-up response to the downtown core station because Station 33 would already be responding to a fire/medical incident at the Reduced Site Size Alternative site. In other words, similar to the proposed project, the Alternative could exacerbate the existing response time deficiency experienced in certain areas of the City of Davis by precluding Station 33 from being able to provide back-up to already impacted areas. Overall, the Reduced Site Size Alternative in combination with past, present, and probable future projects, would result in similar cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis as the proposed project, which were identified as cumulatively considerable and significant and unavoidable. Similar mitigation as the proposed project would be required for the Reduced Site Size Alternative.

5-20 Cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis.

Similar to the proposed project, Reduced Site Size Alternative, as well as each future development project including buildout of the City's General Plan, Davis IC, the Mace Triangle Site, and the Nishi Gateway Property, would be required by the City of Davis to pay adopted development impact fees, which include fees for such services as public safety, general facilities, roadways, parks, and open space. Each project's payment of adopted City impact fees for public services and recreation would ensure that the combined, related effects of cumulative development on public services and recreation would not be significant. Therefore, Reduced Site Size Alternative would result in a similar incremental contribution towards cumulative impacts to public services and recreation from the proposed project in combination with existing and

future developments in the City of Davis as the proposed project, which were identified as being less than cumulatively considerable.

5-21 Cumulative Impacts to Intersections Within the Freeway Interchange Area.

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employee-generating uses, but over a smaller development footprint. Because the Reduced Site Size Alternative would involve the same square footage and land uses as the proposed project, the Alternative would result in similar associated vehicle trips and VMT. Therefore, a similar incremental contribution towards cumulative impacts to intersections within the freeway interchange area would occur, and impacts would remain cumulatively considerable and significant and unavoidable under the Reduced Site Size Alternative.

5-22 Cumulative Impacts to Roadway Segments.

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employee-generating uses, but over a smaller development footprint. Because the Reduced Site Size Alternative would involve the same development as the proposed project, the Alternative would result in similar associated vehicle trips and VMT. Therefore, a similar incremental contribution towards cumulative impacts to roadway segments would occur, and impacts would remain cumulatively considerable and significant and unavoidable under the Reduced Site Size Alternative.

5-23 Cumulative Impacts to Local Area Freeway Segments.

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employee-generating uses, but over a smaller development footprint. Because the Reduced Site Size Alternative would involve the same development as the proposed project, the Alternative would result in similar associated vehicle trips and VMT. Therefore, a similar incremental contribution towards cumulative impacts to local area freeway segments would occur, and impacts would remain cumulatively considerable and significant and unavoidable under the Reduced Site Size Alternative.

5-24 Cumulative Impacts to Regional Transportation Facilities.

Buildout of the Reduced Site Size Alternative would result in the same building square footage and employee-generating uses, but over a smaller development footprint. Because the Reduced Site Size Alternative would involve the same development as the proposed project, the Alternative would result in similar associated vehicle trips and VMT. Therefore, this Alternative would have a similar incremental contribution towards cumulative impacts to regional facilities, as compared to the proposed project's contribution, which would be less than cumulatively considerable.

5-25 Cumulative water system impacts.

As discussed in the Utilities section of this EIR, sufficient water supplies are available to serve the proposed project and other proposed projects, as well as the buildout demands of the City's current service area, over the next 20 years during normal-year, single-dry year, and multiple-dry year scenarios. Because the Reduced Site Size Alternative would involve the same development as the proposed project, but at a smaller site, the Alternative would result in a similar demand for water supply and delivery. As such, sufficient water supplies would be available to serve the Reduced Site Size Alternative under the cumulative scenario. Therefore, cumulative water system impacts would be similar to the proposed project under the Reduced Site Size Alternative, and would be less than cumulatively considerable.

5-26 Cumulative wastewater treatment and collection system impacts.

Based on flow considerations alone, the WWTP would have the capacity to accommodate flows from all future General Plan buildout development, plus the flows from the proposed project, Davis IC, and Nishi Gateway projects. However, based on biological oxygen demand (BOD) loading considerations, adequate WWTP capacity does not appear to exist to fully accommodate the proposed cumulative projects not anticipated in the General Plan. Because the Reduced Site Size Alternative would involve the same development as the proposed project, but at a smaller site, the Alternative would result in a similar demand for wastewater treatment and collection system services. Overall, this Alternative's incremental contribution to cumulative wastewater treatment and collection system impacts would be similar to the proposed project.

5-27 The project may contribute to cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications.

Because the Reduced Site Size Alternative would involve the same development as the proposed project, but at a smaller site, the Alternative would result in a similar demand for utilities, including solid waste, natural gas, electricity, and telecommunications. Therefore, cumulative impacts related to such would be similar to the proposed project under the Reduced Site Size Alternative, which were identified as less than cumulatively considerable.

Reduced Project Alternative

The Reduced Project Alternative is defined as development of about one quarter of the MRIC site with about one fifth of the proposed square footage, and no change to the Mace Triangle component. This Alternative assumes buildout of only the western half (approximately 49.5 acres) of the 106-acre parcel described above for the Reduced Site Size Alternative. The rest of this parcel, or approximately 56 acres, would remain as agricultural land. A maximum of 540,000 square feet of development is assumed for the Reduced Project Alternative, which would include 400,000 square feet of research/manufacturing space to accommodate the expansion needs of Schilling Robotics, and 140,000 square feet of research and development/office use, which may incorporate ground floor ancillary retail of up to 40,000 square feet.

Water and sewer improvements for the MRIC portion of the Reduced Project Alternative would be substantially consistent with the improvements identified for Phase 1 of the proposed project. Two access points would be provided for the Reduced Project Alternative: 1) a new intersection leg heading east at Mace Boulevard and Alhambra Boulevard; and 2) a new southern access point, which would connect to County Road 32A, east of the existing Park-and-Ride lot driveway. The southern access would be the principal point of entry for transport vehicles and goods movement traffic. Similar to the proposed project, the two research and development/office buildings would not exceed 55-feet in height, and the two research/manufacturing buildings would not exceed 45 feet in height. Total open space for the Reduced Project Alternative, including the required 150-foot agricultural buffer, would be approximately 17 acres.

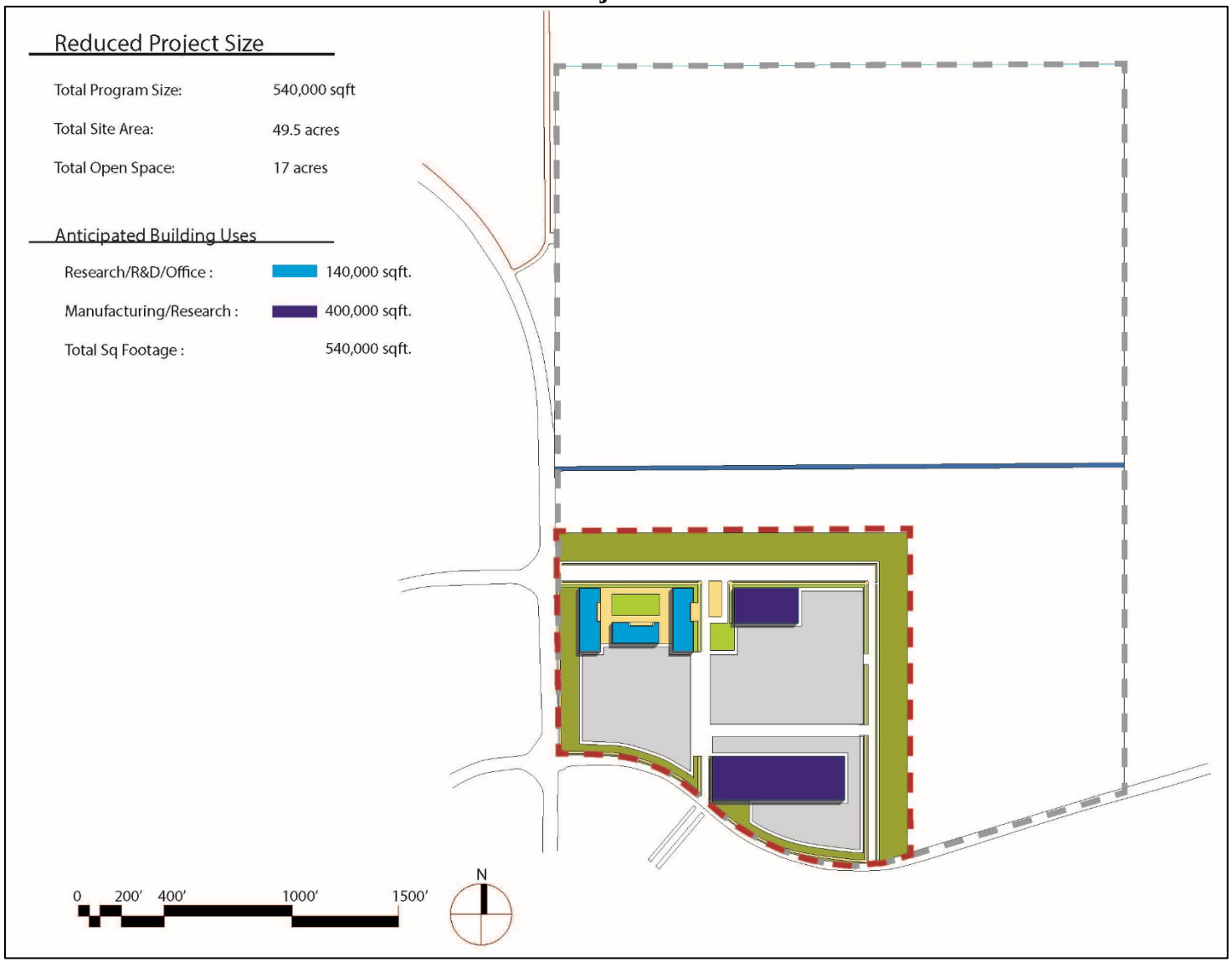
This alternative would include the Mace Triangle. The same development assumptions, and mitigation measures, identified for the Mace Triangle in the Project Description chapter and technical sections of this EIR, would apply for the Reduced Project Alternative.

This Alternative is essentially an analysis of Phase 1 of the MRIC. The Reduced Project Alternative includes the same square footage and land uses as MRIC Phase 1, with the only difference being the layout of the proposed buildings, as can be seen by comparing Figure 7-3 (showing MRIC portion only) with Figure 3-20 of the EIR Project Description chapter. As such, the mitigation requirements for MRIC Phase 1 of the proposed project would also be required for the Reduced Project Alternative. As a corollary, the mitigation measures not required until Phase 2 of the proposed project would not be required for the Reduced Project Alternative. The following proposed project mitigation measures would not be required for MRIC Phase 1/Reduced Project Alternative:

- MM 4.4-2(a) [VELB]
- MM 4.5-2(a) [Arch Resources]
- MM 4.7-2(b) [GHG Monitoring]
- MM 4.14-1 [Covell/Monarch Signal]
- MM 4.14-2(a) [Focused Traffic Study Requirement]
- MM 4.14-2 (b-d) [Mace Interchange Intersection Improvement Options]

The Reduced Project Alternative would result in less than 50 acres of development, just over one half million square feet, and is projected to be built out in under five years. This alternative would result in less impact as compared to the project; however, it fails to achieve the fundamental objectives of the City or the applicant to develop an integrated innovation center campus of approximately 200 acres in size, with sufficient land to meet demand over a 20 to 25 year period. As a result, this alternative would not result in a critical mass of users of various sizes sufficient to allow for a full range of research and market uses. It is also unlikely to support the necessary infrastructure and amenities to meet the City's sustainability, transportation, work environment, and fiscal/community benefit objectives. Moreover, the City would be unlikely to capture a greater share of local and regional business growth with such a small site.

Figure 7-3
Reduced Project Alternative



In addition, because the overall gross FAR for this Alternative is approximately 0.38,[12] this Alternative would not be consistent with the City's goal of at least 0.5 FAR. Also, the lack of hotel and conference center would not be consistent with the project objectives concerning the provision of such uses.

Detailed discussions of impacts to each environmental resource area as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

Aesthetics and Visual Resources

The impacts related to aesthetics and visual resources as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.1-1 Substantial adverse effect on a scenic vista.

Officially designated scenic highways, corridors, vistas, or viewing areas do not exist within the City's planning area; and established scenic vistas are not located on or adjacent to the site. Impacts related to adverse effects on a scenic vista were determined to be less-than-significant for the proposed project. Impacts related to potential effects on such would be similar under the Reduced Project Alternative.

4.1-2 Substantially degrade the existing visual character or quality of the project site and/or the site's surroundings.

Although the Reduced Project Alternative would still be considered to degrade the existing visual character or quality of the project site and/or the site's surroundings, the degree to which this degradation would occur would be less. Whereas the proposed project includes the construction of 2,654,000 sf of non-commercial building space, this Alternative would only construct 540,000 square feet of building space. And whereas the proposed project includes a hotel along Mace Boulevard, with a maximum height of 75 feet, this Alternative does not include the proposed 75-foot hotel.

This Alternative's reduced magnitude of visual character change can also be demonstrated by considering FAR. The Reduced Project Alternative would have an FAR of 0.38 acres over a 49.5-acre site, while the proposed project would have an FAR of 0.49 on a 212-acre site. Although impacts related to substantially degrading the existing visual character or quality of the project site and/or the site's surroundings would be less than the proposed project under the Reduced Project Alternative, because the Alternative would still be considered to degrade the existing visual character or quality of the project site and/or the site's surroundings, the significant and unavoidable impact identified for the proposed project would remain under the Reduced Project Alternative.

[12] 49.5 acres – 17 acres (total open space) x 43,560 sf per ac = 1,415,700 sf
540,000 ÷ 1,415,700 sf = 0.38 FAR

4.1-3 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Creation of new sources of light and glare per the Reduced Project Alternative would occur similar to the proposed project. However, the amount of light and glare sources would be less than the proposed project due to the reduction in buildout intensity, visibility of buildings, and reduction in overall site size. Similar to the proposed project, the Reduced Project Alternative would be required to comply with the City's Municipal Code and project Design Guidelines; thus, the Alternative would not be expected to generate light or glare that would adversely affect day or nighttime views in the area. Overall, the Reduced Project Alternative would result in less impacts than the proposed project related to light and glare; however, a lighting plan would still be required to be prepared and submitted for review and approval to ensure that any light and glare impacts would be reduced to less than significant.

4.1-4 Conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and visual resources.

Because the Reduced Project Alternative would involve similar development as the proposed project, although less intensive and over a smaller area, and would be within the same jurisdictional area as the proposed project, impacts related to consistency with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and visual resources would be similar to the proposed project. Notwithstanding this, the Reduced Project Alternative, arguably, could improve overall consistency with the Davis General Plan policy requiring an architectural "fit" with Davis' existing scale for new development projects.

Agriculture and Forest Resources

The impacts related to aesthetics and visual resources as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

Similar to the proposed project, the Reduced Project Alternative would involve the conversion of Prime Farmland to non-agricultural uses, thereby requiring agricultural land mitigation at a 2:1 ratio. All 49.5 acres of the Reduced Project Alternative site (MRIC portion) are mapped by the State as Prime Farmland. Because development would occur over approximately 163 fewer acres, as compared to the proposed project, impacts related to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be less. However, similar to the proposed project, this Alternative would have a significant and unavoidable impact. The California DOC has defined the 16.49-acre Mace Triangle site as Urban and Built-up Land.

4.2-2 Impacts related to conflicting with existing zoning for agricultural use.

The Reduced Project Alternative site, similar to the proposed project site, is currently in agricultural use and is zoned by the County for agricultural use. Similar to the proposed project, the Alternative would require prezoning to the City's P-D zone, which would be consistent with the proposed new Davis General Plan land use designation of Innovation Technology Center for the project site. However, development of this Alternative would occur over approximately 163 fewer acres as compared to the project. Therefore, impacts related to conflicting with existing zoning for agricultural use would be less under the Reduced Project Alternative as compared to the proposed project.

4.2-3 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use.

The entire Reduced Project Alternative site contains Prime Farmland, and the site is currently used for agricultural uses. Thus, implementation of the Reduced Project Alternative would result in the conversion of agricultural lands to non-agricultural uses. Although conversion of agricultural lands would still occur, the amount of land converted from agricultural uses to non-agricultural uses would be approximately 163 acres (222.9 – 60.4[13]) less under the Reduced Project Alternative than the proposed project. Thus, the impacts associated with agriculture and forest resources under the Reduced Project Alternative would be less than the proposed project. Nonetheless, because active agricultural land would still be permanently converted to urban uses, a significant and unavoidable impact would remain under the Reduced Project Alternative.

4.2-4 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Similar to the proposed project, the Reduced Project Alternative would incorporate agricultural buffers along the northern and eastern perimeters of the site. While these buffers would help minimize conflicts with adjacent agricultural operations, Yolo County's 500-foot aerial spraying restrictions for pesticides would still require a spray buffer to encroach onto adjacent agricultural areas. Therefore, during times when aerial application of pesticides is deemed necessary by the farmer, the proposed innovation center will indirectly result in what might be considered "induced" conversion of off-site agricultural land by disrupting the ability to farm a portion of the adjacent property. However, the reduced size of this Alternative would mean that the potential effects on adjacent farming operations would be proportionally reduced. Furthermore, unlike the proposed project, this Alternative would not require setbacks onto properties owned by others. Rather, the agricultural lands adjacent to this Alternative are owned by the project applicant. Because of this, it is anticipated that, under this Alternative, Mitigation Measure 4.2-4 would not be required. This proposed project mitigation measure requires the applicant to attempt to purchase a "no-spray" easement from the adjacent property owner.

[13] 49.5-acre MRIC portion plus 10.9 acres of Mace Triangle.

The Reduced Project Alternative would, similar to the proposed project, also be required to comply with existing law, including provision of a deed restriction per the City's Municipal Code. Therefore, the Reduced Project Alternative would result in less impacts as compared to the proposed project related to other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. This Alternative would still result in a significant and unavoidable impact.

4.2-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.

Both the proposed project and this alternative would result in conversion of agricultural land on the periphery of the current city limits. This alternative would convert approximately 49 acres of agricultural land, whereas the proposed project would convert 212 acres. As a result, general consistency of this Alternative with the City's agricultural policies would be improved, as compared to the proposed project.

Air Quality

The impacts related to air quality as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.3-1 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.

The Reduced Project Alternative would consist of buildout at a lower intensity than the proposed project and over a smaller footprint. Due to the less intensive buildout and smaller area of disturbance necessary for construction of the Reduced Project Alternative in comparison to the proposed project, the construction-related air pollutant emissions would be less than what is expected for the proposed project. Therefore, impacts related to a violation of air quality standards or a substantial contribution to an existing or projected air quality violation during construction would be less than the proposed project; and the EIR determined that the project's construction emissions would be less-than-significant.

4.3-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during operations, and a conflict with or obstruction of implementation of applicable air quality plans.

Because the Reduced Project Alternative includes less intensive buildout than the proposed project, the operational criteria air pollutant emissions would be expected to be less than estimated for the proposed project. The Reduced Project Alternative operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) software and compared to the proposed project emissions, as shown in Table 7-2. It should be noted that VMT for the Reduced Project Alternative provided by Fehr & Peers, the traffic consultant for the proposed project, was applied to the modeling. In addition, similar assumptions as used for the proposed project, including compliance with the California Building Energy Efficiency Standards Code

and Tier 1 of the CALGreen Code per City standards, proximity to the nearest existing bus stop, on-site pedestrian improvements and connections off-site, have been applied to CalEEMod as inherent project features for the Reduced Project Alternative as well.

Table 7-2
Unmitigated Reduced Project Alternative Operational Emissions

Pollutant	Reduced Project Alternative Emissions	Proposed Project Emissions	Change	YSAQMD Thresholds of Significance
ROG	3.89 tons/yr	19.51 tons/yr	-15.62 tons/yr	10 tons/yr
NO_X	1.48 tons/yr	18.83 tons/yr	-16.82 tons/yr	10 tons/yr
PM_{10}	16.19 lbs/day	138.95 lbs/day	-122.76 lbs/day	80 lbs/day

Source: CalEEMod, May 2015.

As shown in the table, the Reduced Project Alternative would result in fewer operational emissions than the proposed project; and unlike the proposed project, the Reduced Project Alternative's operational emissions would be below the YSAQMD's thresholds of significance for ROG, NO_X, and PM_{10}. Therefore, proposed project Mitigation Measure 4.3-2 is not required for this Alternative; and the project's significant and unavoidable operational air quality impact would be eliminated.

Impacts related to a violation of air quality standards or substantial contribution to an existing or projected air quality violation during operations, and a conflict or obstruction of implementation of applicable air quality plans would be fewer under the Reduced Project Alternative than the proposed project.

4.3-3 Expose sensitive receptors to substantial pollutant concentrations.

Because the Reduced Project Alternative would involve less intensive buildout than the proposed project, fewer associated vehicle trips and VMT would result. For example, the Reduced Project Alternative could result in 23,000 daily vehicle miles traveled compared to the 196,000 daily vehicle miles traveled resulting from the proposed project. As such, traffic volumes would be reduced on area roadways in comparison to the proposed project. Thus, the potential for sensitive receptors to be exposed to localized CO concentrations per the Reduced Project Alternative would be less than that of the proposed project. In addition, the nearest sensitive receptors to the northwest would be located further from the development area of the Reduced Project Alternative in comparison to the proposed project. Thus, such sensitive receptors would be even less likely to be exposed to high concentrations of TACs associated with construction activities, traffic, and project operations. The proposed project was found to have a less-than-significant impact related to substantial pollutant concentrations. The same finding would apply to this Alternative.

4.3-4 Create objectionable odors affecting a substantial number of people.

As the Reduced Project Alternative would involve less intensive buildout than the proposed project and would be located further from sensitive receptors to the northwest, impacts

associated with objectionable odors would be less under the Reduced Project Alternative than the proposed project. This impact was found to be less-than-significant for the project. The same finding would apply to this alternative.

4.3-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to air quality.

General Plan consistency as related to air quality policies would be similar between the project and this alternative; however, because the project would result in lower air emissions overall, plan consistency with this alternative is considered better than for the proposed project.

Biological Resources

The impacts related to biological resources as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.4-1 Impacts to Special-status plant species.

The Reduced Site Size Alternative would result in the disturbance of approximately 49 acres of the site area that would be disturbed by the proposed project, during construction activities. The disturbance of approximately 49 acres, as compared to 212 acres, would result in a concomitant reduction in the likelihood of impacting special-status plant species should they be found on-site. The reconnaissance level surveys conducted at the project site by Sycamore did not detect any special-status plants, with the exception of Parry's rough tarplant on the Mace Triangle site.[14] Overall, impacts related to special-status plant species would be expected to be less than the proposed project. The proposed project mitigation measure for this impact would still be required for this Alternative.

4.4-2 Impacts to Valley elderberry longhorn beetle.

Unlike the proposed project, the single elderberry shrub on the western boundary of the MRIC site would be avoided by the Reduced Site Size Alternative. In addition, the possibility exists that off-site sewer pipe improvements may not be needed for this Alternative, which would ensure preservation of the clump of elderberry shrubs along the northerly off-site sewer alignment.

As discussed in the Utilities section of this EIR, Cunningham Engineering believes that while the existing 8-inch sewer line in Mace Boulevard does not have capacity to convey wastewater flows generated by the proposed project at buildout, it is possible that this existing line may be able to service Phase I of the proposed project in an interim condition. This is based on the factor that several contributing neighboring land uses have not been developed at the densities originally

[14] Mitigation Measure 4.4-1 requires future Triangle applicant(s) to conduct preconstruction surveys and implement propagation measures, should special-status plants be found on the Triangle.

intended in the City's sewer master plan. Because the buildout square footage for the Reduced Project Alternative is consistent with Phase 1 of the proposed project, it follows that this Alternative's wastewater could possibly be accommodated in the Mace Boulevard sewer line, thereby avoiding the need for off-site sewer improvements, which for the project, could include the northerly sewer alignment where elderberry shrubs are found. A sewer study would be required to determine what, if any, capacity remains in the existing Mace Boulevard line.

As a result, this Alternative's impacts to valley elderberry longhorn beetle could be less than the proposed project, if the sewer study determines that off-site sewer pipe improvements are not needed.

4.4-3 Impacts to Giant garter snake.

Potential giant garter snake habitat could exist in the MDC, though this is dependent upon whether water exists within the MDC. While it is anticipated that the stormwater runoff from the Reduced Project Alternative would be routed to the MDC, this Alternative would not include the same improvements to the MDC, which are included in the proposed project. For example, approximately 700 feet of the MDC would not be undergrounded for the Oval Park since this Alternative does not include the Oval park. However, the Reduced Project Alternative would not involve development of or improvements to the MDC. Because the Reduced Project Alternative would disturb less land than the proposed project and would not disturb the MDC, the Reduced Project Alternative would be less likely to disturb any potential on-site giant garter snake than the proposed project. Therefore, impacts related to giant garter snake would be less than the proposed project under Reduced Project Alternative; and it is anticipated that the mitigation measure required for the proposed project would not be required for this Alternative.

4.4-4 Impacts to Burrowing owl.

Although the Reduced Project Alternative would disturb 163 fewer acres of agricultural land than the proposed project, development of the Reduced Project Alternative could still disturb potential burrowing owl habitat on the site. Notwithstanding this, because this Alternative would disturb approximately 23 percent of the area that would be disturbed by the proposed project during construction, impacts related to burrowing owl would be less than the proposed project. The proposed project mitigation measures for this impact would still be required for this Alternative.

4.4-5 Impacts to Swainson's hawk.

The 212-acre MRIC Site contains eight trees along the MDC, along Mace Boulevard, and near the on-site detention basin. Swainson's hawks are unlikely to utilize the young trees in the MRIC site for nesting. The large trees in the eucalyptus groves, located east of the MRIC site, could be used for nesting. Unlike the proposed project, these large eucaplyptus trees are not located within 500 feet of the eastern boundary of the Reduced Project Alternative. Therefore, construction activities associated with the Reduced Project Alternative would not be expected to disturb nesting Swainson's hawk, should they occur within these trees.

The Reduced Project Alternative site would, similar to the proposed project site, provide suitable foraging habitat for Swainson's hawk. However, the Reduced Project Alternative would disturb 163 fewer acres than the proposed project. Therefore, this Alternative's impacts related to Swainson's hawk would be less than the proposed project, but still significant and unavoidable. The Swainson's hawk foraging habitat mitigation measure required for the proposed project would be required for this Alternative.

4.4-6 Impacts to raptors, nesting birds, or other birds protected under the MBTA.

The Reduced Project Alternative would disturb 163 fewer acres than the proposed project, some of which could provide habitat for ground-nesting birds, though these 163 acres are regularly disturbed by farming activities. This Alternative's impacts related to raptors, nesting birds, or other birds protected under the MBTA would be less than the proposed project. The proposed project mitigation measure for this impact would still be required for this Alternative.

4.4-7 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

The only feature within the vicinity of the Reduced Project Alternative site that contains sensitive natural habitats, albeit limited in nature, is the MDC. The existing MDC, which is located north of the Reduced Project Alternative site, would remain in place. Improvements to the MDC are not included as part of the Reduced Project Alternative. Therefore, this Alternative would have less impacts, as compared to the proposed project, to riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS. The proposed project mitigation measure for this impact would not be required for this Alternative.

4.4-8 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Based on the wetland delineation report prepared by Sycamore Environmental Consultants on December, 10 2014, Sycamore determined that the MDC is a non-navigable, man-made storm water drainage ditch maintained by the City of Davis. The MDC is excavated in uplands and drains only uplands. It is not a realigned natural channel, nor does the MDC contain relatively permanent flow of water. For these reasons, the MDC is not jurisdictional. Thus, this impact was found to be less-than-significant for the project. The same finding would apply to this alternative.

4.4-9 Interfere substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.

Because the Reduced Project Alternative would have a smaller development footprint, the potential to interfere with the movement of species would be less than the proposed project. In addition, similar to the proposed project, the Reduced Project Alternative would include

agricultural buffers along the perimeter of the site and open space areas within the site, which could allow for wildlife movement. Furthermore, the adjacent agricultural uses would provide space for the movement of wildlife. Overall, the Reduced Project Alternative would result in less impacts than the proposed project related to interfering substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.

4.4-10 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As noted previously, the City of Davis Municipal Code requires permits for the removal of some species and sizes of trees pursuant to Chapter 37 of Davis Municipal Code. The Reduced Project Alternative would be required to comply with the requirements of the City's Municipal Code. Because none of the eight trees located on the 212-acre proposed project site are within the limits of the Reduced Project Alternative site, the number of protected trees necessary for removal would be less than that of the proposed project. Accordingly, less impacts related to a conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, would occur under the Reduced Project Alternative in comparison to the proposed project.

4.4-11 Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

The YNHP is anticipated to be adopted by May 2017. The Reduced Project Alternative would be subject to the same mitigation/conservation requirements of the future YNHP as would the project. Therefore, impacts related to a conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan would be similar.

4.4-12 Conflict, or create an inconsistency, with any applicable biological resources plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

General Plan consistency as related to biological resources policies would generally be improved under this alternative as compared to the project. The Reduced Site Size Alternative would impact a total of 49 acres, 77 percent fewer than the proposed project.

Cultural Resources

The impacts related to cultural resources as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.5-1 Cause a substantial adverse change in the significance of a historical resource.

The Archaeological Survey Report prepared for the proposed project identified one potential historic resource in close proximity to the proposed project's off-site northerly sewer pipe alignment – The Wright Farm. As discussed above, the potential exists that off-site sewer pipe

improvements would not be needed for this Alternative. If such is the case, the Wright Farm would not be located near the off-site improvement areas associated with the Reduced Project Alternative. Thus, it is anticipated that this Alternative would have less potential impacts to historic resources than the proposed project, though this will depend upon whether or not off-site sewer improvements are required.

4.5-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

The overall area of disturbance for development of the Alternative would be 163 acres less than that of the proposed project. As a result, less acreage, potentially containing unknown archaeological resources, would be disturbed as a result of this Alternative. As compared to the proposed project, the impact would be less under this Alternative; however, similar mitigation measures would be required under the Reduced Project Alternative in order to ensure impacts are reduced to less than significant.

4.5-3 Directly or indirectly destroy a unique paleontological resource or unique geologic feature on the project site.

The overall area of disturbance for development of the Alternative would be 163 acres less than that of the proposed project. As a result, less acreage, potentially containing unique paleontological resources or unique geologic features, would be disturbed as a result of this Alternative. As compared to the proposed project, the impact would be less under this Alternative; however, similar mitigation measures would be required under the Reduced Project Alternative in order to ensure impacts are reduced to less than significant.

4.5-4 Disturb any human remains, including those interred outside of formal cemeteries.

The overall area of disturbance for development of the Alternative would be 163 acres less than that of the proposed project. As a result, less acreage, potentially containing human remains, would be disturbed as a result of this Alternative. As compared to the proposed project, the impact would be less under this Alternative; however, similar mitigation measures would be required under the Reduced Project Alternative in order to ensure impacts are reduced to less than significant.

4.5-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to cultural resources.

General Plan consistency as related to cultural resources policies would be improved under this alternative as compared to the project. The Reduced Site Size Alternative would impact a total of 66 acres, 71 percent fewer than the proposed project.

Geology, Soils, and Mineral Resources

The impacts related to geology, soils, and mineral resources as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.6-1 Risks to people and structures associated with seismic activity, including ground shaking and ground failure.

Risk of exposure to geologic effects such as seismic activity, including ground shaking and ground failure, would be identical as that of the proposed project, but over a smaller site. Because the Alternative would involve fewer buildings over a smaller footprint than the proposed project, the potential for buildings to be subjected to geologic effects or hazards, including ground shaking and ground failure, would be less than that of the proposed project. Therefore, the Reduced Project Alternative would result in less impacts than the proposed project related to risks to people and structures associated with seismic activity, including ground shaking and ground failure.

4.6-2 Result in substantial soil erosion or loss of topsoil.

The Reduced Project Alternative would involve buildout on 49 acres of the 212-acre proposed project site. Accordingly, the same geological conditions would be expected to occur on the Reduced Site Size Alternative site. However, because the Alternative would involve buildout on a smaller area, the potential for substantial erosion or loss of topsoil, would be less than that of the proposed project. Therefore, the Reduced Site Size Alternative would result in less impacts than the proposed project related to risks associated with substantial erosion or loss of topsoil. The proposed project mitigation measure for this impact would still be required for this Alternative.

4.6-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse.

The Reduced Project Alternative would involve buildout on 49 acres of the 212-acre proposed project site. Accordingly, the same geological conditions would be expected to occur on the Reduced Site Size Alternative site. However, because the Alternative would involve less intensive development over a smaller footprint than the proposed project, the potential for the buildings of the Reduced Project Alternative to be subjected to geologic effects or hazards, including unstable soils, would be less than that of the proposed project. Therefore, the Reduced Project Alternative would result in less impacts than the proposed project related to being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse. The proposed project mitigation measure for this impact would still be required for this Alternative.

4.6-4 Be located on expansive soil, as defined in Table 118-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Because the Reduced Project Alternative would involve less intensive development over a smaller footprint than the proposed project, the potential for the buildings of the Reduced Project Alternative to be subjected to geologic effects or hazards, including expansive soils, would be less than that of the proposed project. Therefore, the Reduced Project Alternative would result in less impacts than the proposed project related to risks to people and structures associated with expansive soils. The proposed project mitigation measure for this impact would still be required for this Alternative.

4.6-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology, soils, and mineral resources.

General Plan consistency as related to geology and soils policies would be similar under this alternative as compared to the project.

Greenhouse Gas Emissions and Energy

The impacts related to GHG emissions and energy as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.7-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Because the Reduced Project Alternative would involve less square footage at buildout, the operational GHG emissions would be less than what has been estimated for the proposed project. The Reduced Project Alternative operational GHG emissions were estimated using CalEEMod and compared to the proposed project's unmitigated emissions, as shown in Table 7-3. It should be noted that VMT for the Reduced Project Alternative provided by Fehr & Peers was applied to the modeling. In addition, similar assumptions as used for the proposed project, including compliance with the California Building Energy Efficiency Standards Code and Tier 1 of the CALGreen Code per City standards have been applied to CalEEMod as inherent project features for the Reduced Project Alternative as well.

As shown in the table and as expected, the Reduced Project Alternative would result in fewer operational GHG emissions than the proposed project (approximately 80 percent less). Implementation of Mitigation Measure 4.7-2(a) and (b) sets GHG reduction targets and accountability for the proposed project, but it would not guarantee reductions that show that the development would be able to achieve the City's carbon neutral target by 2050. This mitigation measure would also be applicable to the Reduced Project Alternative. Therefore, this impact would be significant and unavoidable for both the proposed project and the Reduced Project Alternative.

Table 7-3
Unmitigated Reduced Project Alternative Operational GHG Emissions at Buildout

Emission Source	Reduced Project Alternative Annual GHG Emissions ($MTCO_2e$/yr)	Proposed Project Annual GHG Emissions ($MTCO_2e$/yr)	Change
Area	0.01	0.05	-0.04
Energy	1,506.91	4,440.53	-2,933.62
Mobile	2,359.50	19,269.84	-16,910.34
Solid Waste	261.81	649.59	-387.78
Water	263.60	1,524.36	-1,260.76
TOTAL ANNUAL GHG EMISSIONS	**4,391.83**	**25,884.38**	-21,492.57

Source: CalEEMod, July 2015.

4.7-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As presented above, the Reduced Project Alternative would result in 4,391.83 $MTCO_2e$/yr (MRIC portion + Triangle), which exceeds zero. Therefore, the same mitigation would be required and a significant and unavoidable impact would still occur under the Reduced Project Alternative. However, because the Alternative would reduce annual operational GHG emissions from the proposed project level, impacts related to being inconsistent with or impeding attainment of the City's CAAP targets would be considered less than the proposed project under the Reduced Project Alternative.

4.7-3 Impacts related to energy associated with construction.

The Reduced Project Alternative would involve development on approximately 46 acres (66 ac total – 17 ac open space – 3.4 ac Park-and-Ride lot), as compared to approximately 147 acres of the proposed project. Due to the smaller area of disturbance necessary, as well as the less intensive buildout that would occur, for construction of the Reduced Project Alternative in comparison to the proposed project, the construction-related energy emissions would be less than what is expected for the proposed project.

4.7-4 Impacts related to energy associated with operations.

As the Reduced Project Alternative would involve less intensive buildout over a smaller area in comparison to the proposed project and, similar to the proposed project, would include energy-efficiency measures and compliance with building design regulations, the Reduced Project Alternative would be expected to result in less operational energy consumption. Based on the CalEEMod results for the Reduced Project Alternative at an assumed full buildout of 2035, the Reduced Project Alternative would be expected to result in consumption of electricity of a maximum of 5.49 gigawatt-hours (GWh) per year and consumption of natural gas of approximately 0.08 therms per year, in comparison to the proposed project's estimated annual consumption for electricity and gas of 24.03 GWh and 0.27 therms, respectively. Because the

Reduced Project Alternative would be expected to result in a reduction in the amount of energy consumption from the proposed project levels, impacts related to energy associated with operations would be less than the proposed project under the Reduced Project Alternative; however, the same mitigation would still be required.

4.7-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to GHG emissions and energy conservation.

General Plan consistency as related to greenhouse gas emissions policies would be improved under this alternative as compared to the proposed project due to the reduced VMT associated with this Alternative.

Hazards and Hazardous Materials

The impacts related to hazards and hazardous materials as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.8-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Because the Reduced Project Alternative would involve similar uses as the proposed project, but at a less intensive level, similar on-site operations would be expected to occur. Any businesses that may involve the use and/or storage of hazardous materials would be required to be reviewed by the Davis Fire Department for compliance with Fire Code regulations. Accordingly, similar impacts related to the routine transport, use, or disposal of hazardous materials would occur under the Reduced Project Alternative as the proposed project.

4.8-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with the existing on-site wells, canals, nearby uses, or soil contamination.

Two active wells, and one inactive well, are located on the 229-acre proposed project site. One of these active wells is located on the Reduced Project Alternative site. In addition, the backfilled canal, the contents of which are not documented, is located within both the proposed project and Reduced Project Alternative site areas. Therefore, similar impacts related to a reasonably foreseeable upset or accident condition involving the release of hazardous materials into the environment associated with wells would occur under the Reduced Project Alternative as compared to the proposed project; and similar mitigation measures would be required to ensure impacts are reduced to less than significant.

4.8-3 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Similar to the proposed project, the Reduced Project Alternative would not involve any operations or changes to the existing roadway network that would impair implementation or physically interfere with the County's Emergency Operations Plan or MHMP. This impact was found to be less-than-significant for the proposed project. This same finding would apply to this alternative.

4.8-4 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

According to Cal Fire maps for Yolo County, the City of Davis, including the proposed project site, is not within a State or local fire hazard severity zone. Because the Reduced Project Alternative involves buildout on a portion of the same site as the proposed project, similar potential for wildland fires would occur, which is low. Therefore, the Reduced Project Alternative would result in similar impacts as the proposed project related to exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.8-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to hazards and hazardous materials.

General Plan consistency as related to hazards and hazardous materials policies would be similar under this alternative as compared to the project.

<u>Hydrology and Water Quality</u>

The impacts related to hydrology and water quality as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.9-1 Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

The Reduced Project Alternative would involve development on only 46 acres (66 ac total – 17 ac open space – 3.4 ac Park-and-Ride lot), as compared to 147 acres of the proposed project, and would preserve 34 percent of the total Reduced Project Alternative site for open space. Because the Alternative would involve less intensive development over a smaller footprint than the proposed project, the amount of impervious surfaces would be less than that of the proposed project. As a result, the potential to alter the drainage pattern of the site or area, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater

drainage system would be less under the Reduced Project Alternative, as compared to the proposed project. Therefore, the impacts of this Alternative would be less than the proposed project. The proposed project mitigation measure for this impact would still be required for this Alternative.

4.9-2 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality through erosion during construction.

As construction activities would occur over a smaller disturbance area, the Reduced Project Alternative would result in a lesser potential than the proposed project to create or contribute additional sources of polluted runoff, violate water quality standards or waste discharge requirements, or otherwise degrade water quality through erosion during construction. Therefore, impacts related to violating water quality standards or waste discharge requirements, providing substantial additional sources of polluted runoff, or otherwise substantially degrading water quality through erosion during construction would be less under the Reduced Project Alternative as compared to the proposed project. The proposed project mitigation measure for this impact would still be required for this Alternative.

4.9-3 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations.

The Reduced Project Alternative would involve development of impervious surfaces on approximately 42 acres, as compared to 173 acres of impervious surfaces for the proposed project. The reduced amount of impervious surfaces for this Alternative would result in less overall amount of runoff from the site. As such, a lesser potential to provide additional sources of polluted runoff or otherwise degrade water quality would occur under the Reduced Project Alternative. Similar to the proposed project, this Alternative will be required to comply with the BMPs and criteria established in Chapter 30 of the Municipal Code. Through the preparation of improvement and grading plans, these measures will be refined so that they will functionally minimize stormwater quality impacts. The Reduced Project Alternative would result in less impacts than the proposed project related to violating water quality standards or waste discharge requirements, providing substantial additional sources of polluted runoff, or otherwise substantially degrading water quality during operations.

4.9-4 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).

The Reduced Project Alternative would develop 163 fewer acres, as compared to the proposed project. Because the amount of acres developed, and thus impervious surfaces, would be less than that of the proposed project, the amount of land maintained for potential contribution towards groundwater recharge would be more than that of the proposed project.

Similar to the proposed project, this Alternative is expected to install a new irrigation well on-site to meet approximately 80 percent of the Alternative's non-potable, irrigation water needs, the rest of which will be provided by the City's potable system. Existing irrigation wells are already utilized to irrigate crops on the site each year. Therefore, utilization of groundwater at the site to meet a portion of this Alternative's irrigation demand would not be a new occurrence, which would be expected to lower the groundwater table and affect the production rate of preexisting wells.

Overall, impacts related to groundwater recharge and supplies would be less under the Reduced Project Alternative in comparison to the proposed project due to the reduced impervious surfaces and irrigation water demands associated with the Alternative.

4.9-5 Place structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or flood hazard delineation map; or place within a 100-year floodplain structures which would impede or redirect flood flows; or expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Similar to the proposed project, the footprint of the Reduced Project Alternative would not be within the 100- and 200-year floodplains. As such, similar impacts as the proposed project related to flooding would occur.

4.9-6 Impacts related to conflicts, or creation of an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality.

General Plan consistency as related to hydrology and water quality policies would be improved under this alternative as compared to the project. The Reduced Site Size Alternative would impact a total of 49.5 acres, 77 percent fewer than the project.

Land Use and Urban Decay

The impacts related to land use and urban decay as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.10-1 Physical division of an established community.

The Reduced Project Alternative site is located within Yolo County, just outside the western City limits of Davis. The Reduced Project Alternative would result in development of predominately vacant land adjacent to urbanized areas of Davis to the east and south. As a result, similar to the proposed project, the Reduced Project Alternative would not result in division of an established community, and a less-than-significant impact would occur.

4.10-2 Economic and social changes and/or effects that result in urban decay.

The Reduced Project Alternative would involve less intensive buildout than the proposed project, including removal of the hotel portion of the proposed project. Due to the fact that this Alternative includes up to 40,000 square feet of ancillary retail, and the proposed project includes up to 260,000 square feet of supportive commercial uses, which are anticipated to include 160,000 square feet of hotel/conference center use and up to 100,000 square feet of supportive retail, the potential for the Reduced Project Alternative to result in economic and social changes and/or effects that result in urban decay would be less than that of the proposed project. Therefore, impacts associated with such would be less than the proposed project under the Reduced Project Alternative. It is anticipated that the proposed project's mitigation measure related to phasing controls on retail space would not be required for this Alternative.

4.10-3 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

General Plan consistency as related to land use designations on the City's adopted land use exhibit would be achieved with approval of the requested project approvals. General Plan consistency as related to land use policies would be similar, or less, under this alternative, as compared to the project, due to this Alternative's relatively low FAR of 0.38 in comparison to the project's 0.49 FAR, and the ramifications of this FAR relative to the City's project objectives.

Noise and Vibration

The impacts related to noise and vibration as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.11-1 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project.

The Reduced Project Alternative would involve less development over a smaller footprint than the proposed project, and would be located further from the existing residential uses to the west. Accordingly, construction noise levels at the residential uses to the west would be reduced under the Reduced Project Alternative. Construction noise levels at residential uses to the west would remain the same, although the overall duration of construction activities occurring on the project site would be less due to the reduced intensity of development and smaller footprint. Therefore, impacts related to a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project would be less than the proposed project under the Reduced Project Alternative.

4.11-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot

construction occur. As discussed above, the Reduced Project Alternative would involve less development over a smaller footprint than the proposed project, and would be located further from the existing residential uses to the west. Accordingly, construction vibration levels would be reduced under the Reduced Project Alternative. Therefore, impacts related to exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be less under the Reduced Project Alternative as compared to the proposed project.

4.11-3 Transportation noise impacts to existing sensitive receptors in the project vicinity.

Based on traffic volumes for the Reduced Project Alternative provided by Fehr & Peers, the Reduced Project Alternative would generate traffic noise level increases as shown in Table 7-4. As shown in the table, traffic from this Alternative would not cause noise level increases along roadway segments in the project vicinity to exceed the relevant FICON criteria used for this analysis; and impacts would be less than significant. Impacts related to transportation noise impacts to existing sensitive receptors in the project vicinity would be lower with the Reduced project Alternative as compared to the proposed project, due to the reduced number of trips resulting from this Alternative.

4.11-4 Transportation noise impacts to new sensitive receptors in the project vicinity.

The EIR determined that future traffic and UPRR noise levels would not have impacts on the proposed hotel use and outdoor use areas proposed for the project. These findings would also apply to the Reduced Project Alternative given that sensitive on-site outdoor use areas would not be sited any closer to these noise sources. Therefore, transportation noise impacts to new sensitive receptors in the project vicinity would be less under the Reduced Project Alternative as compared to the project.

4.11-5 Operational noise.

The Reduced Project Alternative would involve less development over a smaller footprint than the proposed project, and would be located further from the existing residential uses to the west. Accordingly, operational noise levels at the residential uses to the northwest/west would be reduced under the Reduced Project Alternative. Overall, impacts related to operational noise would be less under the Reduced Project Alternative as compared to the proposed project.

4.11-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise.

General Plan consistency as related to noise policies would be similar under this alternative as compared to the project.

Table 7-4
Existing and Existing Plus Reduced Project Alternative Traffic Noise Levels

Roadway	Segment	Noise Levels (L_{dn}, dB) at Outdoor Activity Areas of Nearest Sensitive Receptors					Distance to Existing + Project Traffic Noise Contours (feet)[2]		
		Existing	Existing + Reduced Project Alt.	Change	Significance Criteria[1]	Significant? (Y/N)	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
A Street	North of Russell Blvd.	50.3	51.4	1.1	+5 dB or > 60 dB	No	3	6	13
A Street	South of Russell Blvd.	52.8	52.9	0.1	+5 dB or > 60 dB	No	4	9	20
Anderson Rd.	North of W Covell Blvd.	58.8	58.8	0.0	+5 dB or > 60 dB	No	11	23	50
Anderson Rd.	W Covell Blvd. to Villanova Dr.	60.8	60.8	0.0	+3 dB	No	15	31	67
Anderson Rd.	Villanova Dr. to W. 8th St.	60.4	60.3	0.0	+3 dB	No	14	29	63
Anderson Rd.	W. 8th St. to Russell Blvd.	60.6	60.6	0.0	+3 dB	No	14	31	66
Anderson Rd.	Russell Blvd. to Orchard	59.3	59.3	0.0	+5 dB or > 60 dB	No	19	42	90
Anderson Rd.	Orchard to Hutchison	58.8	58.9	0.0	+5 dB or > 60 dB	No	18	39	84
Arlington Blvd.	North of Russell Blvd.	58.2	59.4	1.2	+5 dB or > 60 dB	No	14	30	64
Arthur Street	North of Russell Blvd.	57.0	57.1	0.2	+5 dB or >60 dB	No	8	16	35
B Street	North of Russell Blvd.	58.1	58.2	0.0	+5 dB or > 60 dB	No	8	18	38
B Street	South of Russell Blvd.	61.9	61.9	0.0	+3 dB	No	14	31	67
College Park	North of Russell Blvd.	47.2	47.2	0.0	+5 dB or > 60 dB	No	2	4	8
CR 31	West of CR 98	53.3	53.5	0.1	+5 dB or > 60 dB	No	32	68	146
CR 98	North of CR 31	56.7	56.7	0.0	+5 dB or > 60 dB	No	23	50	108
CR 98	South of CR 31	61.9	61.9	0.0	+3 dB	No	22	47	101
CR 99	North of CR 31	53.6	55.4	1.8	+5 dB or > 60 dB	No	18	39	84
CR 99D	South of CR 29	70.7[3]	70.7[3]	0.0	+1.5 dB	No	10	22	48
W Covell Blvd.	CR 98 to Lake Blvd.	59.1	59.6	0.5	+5 dB or > 60 dB	No	31	66	142
W Covell Blvd.	Lake Blvd. to Denali Dr.	52.6	53.1	0.5	+5 dB or > 60 dB	No	17	36	78
W Covell Blvd.	Denali Dr. to Risling Ct.	61.4	61.3	-0.1	+3 dB	No	37	80	172

Table 7-4
Existing and Existing Plus Reduced Project Alternative Traffic Noise Levels

Roadway	Segment	Noise Levels (L_{dn}, dB) at Outdoor Activity Areas of Nearest Sensitive Receptors					Distance to Existing + Project Traffic Noise Contours (feet)[2]		
		Existing	Existing + Reduced Project Alt.	Change	Significance Criteria[1]	Significant? (Y/N)	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
W Covell Blvd.	Risling Ct. to John Jones Rd.	62.3	64.5	2.2	+3 dB	No	32	69	149
W Covell Blvd.	John Jones Rd. to SR 113	64.1	64.3	0.3	+3 dB	No	36	77	165
W Covell Blvd.	SR 113 to Marketplace	61.3	62.7	1.3	+3 dB	No	36	77	166
W Covell Blvd.	Marketplace to Sycamore Ln.	62.7	62.6	-0.1	+3 dB	No	32	69	150
W Covell Blvd.	Sycamore to Anderson Rd.	63.6	63.5	0.0	+3 dB	No	30	64	138
W Covell Blvd.	Anderson Rd. to Oak Ave.	64.0	64.0	0.0	+3 dB	No	30	64	139
W Covell Blvd.	Oak Ave. to Catalina	64.0	64.0	0.0	+3 dB	No	30	64	139
W Covell Blvd.	Catalina to F St.	64.6	64.9	0.4	+3 dB	No	32	69	149
E Covell Blvd.	F St. to Pole Line Rd.	62.7	62.7	0.1	+3 dB	No	33	70	151
E Covell Blvd.	East of Pole Line Rd.	63.3	63.4	0.0	+3 dB	No	27	59	126
Denali Drive	South of W Covell Blvd.	56.0	57.0	1.0	+5 dB or > 60 dB	No	10	22	47
Eisenhower St.	North of Russell Blvd.	49.8	49.8	0.1	+5 dB or > 60 dB	No	3	6	13
F Street	North of Russell Blvd.	59.6	59.6	0.0	+5 dB or > 60 dB	No	10	22	47
F Street	South of Russell Blvd.	59.3	59.3	0.0	+5 dB or > 60 dB	No	10	21	45
F Street	North of Covell Blvd.	62.2	62.2	0.0	+3 dB	No	15	32	70
F Street	South of W Covell Blvd.	60.2	60.2	0.0	+3 dB	No	13	29	62
John Jones Rd.	North of W Covell Blvd.	51.9	51.9	0.0	+5 dB	No	14	30	64
Lake Blvd.	South of W Covell Blvd.	58.4	58.4	0.0	+5 dB or > 60 dB	No	12	25	54
Oak Ave.	South of W Covell Blvd.	57.8	57.8	0.0	+5 dB or > 60 dB	No	8	17	36
Pole Line Rd.	North of W Covell Blvd.	64.2	64.2	0.0	+3 dB	No	31	67	144
Pole Line Rd.	South of Russell Blvd.	60.2	60.2	0.0	+3 dB	No	13	29	62

Table 7-4
Existing and Existing Plus Reduced Project Alternative Traffic Noise Levels

Roadway	Segment	Noise Levels (L_{dn}, dB) at Outdoor Activity Areas of Nearest Sensitive Receptors					Distance to Existing + Project Traffic Noise Contours (feet)[2]		
		Existing	Existing + Reduced Project Alt.	Change	Significance Criteria[1]	Significant? (Y/N)	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
Russell Blvd.	West of Lake Blvd.	54.3	54.0	-0.3	+5 dB or > 60 dB	No	9	18	40
Russell Blvd.	Lake Blvd. to Arlington Blvd.	59.1	59.3	0.2	+5 dB or > 60 dB	No	16	33	72
Russell Blvd.	Arlington Blvd. to Eisenhower St.	61.7	62.4	0.7	+3 dB	No	23	50	108
Russell Blvd.	Eisenhower St. to Arthur St.	63.4	64.0	0.6	+3 dB	No	24	52	111
Russell Blvd.	Arthur St. to SR 113	56.9	57.4	0.5	+5 dB or > 60 dB	No	29	62	135
Russell Blvd.	SR 113 to Orchard Park	62.1	62.1	0.0	+3 dB	No	24	51	111
Russell Blvd.	Orchard Park to Sycamore Ln.	61.3	61.3	0.0	+3 dB	No	24	51	110
Russell Blvd.	Sycamore Ln. to Anderson Rd.	56.5	56.5	0.0	+5 dB or > 60 dB	No	22	47	102
Russell Blvd.	Anderson Rd. to California Ave.	63.1	63.1	0.0	+3 dB	No	28	60	129
Russell Blvd.	California Ave. to College Park	62.6	62.6	0.0	+3 dB	No	27	59	126
Russell Blvd.	College Park to A St.	62.9	63.0	0.0	+3 dB	No	27	59	126
Russell Blvd.	A St. to B St.	62.6	62.6	0.0	+3 dB	No	26	55	119
Russell Blvd.	B St. to F St.	63.9	63.9	0.0	+3 dB	No	20	43	92
Russell Blvd.	East of F St.	63.7	63.8	0.0	+3 dB	No	19	41	89
Shasta Dr.	South of W Covell Blvd.	55.5	56.1	0.7	+5 dB or > 60 dB	No	9	19	42
SR 113	North of W Covell Blvd.	70.4	70.4	0.0	+1.5 dB	No	196	422	910
SR 113	South of W Covell Blvd.	70.1	70.5	0.5	+1.5 dB	No	195	420	905
Sycamore Ln.	North of W Covell Blvd.	60.6	60.6	0.0	+3 dB	No	9	20	44
Sycamore Ln.	South of W Covell Blvd.	57.5	57.4	-0.1	+5 dB or > 60 dB	No	7	16	34
Sycamore Ln.	North of Russell Blvd.	58.8	58.8	0.1	+5 dB or > 60 dB	No	9	19	42

Table 7-4
Existing and Existing Plus Reduced Project Alternative Traffic Noise Levels

Roadway	Segment	Noise Levels (L_{dn}, dB) at Outdoor Activity Areas of Nearest Sensitive Receptors					Distance to Existing + Project Traffic Noise Contours (feet)[2]		
		Existing	Existing + Reduced Project Alt.	Change	Significance Criteria[1]	Significant? (Y/N)	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}

Notes:
[1] Where existing noise levels are less than 60 dB an increase of 5 dB would be a significant increase. Additionally, any increase causing noise levels to exceed the City's Normally Acceptable 60 dB L_{dn} noise level standard at an existing outdoor activity area of a residential use would also be significant. Where existing noise levels exceed 60 dB but are less than 65 dB, an increase of 3 dB or more would be significant. Where existing noise levels exceed 65 dB, an increase of 1.5 dB or more would be significant.
[2] Distances to traffic noise contours are measured in feet from the centerlines of the roadways.
[3] Includes contribution from SR 113 traffic noise. Specifically, SR 113 is predicted to generate 70.4 dB under existing conditions and 70.4 under existing plus Reduced Alternative project conditions. CR 99D is predicted to generate 59.6 dB under existing conditions and 59.7 dB under existing plus Reduced Alternative project conditions. The noise exposure from both roadways is added to achieve the total noise level at receptors along this roadway segment. Under existing and existing plus Reduced Alternative conditions, SR 113 is predicted to be the primary noise source to receptors along this roadway segment and would somewhat mask the noise from traffic on CR 99D.
[4] SR = State Route; CR = County Road

Source: j.c. brennan & associates, Inc., March 16, 2015.

Population and Housing

The impacts related to population and housing as a result of buildout of the site per the Reduced Project Alternative in comparison to that of the proposed project are presented below.

4.12-1 Induce substantial population growth.

The Reduced Project Alternative would involve less square footage at buildout than the proposed project. Similar to the proposed project, the Reduced Project Alternative would not involve a direct increase in population or housing. Due to the reduced buildout intensity, the number of employees at the site would be less for the Alternative, as compared to the proposed project. Specifically, per Table 7-5, applying the employment projection metrics used in the EIR (see Section 4.12), the Reduced Project Alternative would be expected to generate a total of 1,256 employees, which is 4,626 less than the proposed project.

Table 7-5
Estimated Buildout Job Yields
Reduced Project Alternative compared to Proposed Project

Land Use Category	Estimated Employment (Reduced Project Alt)	Estimated Employment (MRIC Project)
Office/Tech Space/Manufacturing	5,633[1]	1,176[5]
Retail	200[2]	80[6]
Hotel	50[3]	N/A
Total Employees	**5,882**	**1,256**
Total Employee Households	**3,631**[4]	**775**

Notes:
sf/employee = square feet per employee
1. MRIC Site office/tech space employment assumes 425 square feet per employee.
2. Retail assumes 500 square feet per employee.
3. Hotel assumes 0.33 employees per room.
4. Estimated 1.62 employed residents per household.
5. Calculated as follows (500,000/425 sf per employee).
6. Calculated as follows (40,000/500 sf per employee).

As shown in Table 4.12-12 of the Population and Housing Section of this EIR, the total amount of available housing within Davis that could be available for the MRIC Project is estimated to be 1,238 units. Therefore, unlike the proposed project, the total employee household demand for the Reduced Project Alternative of 775 could be accommodated within the City of Davis. However, it should be noted that, consistent with BAE's assumptions for the proposed project, as discussed on page 4.12-17 of the Population and Housing section of this EIR, a percentage of employees would be expected to live outside of Davis, even if the total housing demand for this alternative can be met within Davis. Commute patterns of existing workers, who are employed in the Davis area, including the City of Davis and the UC Davis main campus, show that approximately 55 percent of Davis area workers live in the City of Davis and the rest of the local employees live in scattered residential locations (including UC Davis main campus). For the proposed project, the EIR assumes that new employees in the innovation center would have the same general

propensity to live in Davis (or outside of Davis) as existing employees, assuming housing availability.

In conclusion, impacts related to inducing substantial population growth would be less under the Reduced Project Alternative as compared to the proposed project; and the project's significant and unavoidable impact would be eliminated.

4.12-2 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating and environmental effect.

Because the Reduced Project Alternative would involve similar development as the proposed project, although less intensive and over a smaller area, and would be within the same jurisdictional area as the proposed project, impacts related to consistency with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to population and housing would be similar to the proposed project.

Public Services and Recreation

The impacts related to public services and recreation as a result of buildout of the site per the Reduced Project Alternative, in comparison to that of the proposed project, are presented below.

4.13-1 Result in substantial adverse physical impacts associated with the provisions of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection facilities.

Buildout of the Reduced Project Alternative would result in 540,000 sf of non-commercial building space, which is approximately 20 percent of the proposed project (540,000/2,654,000). Due to the reduction in buildings, the demand for fire protection services would be less than the proposed project. Therefore, impacts related to adequate fire protection services would be less under the Reduced Project Alternative as compared to the project.

4.13-2 Result in substantial adverse physical impacts associated with the provisions of new or physically altered police protection facilities, and/or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police protection facilities.

Due to the Alternative's reduction in number of buildings, and number of employees, the demand for police protection services would be less than the proposed project.

4.13-3 Result in substantial adverse physical impacts associated with the provisions of new or physically altered school facilities, and/or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for school facilities.

Similar to the proposed project, while this Alternative would not introduce housing that could directly lead to greater demands on local schools, children of people who work in Davis may be eligible to attend Davis schools through an interdistrict school transfer. If a parent/guardian of a student is employed in Davis a minimum of 10 hours per week, they are eligible for the transfer based upon parent/guardian employment. Therefore, this Alternative, similar to the proposed project, would not generate additional students within the DJUSD unless the District approves interdistrict transfer students.

In addition, the Davis Joint Unified School District (DJUSD) collects $0.47 per square foot for commercial and industrial uses, which would include the Reduced Site Size Alternative's uses. Pursuant to State law (SB 50), payment of school impact fees is deemed to be full and satisfactory mitigation for development projects. Overall, this Alternative, as compared to the proposed project, would generate less potential impacts schools due to the reduced potential for interdistrict transfers.

4.13-4 Result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for park facilities.

The Reduced Project Alternative, based upon its lack of housing, is not strictly subject to the City's parkland dedication requirements. However, the employees, who would work at the Alternative site at buildout, are expected to have impacts on local parks and recreation if sufficient facilities are not provided on-site. The Reduced Project Alternative employees would be within the City for five or more days per week for at least 8 to 12 hours per day.

Due to the reduced size of the Alternative, approximately 17 acres of open space/parks would be provided on-site, whereas the proposed project would include approximately 65 acres of open space/parks. Based upon the employee estimate for the proposed project (1,256 employees), 11.23 acres of open space/parklands would need to be provided:

- *Parklands*: 6.28 acres (1,256 employees x 0.005 acres/person).
- *Greenways/open space*: 4.95 acres (10 percent of 49.5 acres; not combined with parklands, but can be combined with interior 50 feet of agricultural buffer).

The Reduced Project Alternative provides 17 acres of open space, which meets the requirement, based upon the above methodology. However, the conceptual site plan does not specifically reflect park sites, so similar to the proposed project, the same mitigation required for the proposed project would be required for this Alternative to ensure the proper allocation of the on-

site green space. Therefore, this Alternative would have similar impacts related to an increased demand for parks and recreation facilities, as compared to the proposed project.

4.13-5 Result in substantial adverse physical impacts associated with the provisions of new or physically altered other public facilities, and/or the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.

Due to the reduction in the number of employees associated with the Reduced Project Alternative, potential increases in demand for other public facilities, such as libraries or community centers, would be less under the Reduced Project Alternative, as compared to the proposed project.

4.13-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public services and recreation.

General Plan consistency as related to public services and recreation policies would be similar under this alternative as compared to the proposed project.

Transportation and Circulation

Based on data provided by Fehr & Peers, the Reduced Project Alternative would generate vehicle trips as shown in Table 7-6. As shown in the table, the Reduced Project Alternative would generate 380 AM peak hour trips and 370 PM peak hour trips, approximately 83.5 percent fewer peak hour trips than the proposed project.

Table 7-6
Reduced Project Alternative Trip Generation

Alternative	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
Proposed MRIC Project	15,550	2,360	2,180
MRIC Reduced Project Alternative	2,230	380	370
Percent Difference from Proposed Project	-86%	-84%	-83%

Source: Fehr & Peers, May 2015.

The impacts related to transportation and circulation, as a result of buildout per the Reduced Project Alternative in comparison to that of the proposed project, are presented below.

4.14-1 Impacts to Intersections Outside Freeway Interchange Areas

The project was determined to have a significant impact at the East Covell Boulevard/Monarch Lane intersection. Impacts from the Reduced Project Alternative would be less than the proposed project. Fehr & Peers has determined that the Reduced Project Alternative would not result in a significant impact to this intersection based on an interpolation of intersection delays between

the Existing and Existing plus Project scenarios. As a result, it is expected that this Alternative would have less impacts to intersections outside freeway interchange areas as compared to the project.

4.14-2 Impacts to Intersections Within the Mace Boulevard Interchange Area

The project was determined to have a significant and unavoidable impact at the intersections of Mace Boulevard with Alhambra Drive, 2nd Street/County Road 32A, and the I-80 WB ramps. Impacts from the Reduced Project Alternative would be less than the project given that this alternative would result in approximately 83.5 percent fewer peak hour trips than the proposed MRIC Project. Based on the comparative analysis prepared by Fehr & Peers, the Reduced Project Alternative would not likely result in a significant impact at any of the three intersections based on an interpolation of intersection delays between the Existing and Existing plus Project scenarios. If the Reduced Project Alternative would not result in a significant impact to intersections within the interchange area, then Mitigation Measure 4.14-2 would not be required, and a significant and unavoidable project impact would be avoided. This would need to be confirmed through an equal-level traffic analysis of the Reduced Project Alternative. In conclusion, it is expected that this Alternative would have less impacts to intersections outside freeway interchange areas, as compared to the project.

4.14-3 Impacts to Regional Roadways

The proposed project was determined to have a less-than-significant impact to regional roadways. Impacts from the Reduced Project Alternative would be less than the proposed project, given that it would not contribute as many vehicle trips to the regional roadways. As such, the Reduced Project Alternative would have less impacts to regional roadways as compared to the project.

4.14-4 Impacts to Freeways

The proposed project was determined to have a less-than-significant impact to freeway segments. Impacts from the Reduced Project Alternative would be less than the proposed project, given that it would not contribute as many vehicle trips to the freeway segments. As such, the Reduced Project Alternative would have less impacts to freeway segments as compared to the project.

4.14-5 Impacts to Local Neighborhood Street Traffic

The project was determined to have a significant and unavoidable impact to neighborhood streets. For example, the proposed project is forecast to add 100 to 130 peak hour trips to Alhambra Drive, although the actual choice of drivers to choose Alhambra Drive instead of the Covell/Mace curve to approach and depart the site is somewhat difficult to predict. Korematsu Elementary School is located at the junction of Alhambra Drive and Loyola Drive, a segment which currently contains about 480 to 520 peak hour vehicles. Implementation of a neighborhood traffic calming plan was identified to reduce project impacts to a less-than-significant level.

As shown above, the Reduced Project Alternative would result in approximately 83.5 percent fewer peak hour trips than the proposed project. Due to the substantial reduction in vehicle trips associated with the Reduced Project Alternative, Fehr & Peers has determined that this alternative would not likely result in a significant impact to neighborhood streets, based on an interpolation of added volumes on Alhambra Drive between the Existing and Existing Plus Project scenarios. This would need to be confirmed through an equal-level traffic analysis of the Reduced Project Alternative. In conclusion, it is expected that this alternative would have less impacts to neighborhood streets as compared to the project. Mitigation Measures 4.14-5 would apply to this alternative to reduce the impact to a less-than-significant level.

4.14-6 Increase in Vehicle Miles Traveled

Due to the reduced number of employees, which would be generated by this Alternative, the number of associated vehicle trips and VMT would be less than the proposed project. This Alternative is anticipated to generate 23,000 daily VMT, whereas, the proposed project is anticipated to generate 196,000 daily VMT. Therefore, impacts related to VMT as a result of the Reduced Project Alternative would be less than what is anticipated for the proposed project. The TDM mitigation measure required for the propoed project, however, would be required for this Alternative.

4.14-7 Impacts to Emergency Vehicle Access

The project was determined to have less-than-significant impacts related to emergency vehicle access. Impacts from the Reduced Project Alternative would be similar as adequate emergency access would also be provided for this alternative. As such, the Reduced Project Alternative would have a less-than-significant impact related to emergency vehicle access.

4.14-8 Impacts associated with Construction Vehicle Traffic

The project was determined to have a significant impact. Similar to the proposed project, the Reduced Project Alternative would generate construction traffic that could disrupt traffic on the adjacent transportation network. To the extent that the level of construction traffic correlates with the overall extent of site work and the length of construction, it is anticipated that the Reduced Project Alternative would generate less congestion on surrounding roadways during the construction period, as compared to the proposed project. Mitigation Measure 4.14-7, however, would still be applicable for the Reduced Project Alternative. In conclusion, the Reduced Project Alternative would result in less construction traffic impacts compared to the proposed project.

4.14-19 Impacts to Pedestrian and Bicycle Facilities

The project was determined to have a significant impact, requiring mitigation such as construction of a grade-separated bicycle/pedestrian crossing at Mace Boulevard, and a multi-use path connection on the west side of Mace Boulevard, just north of Alhambra Drive, the timing of which shall be identified by a study funded by the applicant. While the Reduced Project Alternative would result in a decreased demand for pedestrian and bicycle facilities, as compared to the proposed project, the alternative would still be expected to increase demand for bicycle

and pedestrian facilities. For example, the Transportation section of this EIR notes that approximately 22 percent of MRIC employees, who live in Davis households, are projected to commute by bicycle. Applying this rate to the Reduced Project Alternative, it can be expected that approximately 151 employees[15] would bike to work under this alternative scenario.

The EIR also determined that the proposed project would result in significant impacts with respect to bicycle safety along CR 32A. Even though the Reduced Project Alternative would not contribute as many additional trips to CR 32A, as would the proposed project, the potential exists for this Alternative to contribute to bicycle/vehicular/rail conflicts, which would warrant a fair share contribution towards needed improvements along CR 32A.

Therefore, while the demand for bicycle and pedestrian facilities would be less under this Alternative as compared to the proposed project, Mitigation Measure 4.14-9 of the EIR would still be expected to be required, though possibly in modified form.

4.14-10 Impacts to Transit Services

The project was determined to have a significant impact, requiring mitigation, which includes installation of bus stops with turnouts on both sides of Mace Boulevard. Impacts to transit services from the Reduced Project Alternative would be less than the project due to reduced ridership. However, this Alternative would still increase demand for transit services; and it is anticipated that Mitigation Measure 4.14-10 of the EIR would still be required for the Reduced Project Alternative. In conclusion, the Reduced Project Alternative would result in less impacts to transit services compared to the proposed project.

4.14-11 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to transportation/traffic.

General Plan consistency as related to the City's adopted circulation exhibit and applicable transportation and circulation policies would be similar under this alternative as compared to the proposed project.

<u>Utilities</u>

The impacts related to utilities as a result of buildout of the site per the Reduced Project Alternative in comparison to that of the proposed project are presented below.

4.15-1 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

This impact was found to be less-than-significant for the proposed project. The same finding would apply to this alternative.

[15] 775 total employee households × 1.62 employees per household × 54.6 percent living in City of Davis.

4.15-2 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Buildout of the Reduced Project Alternative would involve less square footage at buildout than the proposed project, and would reduce the number of employees at the site. Due to the reduction in the number of employees associated with the site, demands for domestic water supply and delivery would be less under the Reduced Project Alternative, as compared to the proposed project. The EIR determined that sufficient water supply exists to serve the proposed project. Therefore, impacts related to sufficient water supplies available to serve the project would be less under the Reduced Project Alternative, as compared to the project.

4.15-3 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Because the Reduced Project Alternative would involve less building square footage and fewer employees than the proposed project, the amount of wastewater generation associated with the Reduced Project Alternative would be less than the proposed project. Therefore, impacts related to whether the wastewater treatment provider which serves or may serve the project has adequate capacity to serve the project's projected demand, would be less under the Reduced Project Alternative, as compared to the proposed project.

4.15-4 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Because the Reduced Project Alternative would involve less building square footage and fewer employees than the proposed project, the amount of solid waste generation associated with the Reduced Project Alternative would be less than the proposed project. Therefore, impacts related to whether the project could be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs would be less under the Reduced Project Alternative, as compared to the project.

4.15-5 Gas and electric facilities.

Buildout of the Reduced Project Alternative would involve less intensive buildout than the proposed project over a smaller footprint, and would reduce the number of employees at the site. Due to the reduction in the number of employees and the less intensive buildout, demands for gas and electric services and facilities would be less under the Reduced Project Alternative as compared to the proposed project. Therefore, impacts related to gas and electric facilities would be less under the Reduced Project Alternative, as compared to the project.

4.15-6 Adequate telecommunication facilities.

Buildout of the Reduced Project Alternative would involve less intensive buildout than the proposed project over a smaller footprint, and would reduce the number of employees at the site. Due to the reduction in the number of employees, and the less on-site high-tech/R&D uses

potentially requiring high speed internet, demands for telecommunication facilities would be less under the Reduced Project Alternative than the proposed project. Therefore, impacts related to adequate telecommunication facilities would be less under the Reduced Project Alternative, as compared to the project.

4.15-7 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to utilities.

General Plan consistency as related to utilities policies would be similar under this alternative as compared to the proposed project.

Cumulative Impacts

For conservative analysis purposes, this cumulative impact comparison is based upon the CEQA Cumulative Scenario.

The Reduced Project Alternative's incremental contributions to cumulative impacts, in comparison to the proposed project's incremental contributions to cumulative impacts, are presented below.

5-1 Cumulative impacts related to long-term changes in visual character of the region associated with development of the proposed project in combination with future buildout in the City of Davis.

Impacts to aesthetics and visual resources resulting from the Reduced Project Alternative would combine with related impacts resulting from development of the Davis IC Project, the Nishi Gateway Project, and buildout of the Davis General Plan. The combined effects of this cumulative development scenario would lead to a significant cumulative impact on aesthetics and visual resources. However, because development of the Reduced Project Alternative would result in urban development of approximately 49.5 acres of agricultural land, as compared to 212 acres of urban development for the proposed project, this Alternative's incremental contribution would be less than the incremental contribution of the proposed project. The cumulatively considerable and significant and unavoidable impact identified for the proposed project would remain under Reduced Project Alternative.

5-2 Cumulative impacts related to the creation of new sources of light or glare associated with development of the proposed project in combination with future buildout in the City of Davis.

The Reduced Project Alternative would involve less square footage at buildout than the proposed project, and development would occur over a smaller footprint. The new sources of light and glare resulting from Reduced Project Alternative would be less than the proposed project due to the fact that this Alternative would development 540,000 sf of non-commercial uses, whereas the proposed project would develop 2,654,000 sf of non-commercial uses. Similar to the proposed project, the Reduced Project Alternative would be required to comply with the City's Outdoor

Lighting Control policies, the goals and policies of the General Plan, and the project Design Guidelines. Compliance with the Design Guidelines, as well as the City's Municipal Code limitations related to glare, would help to reduce the amount of reflective surfaces and materials that could contribute to glare. The Reduced Project Alternative's incremental contribution to cumulative light and glare impacts would be less than the proposed project's incremental contribution.

5-3 Impacts related to cumulative loss of agricultural land

Due to the farmland designations and current agricultural land uses on the Reduced Project Alternative site, the Alternative would have adverse impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Development of other cumulative projects, such as the Davis IC and Nishi Gateway projects, the sites of which are primarily active agricultural sites, would result in related impacts associated with conversion of farmland. Similar to the proposed project, Reduced Project Alternative, in combination with other cumulative development, would be required to set aside agricultural mitigation acreage at a 2:1 ratio (two acres of agricultural land for every acre impacted) per City of Davis Municipal Code requirements, which would help to minimize the effects of agricultural land conversion. Due to the fact that this Alternative would result in the conversion of approximately 49.5 acres of agricultural land, as compared to 212 acres for the proposed project, this Alternative's incremental contribution toward this cumulative impact would be less than the proposed project's incremental contribution.

5-4 A cumulatively considerable net increase of any criteria pollutant.

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Air pollution is largely a cumulative impact. Consequently, the YSAQMD's approach to cumulative thresholds of significance is relevant to whether a project's individual emissions would result in a cumulatively considerable contribution to the SVAB's existing cumulative impacts related to air quality conditions. If a project's emissions would be less than YSAQMD thresholds, the project would not be expected to result in a cumulatively considerable contribution to a significant cumulative impact. As discussed above, the project's operational emissions would not exceed YSAQMD's thresholds of significance for criteria pollutants. Therefore, this Alternative's incremental contribution towards cumulative air quality impacts would not be cumulatively considerable and significant and unavoidable, as is the case for the proposed project.

5-5 Cumulative habitat loss in the City of Davis Area for special-status species.

The habitat loss resulting from Reduced Project Alternative would combine with related impacts resulting from development of the Davis IC Project, the Nishi Gateway Project, and buildout of the Davis General Plan. The combined effects of the cumulative development scenario would lead to a significant cumulative impact on habitat loss within the cumulative geographic setting. Although the Reduced Project Alternative, in combination with other cumulative development, would be required to implement mitigation measures to minimize the effects of habitat loss, the

cumulative impact, as well as Reduced Project Alternative's incremental contribution, would be less than the proposed project. However, the significant and unavoidable impact identified for the proposed project would remain under Reduced Project Alternative.

5-6 Cumulative impacts to movement corridors in the City of Davis area.

The impacts associated with movement corridors resulting from Reduced Project Alternative would combine with related impacts resulting from development of the Davis IC Project, the Nishi Gateway Project, and buildout of the Davis General Plan. The Reduced Project Alternative's effects to movement corridors, in combination with related effects of other cumulative development, would be less than the proposed project due to the fact that this Alternative would disturb 77 percent less area than the proposed project.

5-7 Cumulative loss of cultural resources.

While some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site are generally not made worse by impacts from another project to a cultural resource at another site. Rather the resources and the effects upon them are generally independent. Similar to the proposed project, site-specific impacts to cultural resources would be avoided during construction of this Alternative, via implementation of standard mitigation measures.

5-8 Cumulative increase in the potential for geological related impacts and hazards.

Potentially adverse environmental effects associated with geologic or soils constraints, topographic alteration, and erosion, are usually site-specific and generally would not combine with similar effects that could occur with other projects in Davis. Furthermore, all projects in the cumulative scenario would be required to comply with the California Building Code, the City of Davis's General Plan, and other applicable regulations. Consequently, the Reduced Project Alternative, similar to the proposed project, would generally not be affected by, nor would it affect, other development approved by the City of Davis. Therefore, impacts related to a cumulative increase in the potential for geological related impacts and hazards would be less than cumulatively considerable, similar to the proposed project, under the Reduced Project Alternative.

5-9 Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.

GHG is a cumulative impact. Therefore, similar to the conclusion for impacts 4.7-1 and 4.7-2, this Alternative's incremental contribution to GHG emissions would be less than the proposed project's incremental contribution, though both scenarios would result in significant and unavoidable impacts. Implementation of Mitigation Measure 4.7-2 sets GHG reduction targets and accountability for the proposed project, but it would not guarantee reductions that show that the development would be able to achieve the City's carbon neutral target by 2050. This mitigation measure would also be applicable to the Reduced Project Alternative. Therefore, this

impact would be significant and unavoidable for both the proposed project and the Reduced Project Alternative.

5-10 Cumulative impacts related to energy.

Similar to the proposed project, buildout of the Reduced Project Alternative in conjunction with buildout of the General Plan, Davis IC, and Nishi Gateway would result in a substantial increase in demand on energy resources from existing levels that would represent a large commitment of non-renewable resources. As noted in impacts 4.7-3 and 4.7-4 above, the Reduced Project Alternative would result in less impacts related to energy consumption, as compared to the proposed project. Although cumulative buildout would cause an irreversible consumption of energy, because each project, similar to the proposed project and the Reduced Project Alternative, would be required to comply with all applicable regulations for reducing energy demand, cumulative development would not be expected to result in an inefficient, wasteful, and unnecessary consumption of energy. Overall, this Alternative's incremental contribution towards cumulative impacts on energy would be less than the proposed project's contribution.

5-11 Increase in the number of people who could be exposed to potential hazards or hazardous materials and an increase in the transport, storage, and use of hazardous materials due to development of the proposed project in combination with future buildout in the City of Davis.

Project-specific impacts related to hazards and hazardous materials under the Reduced Project Alternative would be similar to the proposed project, which were found to be less-than-significant with implementation of mitigation measures. In addition, Reduced Project Alternative and surrounding development would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community, including potential effects, if any, on the project site. Compliance with all applicable regulations would ensure that development of the Reduced Project Alternative in conjunction with the Davis IC, Nishi Gateway, and buildout of the City's General Plan would not result in any substantial increases in the potential for people to be exposed to hazards or hazardous materials due to an increase in the transport, storage, and use of hazardous materials. Therefore, the Reduced Project Alternative would result in similar impacts as the proposed project related to such.

5-12 Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area.

The Reduced Project Alternative would involve less building square footage and fewer employees than the proposed project. Accordingly, the overall amount of new impervious surfaces would be less than that of the proposed project under the Reduced Project Alternative, which would result in a lesser potential to alter the drainage pattern of the site or area, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage system.

The combined effects of the Reduced Project Alternative and other cumulative development, however, would contribute to potential regional flooding issues. Similar to the proposed project, it is anticipated that this project will need to detain its incremental runoff on-site, or at an off-site location, such that low-level ponding does not increase downstream, when the Yolo Bypass culvert flapgate is blocked due to high flows in the Bypass. Due to the reduced impervious surface area, and concomitant reduction in runoff volume, the incremental contribution to cumulative runoff volume impacts of the Reduced Site Size Alternative would be less than the proposed project.

5-13 Cumulative impacts to water quality within the City of Davis.

Continued development within the City of Davis, including the Reduced Project Alternative, would result in additional stormwater runoff and entry of pollutants into receiving waters via construction and operation of future projects. However, the Reduced Site Size Alternative would result in fewer impervious surfaces than the proposed project, which could in turn lead to a reduced amount of urban pollutants entering the receiving storm drainage system during storm events. Development at the Alternative site would be required to comply with the City's regulatory stormwater documents, standards, and requirements. Similar to the proposed project, Reduced Site Size Alternative would integrate Low Impact Development measures throughout the project to provide stormwater quality treatment. Overall, the incremental contribution to cumulative water quality effects resulting from the Alternative would be less than the proposed project's incremental contribution.

5-14 Cumulative land use incompatibilities.

Land use conflicts are site-specific and would not result in a cumulative impact. Incompatibility issues are addressed and mitigated on a project-by-project basis. The proposed project has been designed to be consistent with applicable aspects of the City's General Plan, and as described in this EIR, the project would not result in incompatibilities with any of the surrounding land uses. The same conclusion would apply to the Reduced Project Alternative.

5-15 Cumulative urban decay.

The Reduced Project Alternative's incremental contribution to cumulative urban decay impacts would be less than the proposed project's incremental contribution due to the fact that this Alternative includes 40,000 square feet of ancillary retail, whereas, the proposed project includes 260,000 of support retail, consisting of 100,000 sf of ancillary retail and 160,000 sf for a proposed hotel.

5-16 Cumulative impacts on noise-sensitive receptors.

The Reduced Project Alternative's incremental contribution to cumulative traffic noise levels along surrounding roadways, and correlated effects to nearby receptors, would be less than the proposed project's incremental contribution due to the fact that this Alternative would contribute 2,230 additional daily trips to the network, while the proposed project would contribute 15,550 additional vehicle trips to the network.

5-17 Cumulative traffic noise effects on proposed uses.

The EIR determined that future cumulative traffic and UPRR noise levels would not have impacts on the proposed hotel use and outdoor use areas proposed for the project. These cumulative findings would also apply to the Reduced Project Alternative given that sensitive on-site outdoor use areas would not be sited any closer to these noise sources. Therefore, cumulative transportation noise impacts to new sensitive receptors in the project vicinity would be less under the Reduced Project Alternative, as compared to the project.

5-18 Cumulative population and housing impacts.

According to SACOG, the Davis IC, MRIC, Mace Triangle, and the Nishi Gateway Project would not exceed SACOG's regional employment projections. Therefore, the employee household demand from the Davis IC, MRIC, Mace Triangle, and the Nishi Gateway Project is already accounted for in the MTP/SCS projections. However, on a local level, the City of Davis would not be able to fully meet the proposed project's estimated employee-generated demand for housing within the City. Due to its reduced size, however, the estimated employee-generated demand for housing within the City of Davis could be met for the Reduced Project Alternative. In this way, this Alternative's incremental contribution to cumulative population and housing impacts (related to job growth) would be less than cumulatively considerable.

5-19 Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.

Similar to the proposed project, the Reduced Project Alternative could exacerbate the existing response time deficiency experienced in certain areas of the City of Davis by precluding Station 33 from being able to provide back-up to already impacted areas. The Reduced Project Alternative in combination with past, present, and probable future projects, would, however, result in a smaller incremental contribution toward this cumulative impact to fire protection services, due to its reduced square footage and employee count. Therefore, this Alternative's contribution to this cumulative impact would be less than that of the project's, but still significant and unavoidable.

5-20 Cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis.

Similar to the proposed project, Reduced Project Alternative, as well as each future development project including buildout of the City's General Plan, Davis IC, the Mace Triangle, and the Nishi Gateway Property, would be required by the City of Davis to pay adopted development impact fees, which include fees for such services as public safety, general facilities, roadways, parks, and open space. Each project's payment of adopted City impact fees for public services and recreation would ensure that the combined, related effects of cumulative development on public services and recreation would not be significant. The Reduced Project Alternative would result in a smaller incremental contribution towards cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of

Davis as the proposed project, which were identified as being less than cumulatively considerable.

5-21 Cumulative Impacts to Intersections Within the Freeway Interchange Area

The incremental contribution of the project was determined to have significant impacts at five intersections. Impacts from the Reduced Project Alternative would be less than the project. Fehr & Peers has indicated that it is likely that the incremental contribution of the Reduced Project Alternative would be cumulatively considerable and significant, at four of the five intersections (Mace Boulevard/Chiles Road, Mace Boulevard/I-80 WB Ramps, Mace Boulevard/2nd Street/CR 32A, and I-80 EB Off-ramp/Chiles Road), based on an interpolation of intersection delays between the Cumulative No Project and Cumulative Plus Project scenarios. The fifth intersection, which would not be expected to be significantly impacted under this alternative, is Mace Boulevard/I-80 EB Ramps. Mitigation Measure 5-21, as it applies to the above four intersections, should be applicable for the Reduced Project Alternative. Therefore, although this impact would remain significant and unavoidable for this Alternative, one intersection impact identified for the proposed project would be eliminated. Thus, the Reduced Project Alternative would have less impacts to intersections within freeway interchange areas as compared to the project.

5-22 Cumulative Impacts to Roadway Segments

The project was determined to have a significant and unavoidable incremental contribution to cumulative impacts to five roadway segments:

1. Covell Boulevard East of Denali Drive (LOS F, PM peak hour)
2. John Jones Road North of Covell Boulevard (LOS F, AM and PM peak hours)
3. Old Davis Road north of I-80 (LOS E, PM peak hour)
4. Pole Line Road south of 5th Street (LOS F, PM peak hour)
5. Richards Boulevard east of Research Park Drive (LOS F, AM and PM peak hours)

Impacts from the Reduced Project Alternative would be less than the project. Fehr & Peers has stated that it is likely that the incremental contribution of the Reduced Project Alternative would be considered less than cumulatively considerable for any of the five roadway segments based on an interpolation of roadway volumes between the Cumulative No Project and Cumulative Plus Project scenarios. This would need to be confirmed through an equal-level traffic analysis of the Reduced Project Alternative. In conclusion, it is expected that this alternative would have less impacts to neighborhood streets as compared to the project.

5-23 Cumulative Impacts to Local Area Freeway Segments

The project was determined to have a significant and unavoidable incremental contribution to cumulative impacts to five freeway segments:

1. I-80 Eastbound, PM peak hour, Mace to Chiles
2. I-80 Eastbound, PM peak hour, Chiles to Enterprise

3. I-80 Westbound, AM peak hour, Enterprise to Chiles
4. I-80 Westbound, AM peak hour, Chiles to Mace
5. I-80 Westbound, AM peak hour, Mace to Olive

Impacts from the Reduced Project Alternative would be less than the project. According to Fehr & Peers, there is a potential that the Reduced Project Alternative would result in a significant impact to all five freeway segments, though this alternative would not contribute as many vehicle trips to these roadway segments, as compared to the proposed project. Mitigation Measure 5-23 should be applicable for the Reduced Project Alternative. In conclusion, this Alternative would result in less impacts as compared to the project, though the cumulative impact would be expected to remain significant and unavoidable.

5-24 Cumulative Impacts to Regional Transportation Facilities

The proposed project was determined to have a less-than-significant impact to regional facilities. Impacts from the Reduced Project Alternative would be less than the project, due to a substantial reduction in the number of vehicle trips as compared to the proposed project.

5-25 Cumulative water system impacts.

As discussed in the Utilities section of this EIR, sufficient water supplies are available to serve the proposed project and other proposed projects, as well as the buildout demands of the City's current service area, over the next 20 years during normal-year, single-dry year, and multiple-dry year scenarios. The Reduced Project Alternative would involve less building square footage and fewer employees than the proposed project; therefore, the Alternative would result in a reduced demand for water supply and delivery. As such, sufficient water supplies would be available to serve Reduced Project Alternative. As also discussed in the Utilities section of this EIR, the City's existing water delivery infrastructure system would be able to accommodate the domestic and fire flow demands associated with the proposed project and cumulative development, including General Plan buildout and the Davis IC and Nishi Gateway projects. Therefore, cumulative water system impacts would be less than the proposed project under Reduced Project Alternative, and would be less than cumulatively considerable.

5-26 Cumulative wastewater treatment and collection system impacts.

Based on flow considerations alone, the WWTP would have the capacity to accommodate flows from all future General Plan buildout development, plus the flows from the proposed, Davis IC, and Nishi Gateway projects. However, based on BOD loading considerations, adequate WWTP capacity does not appear to exist to fully accommodate the proposed cumulative projects not anticipated in the General Plan. The Reduced Project Alternative would involve less building square footage and fewer employees than the proposed project; therefore, the Alternative would result in a reduced demand for wastewater treatment and collection system services. The same mitigation measures as identified for the proposed project would be required for Reduced Project Alternative in order to ensure the Alternative's wastewater effects, in combination with related effects from cumulative development, would be reduced to less than cumulatively considerable.

Overall, this Alternative's incremental wastewater treatment and collection system impacts would be less than the proposed project.

5-27 The project may contribute to cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications.

The Reduced Project Alternative would involve less building square footage and fewer employees than the proposed project; therefore, the Alternative would result in a reduced demand for utilities, including solid waste, natural gas, electricity, and telecommunications. This Alternative's incremental impacts related to such would be less than the proposed project, which were identified in the EIR as less than cumulatively considerable.

Off-Site Alternative A (Davis Innovation Center Site)

The Off-Site Alternative A is defined as continuation of existing agriculture and related uses over the entire 229-acre project site and development of the MRIC component only at an alternate site near the Sutter Davis Hospital. The Mace Triangle component of the project would not be built under this alternative. Buildout per Off-Site Alternative A (Davis Innovation Center site) would assume development of the same proposed MRIC at an alternative site, which in this case is the 207.75-acre Davis Innovation Center (Davis IC) site, located immediately west of the City of Davis city limits in Yolo County, approximately 2.5 miles west of downtown Davis. Regional access to the Davis IC site is provided by the State Route 113/Covell Boulevard interchange, located southeast of the Davis IC site. The Davis IC Site is identified by Assessor's Parcel Numbers (APNs) 036-060-005, and 036-020-012 thru -018. The Davis IC site, similar to the proposed project site, is currently used for agricultural purposes and is located near other existing development (to the east and south) and other agricultural uses (to the west and north).

Off-Site Alternative A (Davis IC site) would result in greater impact as compared to the project, particularly in the areas of biological resources, flooding and hydrology, and noise. This alternative would meet many of the objectives of the proposed project. However, the property is not controlled by, nor available to the applicant, and would not meet their objective related to proximity to I-80 and logical extension of the 2nd Street corridor, where existing technology businesses are located. This Alternative also would not provide an opportunity for the Mace Triangle agricultural retail business to expand as that property would remain in the County.

<u>Aesthetics and Visual Resources</u>

The impacts related to aesthetics and visual resources as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.1-1 Substantial adverse effect on a scenic vista.

There are no officially designated scenic highways, corridors, vistas, or viewing areas in the City's planning area and there are no established scenic vistas located on or adjacent to the site. This impact was found to be less-than-significant for the proposed project. This finding would also apply to this Alternative.

4.1-2 Substantially degrade the existing visual character or quality of the project site and its surroundings.

Both the proposed project and Off-site Alternative A are located on agricultural sites. Development of this Alternative and the proposed project would result in a substantial degradation of the existing visual character of their respective sites. The buildings constructed for Off-Site Alternative A would be similar in height and density to those of the proposed project. In addition, both the Alternative site and the proposed project site provide open views for residents, motorists, and bicyclists; and the visual changes at the sites would be substantial for these viewer types. As such, Off-Site Alternative A's potential to degrade the existing visual character or quality of the site or the site's surroundings would be similar to the proposed project. The significant and unavoidable impact identified for the proposed project would remain for Off-Site Alternative A.

4.1-3 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Creation of new sources of light and glare per the Off-Site Alternative A would occur similar to the proposed project. The intensity of light associated with the developed Off-Site Alternative would be similar to the proposed project. The Off-Site Alternative A would be required to comply with the City's Municipal Code and site-specific Design Guidelines; thus, the Alternative would not be expected to generate light or glare that would adversely affect day or nighttime views in the area. Overall, Off-Site Alternative A would result in similar impacts related to light and glare as the proposed project.

4.1-4 Conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and visual resources.

Because the Off-Site Alternative A would involve buildout of the same project, on a different site, General Plan consistency as related to aesthetic policies would be similar to the determinations made for the project. This impact was found to be less-than-significant.

Agriculture and Forest Resources

The impacts related to agriculture and forest resources as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

The California Department of Conservation has defined the Davis IC site as Farmland of Local Importance (approximately 200 acres or 96.6 percent of the project site), Farmland of Local

Potential (approximately five acres or 2.4 percent of the project site), and Urban Land (approximately 2 acres or 1.0 percent of the project site). Therefore, Off-Site Alternative A would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. In contrast, the proposed project would convert Prime Farmland and Farmland of Statewide Importance. Therefore, impacts related to such would be less than the proposed project.

4.2-2 Impacts related to conflicting with existing zoning for agricultural use.

The Off-Site Alternative A site, similar to the proposed project site, is currently in agricultural use and is zoned for agricultural use. Similar to the proposed project, the Alternative would require prezoning to the City of Davis' P-D zone, which would be consistent with the proposed new Davis General Plan land use designation of Innovation Technology Center for the project site. Therefore, impacts related to conflicting with existing zoning for agricultural use would be less-than-significant for the Off-Site Alternative A (Davis IC Site), similar to the proposed project.

4.2-3 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use.

The Off-Site Alternative A site is comprised of Local Farmland and Potential Local Farmland, and the site is currently used for agricultural uses. Under City regulations, conversion of the Davis IC site would be considered a significant and unavoidable impact and would require off-site agricultural land mitigation at a ratio of two acres to one acre. The impact for Off-Site Alternative A would be similar to the proposed project; however, Off-Site Alternative A is slightly smaller (207 acres under Off-Site Alternative A and 212 acres under the proposed project). Thus, the impacts associated with agriculture and forest resources under Off-Site Alternative A would be less than the proposed project. Because active agricultural land would still be permanently converted to urban uses, a significant and unavoidable impact would remain under Off-Site Alternative A.

4.2-4 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Off-Site Alternative A site is currently used for agricultural purposes, and existing agricultural uses occur to the north and west of the site. The existing agricultural uses in the vicinity could continue to be farmed after implementation of Off-Site Alternative A, which could have effects on the Alternative site. Similar to the proposed project, the Alternative would incorporate agricultural buffers along the perimeter of the site. In addition, the Alternative would, similar to the proposed project, be required to comply with existing law, including provision of a deed restriction per the City's Municipal Code. Therefore, Off-Site Alternative A would result in similar impacts as the proposed project related to other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. The significant and unavoidable impact identified for the proposed project would remain under Off-Site Alternative A.

4.2-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.

Both the project and this Alternative would result in conversion of agricultural land on the periphery of the current city limits. However the Off-Site alternative is already within the City's sphere of influence, indicating an assumption under state law that future development in the area is anticipated. Moreover the quality of farmland on the Off-Site alternative is lower, as compared to the proposed project site, which has approximately 159 acres of Prime Farmland. Therefore, impacts related to consistency with General Plan policies related to agricultural land would be less with this Alternative, as compared to the project.

Air Quality

The impacts related to air quality as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.3-1 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.

Off-Site Alternative A would consist of buildout of the same intensity as the proposed project, but on a different site. Due to the similar area of disturbance necessary for construction of Off-Site Alternative A, in comparison to the proposed project, the associated air pollutant emissions would be similar to what is expected for the proposed project. Therefore, impacts related to a violation of air quality standards or a substantial contribution to an existing or projected air quality violation during construction would be similar to the proposed project, which was found to be less than significant.

4.3-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during operations, and a conflict with or obstruction of implementation of applicable air quality plans.

Because Off-Site Alternative A includes the same buildout intensity and land uses as the proposed project, the operational criteria air pollutant emissions would be similar to those estimated for the proposed project. As a result, Off-Site Alternative A would result in similar impacts as the proposed project associated with a violation of air quality standards or substantial contribution to an existing or projected air quality violation during operations, and a conflict or obstruction of implementation of applicable air quality plans. As such, the significant and unavoidable impact related to air quality identified for the proposed project would also occur with the Off-Site Alternative A.

4.3-3 Expose sensitive receptors to substantial pollutant concentrations.

Because Off-Site Alternative A would involve the same buildout square footage and land uses as the proposed project, the same number of associated vehicle trips and approximate VMT would occur. As such, similar traffic conditions would be expected on area roadways. Thus, the

potential for sensitive receptors to be exposed to localized CO concentrations per the Off-Site Alternative A would be similar to that of the proposed project. Similarly, nearby sensitive receptors to the north, south, and east may be exposed to higher concentrations of TACs associated with construction activities and traffic operations due to the same buildout intensity over a concentrated area. Overall, this Alternative's impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be similar to the proposed project, for which the finding was less than significant.

4.3-4 Create objectionable odors affecting a substantial number of people.

As Off-Site Alternative A would involve the same buildout intensity and land uses as the proposed project, impacts associated with objectionable odors would be the same under Off-Site Alternative A as the proposed project. This impact was found to be less-than-significant for the proposed project. The same finding would apply to this Alternative.

4.3-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to air quality.

General Plan consistency as related to air quality policies would be similar between the proposed project and this Off-Site Alternative.

Biological Resources

The impacts related to biological resources as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.4-1 Impacts to Special-status plant species.

The Off-Site Alternative A site contains potentially suitable habitat for special-status plant species, including heartscale, brittlescale, San Joaquin spearscale, palmate-bracted bird's-beak, and saline clover. The proposed project site contains marginal habitat for special-status plant species, including ferris' milk vetch, alkali milk vetch, heartscale, brittlescale, San Joaquin spearscale, bristly sedge, Parry's rough tarplant, hogwallow starfish, wooly rose-mallow, Heckard's pepper-grass, Suisun Marsh aster, and saline clover. As a result, preconstruction surveys would be required for both the proposed project and Off-Site Alternative A; and if special-status plants are found on-site, propagation measures would need to be implemented. It should also be noted that Parry's rough tarplant was found on the Triangle site. Because the Triangle site is only a component of the proposed project, for annexation purposes, potential impacts to special-status plants on the Triangle would not be applicable under this Off-Site Alternative.

4.4-2 Impacts to Valley elderberry longhorn beetle.

An elderberry shrub clump consisting of approximately 10 shrubs was observed on the western boundary of the Davis IC site in 2014. Due to the presence of the shrubs on the site, similar

mitigation measures identified for the proposed project would be required for the Off-Site Alternative A in order to protect such species and ensure impacts are less than significant. The exception to this, however, would be if the northerly off-site sewer pipe alignment was not selected for the proposed project. In such an event, the proposed project may only impact one elderberry shrub along the proposed project's western boundary. Therefore, impacts associated with valley elderberry longhorn beetle would be the same, or potentially less, under the Off-Site Alternative A, as compared to the proposed project.

4.4-3 Impacts to Giant garter snake.

Similar to the proposed project, giant garter snake could be impacted by Off-Site Alternative A as a result of proposed improvements to existing drainages (i.e., Covell Drain for this Alternative and MDC for the proposed project). As such, similar mitigation measures identified for the proposed project would be required for the Off-Site Alternative A in order to protect GGS and ensure any potential impacts are reduced to less than significant. Therefore, impacts related to giant garter snake would be similar to the proposed project under Off-Site Alternative A (Davis IC Site).

4.4-4 Impacts to Burrowing owl.

The same potential exists for burrowing owl to be located at Off-Site Alternative A, as compared to the proposed project site. As such, similar mitigation measures identified for the proposed project would be required for the Off-Site Alternative A in order to protect burrowing owl and ensure impacts are less than significant. Because Off-Site Alternative A would disturb a similar amount of land as the proposed project, Off-Site Alternative A would be equally as likely to disturb any potential on-site burrowing owl, as compared to the proposed project. Therefore, this Alternative's impacts related to burrowing owl would be similar to the proposed project.

4.4-5 Impacts to Swainson's hawk.

Suitable nesting trees are located within the Off-Site Alternative A site. Thus, Off-Site Alternative A would have similar potential to cause direct effects on the species during tree removal, or if construction occurs within close proximity to trees where active Swainson's hawk nests are present. In addition, the Off-Site Alternative A site, similar to the proposed project site, provides suitable foraging habitat for Swainson's hawk. Because the Davis IC Site is slightly smaller than the proposed project site, the Off-Site Alternative A would result in slightly fewer impacts to Swainson's hawk foraging habitat. However, because a permanent loss of foraging habitat would still occur, the impact would remain significant and unavoidable.

4.4-6 Impacts to raptors, nesting birds, or other birds protected under the MBTA.

Both the Off-Site Alternative A site and the proposed project site could support nesting raptors and other migratory birds. Although the Off-Site Alternative A would disturb 4.25 fewer acres than the proposed project, the Davis IC site contains 250 trees, as compared to eight trees on the proposed project site. Therefore, it is reasonable to assume that an increased potential exists for raptors and other migratory birds to nest on the Off-Site Alternative A, as compared to the

proposed project site. Similar preconstruction mitigation measures would be required for both scenarios. Overall, this Alternative would be expected to have more potential impacts to nesting migratory birds than the proposed project.

4.4-7 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

The Covell Drain, located immediately south of the Davis IC Site, contains sensitive natural habitats. Improvements to the Covell Drain may be required for the Off-Site Alternative A. Therefore, Off-Site Alternative A would result in similar impacts, as compared to the proposed project, related to riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS would occur under the Off-Site Alternative A. Impacts to riparian habitat or other sensitive natural communities were determined to be less-than-significant with mitigation for the proposed project.

4.4-8 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

The only feature within the Off-Site Alternative A site that contains sensitive natural habitats are the six agricultural ditches, totaling 5,422 linear feet. In addition, the Covell Drain, located on the Davis IC Site, could be considered jurisdictional given its connectivity to other off-site drainage features, though its jurisdictional status is not known at this time. Impacts related to federally protected wetlands were determined to be less-than-significant for the proposed project. Without a jurisdictional wetland delineation, it is not possible to verify at this time if development of Off-Site Alternative A would impact federally protected wetlands. Therefore, the possibility exists for more impacts to wetlands to occur under this Alternative, as compared to the proposed project.

4.4-9 Interfere substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.

Because Off-Site Alternative A would have a similar development footprint, the potential to interfere with the movement of species would be similar to the proposed project. In addition, similar to the proposed project, Off-Site Alternative A would include agricultural buffers along the perimeter of the site and open space areas within the site, which could allow for wildlife movement. Furthermore, the adjacent agricultural uses would provide space for the movement of wildlife. Overall, Off-Site Alternative A would result in similar impacts to the proposed project related to interfering substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors. Impacts to movement corridors were determined to be less-than-significant for the proposed project.

4.4-10 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As noted previously, the City of Davis Municipal Code requires permits for the removal of some species and sizes of trees pursuant to Chapter 37 of Davis Municipal Code. The Off-Site Alternative A would be required to comply with the requirements of the City's Municipal Code. However, the Davis IC site contains 250 trees compared to eight trees on the proposed project site. Though the number of trees that would require removal to accommodate the Off-Site Alternative A is not known at this time, it is reasonable to assume that implementation of this Alternative would require removal of more trees than the proposed project scenario. Accordingly, more impacts related to a conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, could occur under the Off-Site Alternative A in comparison to the proposed project.

4.4-11 Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

The YNHP is anticipated to be adopted by May 2017. Off-Site Alternative A would be subject to the same mitigation/conservation requirements of the future YNHP, as would the proposed project. Therefore, impacts related to a conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan would be similar.

4.4-12 Conflict, or create an inconsistency, with any applicable biological resources plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

General Plan consistency as related to biological resources policies would generally be the same under this alternative as compared to the proposed project.

Cultural Resources

The impacts related to cultural resources as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.5-1 Cause a substantial adverse change in the significance of a historical resource.

The Off-Site Alternative A site contains remnants of an old dairy farm. This dairy farm was formerly evaluated and recorded, before being demolished. It is not anticipated the development of Off-Site Alternative A within this area would result in any impacts to heretofore unknown significant historical resources. With respect to the proposed project, a possibility exists for historic resources to be impacted if the northerly off-site sewer pipe alignment is selected; and construction within this alignment affects the Wright Farm site within the near vicinity. Though not conclusive, it is anticipated that this Alternative would potentially result in less impacts to historic resources.

4.5-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

The overall area of disturbance for development of Off-Site Alternative A would be similar to that of the proposed project. As a result, the potential for Off-Site Alternative A to disrupt or destroy previously unknown archaeological resources during ground disturbing activities would be similar to the proposed project, and similar impacts would occur. In addition, similar mitigation measures would be required under Off-Site Alternative A in order to ensure impacts are reduced to less than significant.

4.5-3 Directly or indirectly destroy a unique paleontological resource or unique geologic feature on the project site.

The overall area of disturbance for development of Off-Site Alternative A would be similar to that of the proposed project As a result, the potential for the Off-Site Alternative A to destroy previously unknown unique paleontological resources during ground disturbing activities would be similar to the proposed project, and impacts would be similar. Similar mitigation measures would still be required under Off-Site Alternative A in order to ensure impacts are reduced to less than significant.

4.5-4 Disturb any human remains, including those interred outside of formal cemeteries.

The overall area of disturbance for development of Off-Site Alternative A would be similar to that of the proposed project As a result, the potential for Off-Site Alternative A to disturb any previously unknown human remains during ground disturbing activities would be similar to the proposed project, and impacts would be similar. Similar mitigation measures would still be required under Off-Site Alternative A in order to ensure impacts are reduced to less than significant.

4.5-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to cultural resources.

General Plan consistency as related to cultural resources policies would be similar under this alternative as compared to the proposed project.

Geology, Soils, and Mineral Resources

The impacts related to geology, soils, and mineral resources as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.6-1 Risks to people and structures associated with seismic activity, including ground shaking and ground failure.

The Off-Site Alternative A area is not located within an Alquist-Priolo Earthquake Fault Zone, and surface evidence of faulting was not observed during site reconnaissance of the Davis IC

Site. In addition, development of Off-Site Alternative A would be required to adhere to the provisions of the 2013 California Building Code. Therefore, Off-Site Alternative A would result in similar impacts as the proposed project related to risks to people and structures associated with seismic activity, including ground shaking and ground failure. This impact was found to be less-than-significant with mitigation for both sites.

4.6-2 Result in substantial erosion or loss of topsoil.

The Off-Site Alternative A would involve buildout on a similar sized area as the proposed project. Accordingly, a similar potential for substantial erosion or loss of topsoil would be expected to occur on the Off-Site Alternative A site. Therefore, Off-Site Alternative A would result in similar impacts than the proposed project related to risks associated with substantial erosion or loss of topsoil. This impact was found to be less-than-significant with mitigation for both sites.

4.6-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse.

The Off-Site Alternative A would involve buildout on a similar sized area as the proposed project. Similar geological conditions would be expected to occur on the Off-Site Alternative A site. This impact was found to be less-than-significant with mitigation for both sites. Therefore, impacts would be similar.

4.6-4 Be located on expansive soil, as defined in Table 118-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Expansive soils occur on both the proposed project site and the Off-Site Alternative A site. This impact was found to be less-than-significant with mitigation for both sites.

4.6-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology and soils.

This impact was found to be less-than-significant for the proposed project. The same finding would apply to this Alternative.

<u>Greenhouse Gas Emissions and Energy</u>

The impacts related to GHG emissions and energy as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.7-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Because Off-Site Alternative A includes the same buildout intensity and land uses as the proposed project, the operational GHG emissions would be similar to those estimated for the proposed project. The impact related to generation of GHG emissions as a result of the proposed project, in comparison to existing conditions, was determined to be significant and unavoidable. As a result, Off-Site Alternative A would result in similar impacts as the proposed project associated with the generation of GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

4.7-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Off-Site Alternative A includes the same buildout square footage and land uses as the proposed project; thus vehicle trips and approximate daily VMT would be similar for both. As stated above, the operational GHG emissions associated with Off-Site Alternative A would be similar to those estimated for the proposed project. Implementation of Mitigation Measure 4.7-2 sets GHG reduction targets and accountability for the proposed project, but it would not guarantee reductions that show that the development would be able to achieve the City's carbon neutral target by 2050. This mitigation measure would also be applicable to Off-Site Alternative A. Therefore, this impact would be significant and unavoidable for both the proposed project and Off-Site Alternative A.

4.7-3 Impacts related to energy associated with construction.

Off-Site Alternative A would consist of the same buildout square footage and land uses as the proposed project. Due to the similar extent of development, and area of disturbance necessary for construction of the Off-Site Alternative A, in comparison to the proposed project, the associated energy consumption would be similar to what is expected for the proposed project. Therefore, this Alternative's impacts related to energy used during construction would be similar to the proposed project. Impacts related to energy associated with construction as a result of the proposed project were determined to be less than significant.

4.7-4 Impacts related to energy associated with operations.

Off-Site Alternative A includes the same buildout intensity and land uses as the proposed project. Thus, as stated above, the operational GHG emissions associated with Off-Site Alternative A would be similar to those estimated for the proposed project. Therefore, Off-Site Alternative A would result in similar demands and consumption of energy during operations. Impacts related to energy associated with operations would be similar to the proposed project under the Off-Site Alternative A. Impacts related to energy associated with operations as a result of the proposed project were determined to be less-than-significant with mitigation.

4.7-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to GHG emissions and energy conservation.

General Plan consistency as related to greenhouse gas emissions policies would be similar for the proposed project and this alternative due to similar VMT and energy demands.

Hazards and Hazardous Materials

The impacts related to hazards and hazardous materials as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.8-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Because Off-Site Alternative A includes the same buildout intensity and land uses as the proposed project, similar on-site operations would be expected. Any businesses that may involve the use and/or storage of hazardous materials would be required to store and use hazardous materials in accordance with state and local regulations, such as California Fire Code regulations. Impacts related to the routine transport, use, or disposal of hazardous materials as a result of the proposed project were determined to be less than significant. Accordingly, similar impacts related to the routine transport, use, or disposal of hazardous materials would occur under the Off-Site Alternative A as the proposed project

4.8-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with the existing on-site wells, canals, nearby uses, or soil contamination.

The possibility exists for abandoned septic tanks, fuel tanks, and/or wells to be at the Off-Site Alternative A site. Therefore, similar impacts related to a reasonably foreseeable upset or accident condition involving the release of hazardous materials into the environment associated with potential on-site tanks, well, or soil contamination would occur under the Off-Site Alternative A as the proposed project; and similar mitigation measures would be required to ensure impacts are reduced to less than significant.

4.8-3 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Similar to the proposed project, Off-Site Alternative A would not involve any operations or changes to the existing roadway network that would impair implementation or physically interfere with the County's Emergency Operations Plan or Multi-Hazard Mitigation Plan (MHMP). This impact was found to be less-than-significant for the proposed project. This same finding would apply to this Alternative.

4.8-4 Expose people or structure to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

According to Cal Fire maps for Yolo County, the City of Davis, including the Davis IC Site, is not within a State or local fire hazard severity zone. Because the Off-Site Alternative A involves the same buildout intensity and land uses as the proposed project, similar potential for wildland fires would occur, which is low. Therefore, Off-Site Alternative A would result in similar impacts as the proposed project related to exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.8-5 Conflict, or create an inconsistency, with applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to hazards and hazardous materials.

General Plan consistency as related to hazards and hazardous materials policies would be similar under this alternative as compared to the project.

Hydrology and Water Quality

The impacts related to hydrology and water quality as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.9-1 Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems.

The overall size of Off-Site Alternative A would be similar to that of the proposed project. Accordingly, the overall amount of new impervious surfaces would be similar to the proposed project under Off-Site Alternative A, which would result in a similar potential to alter the drainage pattern of the site or area, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage system. Impacts related to alterations to the existing drainage pattern as a result of the proposed project were determined to be less-than-significant with mitigation. Thus, the impacts related to such would be similar to the proposed project under Off-Site Alternative A.

4.9-2 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality through erosion during construction.

As construction activities would occur over a similar disturbance area, Off-Site Alternative A would result in a similar potential as the proposed project to violate water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff or otherwise degrade water quality during construction. Thus, impacts related to violating water quality standards or waste discharge requirements, providing substantial additional sources of

polluted runoff, or otherwise substantially degrading water quality through erosion during construction would be similar under Off-Site Alternative A compared to the proposed project. Impacts related to violating water quality standards during construction as a result of the proposed project were determined to be less-than-significant with mitigation.

4.9-3 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations.

Off-Site Alternative A includes the same buildout intensity and land uses as the proposed project, located on an alternative site. As such, the same potential for sources of polluted runoff would occur for Off-Site Alternative A, as compared to the proposed project. Thus, impacts related to violating water quality standards or waste discharge requirements, providing substantial additional sources of polluted runoff, or otherwise substantially degrading water quality through erosion during operation would be similar under the Off-Site Alternative A compared to the proposed project.

4.9-4 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).

Similar to the proposed project, a well permit would be required for the Off-Site Alternative A by the Yolo County Environmental Health Services Department for the installation, modification, or abandonment of water wells, as well as a groundwater analysis. As such, impacts related to groundwater supplies would be similar under Off-Site Alternative A to the proposed project. Because the amount of impervious surfaces would be similar to that of the proposed project under Off-Site Alternative A, the amount of land maintained for potential contribution towards groundwater recharge would be similar to that of the proposed project. Accordingly, impacts related to groundwater recharge would be similar under Off-Site Alternative A in comparison to the proposed project. This impact would be less-than-significant for both sites.

4.9-5 Place structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or flood hazard delineation map; or place within a 100-year floodplain structures which would impede or redirect flood flows; or expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

The proposed project was determined to lie outside of the 100-year FEMA floodplain. The majority of the Off-Site Alternative A site is currently located within FEMA Zone A, which is an area determined to flood during the one percent annual (i.e., 100-year) flood event. As such, greater impacts as compared to the proposed project related to flooding would occur, and mitigation measures would be required for the Off-Site Alternative A to ensure impacts are reduced to less than significant.

4.9-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality.

General Plan consistency as related to hydrology and water quality policies could be considered less under this alternative, as compared to the proposed project, due to the fact that the Off-Site alternative would have greater impacts related to construction in a floodplain.

Land Use and Urban Decay

The impacts related to land use and urban decay as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.10-1 Physical division of an established community.

Off-Site Alternative A site is located within Yolo County, just outside the western City limits of Davis. Off-Site Alternative A would result in development of agricultural land adjacent to urbanized areas of Davis to the east and south. As a result, similar to the proposed project, the Off-Site Alternative A would not result in the division of an established community and a less-than-significant impact would occur.

4.10-2 Economic and social change and/or effect that result in urban decay.

Because Off-Site Alternative A includes the same buildout square footage and land uses as the proposed project, the same potential for urban decay to occur would result from the Off-Site Alternative A and the proposed project. Therefore, this Alternative's impacts related to economic and social changes and/or effects that result in urban decay would be similar to the proposed project.

4.10-3 Conflict, or create an inconsistency, with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

General Plan consistency as related to land use designations on the City's adopted land use exhibit would be achieved with approval of the requested project approvals. General Plan consistency, as related to land use policies, would be similar under this Alternative, as compared to the proposed project.

Noise and Vibration

The impacts related to noise and vibration as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.11-1 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project.

Because Off-Site Alternative A would involve buildout of the same square footage and land uses as the proposed project, the overall area of disturbance for development of the Alternative would be similar to that of the proposed project. However, because the Off-Site Alternative A would be located closer to some of the nearby receptors identified for the Davis IC Project (e.g., the Binning Tract), the potential for such noise to affect nearby receptors would be greater than the proposed project. Overall, this Alternative's impacts related to a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project would be more than the proposed project. Impacts related to increased noise levels during construction as a result of the proposed project were determined to be less than significant.

4.11-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. As discussed above, construction of the Off-Site Alternative A would be located closer to some of the nearby receptors identified for the proposed project. Consequently, the potential for such to affect nearby receptors would be greater than the proposed project, though less than significant. Impacts related to increased groundborne vibration levels during construction as a result of the proposed project were determined to be less than significant.

4.11-3 Transportation noise impacts to existing sensitive receptors in the project vicinity.

As the same buildout and land uses would occur under Off-Site Alternative A, as compared to the proposed project, the project traffic consultant has indicated that the same number of associated vehicle trips and approximate VMT would occur. Consequently, similar traffic conditions would be expected on area roadways, which would result in similar traffic-related noise in the area, as compared to the proposed project. Thus, impacts under the Off-Site Alternative A would be similar to the proposed project associated with transportation noise at existing sensitive receptors.. The proposed project's traffic noise contribution would not result in impacts to existing receptors along roadways surrounding the MRIC site. Given that this Alternative is located at a different location, where residential receptors, are in some cases, located in closer proximity to heavily traveled roadways, as compared to the proposed project, the possibility exists that the Off-Site Alternative A could result in more traffic noise impacts to existing sensitive receptors.

4.11-4 Transportation noise impacts to new sensitive receptors in the project vicinity.

Off-Site Alternative A includes the same types of sensitive land uses as the proposed project, albeit they are limited in nature (hotel use, outdoor use areas). Although the project's sensitive uses would be located along different roadways under this Alternative, it is anticipated that site design (e.g., building orientation) and building construction (e.g., STC-rated windows) can be carried out in such a manner as to ensure that outdoor and indoor noise levels are at or below the

City's relevant standards. Thus, impacts under the Off-Site Alternative A would be similar to the proposed project associated with transportation noise at new sensitive receptors.

4.11-5 Operational noise.

As Off-Site Alternative A would involve similar development as the proposed project, at an alternative location, impacts related to operational noise would be expected to be similar as well. Impacts related to operational noise as a result of the proposed project were determined to be less than significant. It should be noted, however, that buildings for Off-Site Alternative A would likely be located closer to residential receptors than the buildings for the proposed project; thus, Off-Site Alternative A could result in greater operational noise exposure to existing receptors. Though increased in intensity, operational noise resulting from this Alternative would still be expected to be less-than-significant at the nearest sensitive receptors.

4.11-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise.

General Plan consistency as related to noise policies would be similar under this alternative as compared to the proposed project.

Population and Housing

The impacts related to population and housing as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.12-1 Induce substantial population growth.

According to the Sacramento Area Council of Governments (SACOG), the Davis IC, MRIC, Mace Triangle, and the Nishi Gateway Project would not exceed SACOG's regional employment projections. Therefore, the employee household demand from the Davis IC, MRIC, Mace Triangle, and the Nishi Gateway Project is already accounted for in the MTP/SCS projections.

With respect to growth-inducement on the local scale, as a result of the Alternative's increase in employment, the City of Davis likely cannot accommodate the expected demand for housing that would result from MRIC employees. The City determined that a total of 1,238 housing units could reasonably be expected to be available for MRIC employees. This available housing supply falls short of the project's anticipated need for 2,053 units within the City of Davis. This EIR recognizes that provision of additional housing units within Davis, above the potentially available supply of 1,238 units, would likely require annexation and development of additional land within Davis' SOI, which would require voter approval through Measure R. It is somewhat speculative to determine that the MRIC would lead to indirect residential growth within the City of Davis, above and beyond that which can be accommodated by the potentially available supply of 1,238 units. Rather, this EIR recognizes that the MRIC employee-generated demand for housing within Davis, above that which can be accommodated by 1,238 units, would need to be met within other jurisdictions. Similar to the proposed project, the City's anticipated inability to

meet the Alternative's fair share of employee-generated housing is considered a significant population growth impact.

4.12-2 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating environmental effects related to population and housing.

General Plan consistency as related to population and housing policies would be similar under this alternative as compared to the project.

Public Services and Recreation

The impacts related to public services and recreation as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.13-1 Result in substantial adverse physical impacts associated with the provisions of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection facilities.

Buildout of Off-Site Alternative A would result in the same square footage and employee-generating land uses as the proposed project, at an alternate site. As such, similar demands as the proposed project for public services and recreation, including fire protection services, would occur under Off-Site Alternative A. Similar to the proposed project site, an existing fire station is located in close proximity to the Off-Site Alternative A site. The closest station to the Off-Site Alternative A site would be Station 32, located at 1350 Arlington Boulevard, approximately 0.70-mile southwest of the site. Thus, similar impacts as the proposed project related to adequate fire protection services would occur for the Off-Site Alternative A. Impacts related to fire protection facilities as a result of the proposed project were determined to be less than significant.

4.13-2 Result in substantial adverse physical impacts associated with the provisions of new or physically altered police protection facilities, and/or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police protection facilities.

Buildout of the Off-Site Alternative A would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but in a different area. As such, similar demands as the proposed project for public services and recreation, including police protection services would occur under the Off-Site Alternative A. Thus, similar impacts as the proposed project related to adequate police protection services would occur under the Off-Site Alternative A. This impact was determined to be less-than significant with no mitigation triggered for either site.

4.13-3 Result in substantial adverse physical impacts associated with the provisions of new or physically altered school facilities, and/or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for school facilities.

Similar to the proposed project, while this Alternative would not introduce housing that could directly lead to greater demands on local schools, children of people who work in Davis may be eligible to attend Davis schools through an interdistrict school transfer. If a parent/guardian of a student is employed in Davis a minimum of 10 hours per week, they are eligible for the transfer based upon parent/guardian employment. Therefore, this Alternative, similar to the proposed project, would not generate additional students within the DJUSD unless the District approves interdistrict transfer students.

In addition, the Davis Joint Unified School District (DJUSD) collects $0.47 per square foot for commercial and industrial uses, which would include the Reduced Site Size Alternative's uses. Pursuant to State law (SB 50), payment of school impact fees is deemed to be full and satisfactory mitigation for development projects. Overall, similar impacts as the proposed project related to adequate school capacity would occur under Off-Site Alternative A Alternative.

4.13-4 Result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for park facilities.

Similar to the proposed project, Off-Site Alternative A, based upon its lack of housing, is not strictly subject to the City's parkland dedication requirements. However, the employees, who would be supported by the Alternative at buildout are expected to have impacts on local parks and recreation if sufficient facilities are not provided on-site. Off-Site Alternative A employees would be within the City for five or more days per week for at least 8 to 12 hours per day.

It is anticipated that, similar to the proposed project, approximately 65 acres of park/open space would be included within the innovation center should it be located at the Off-Site Alternative A location. This amount of park/open space would meet the requirement of 64 acres (see Section 4.13 of this EIR for methodology). Therefore, this Alternative would be expected to have similar impacts as the proposed project related to an increased demand for parks and recreation facilities.

4.13-5 Result in substantial adverse physical impacts associated with the provisions of new or physically altered other public facilities, and/or the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.

Buildout of Off-Site Alternative A would result in the same intensity and land uses as the proposed project, including the same square footage and employees, at an alternate site. The Off-

Site Alternative A would not involve a direct increase in population or housing in the project area. Consequently, similar demands as the proposed project for other public facilities, such as libraries or community centers, would occur under the Off-Site Alternative A. Thus, similar impacts as the proposed project related to increased demand for other public facilities would occur under the Off-Site Alternative A.

4.13-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public services and recreation.

General Plan consistency as related to public services and recreation policies would be similar under this alternative as compared to the proposed project

Transportation and Circulation

The impacts related to transportation and circulation as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.14-1 Impacts to Intersections Outside Freeway Interchange Areas.

Based upon preliminary traffic engineering conducted by Fehr & Peers, the possibility exists that development of the same project (2,654,000 sf) at the Off-Site Alternative A location could result in a significant intersection impact if the project includes a primary access along Covell Boulevard. Though at a different roadway facility, the proposed project was also determined to have one significant intersection impact to intersections outside freeway interchange areas (Covell Boulevard/Monarch Lane). Therefore, this Alternative would result in similar impacts to intersections outside freeway interchange areas, as compared to the proposed project. It is expected that both intersections could be mitigated.

4.14-2 Intersections Within the Mace Boulevard Interchange Area.

While this Alternative would not be expected to have similar impacts to the Mace Boulevard interchange area, trips from this Alternative could impact other freeway interchange areas, such as those along SR 113.

Based upon preliminary traffic engineering conducted by Fehr & Peers, the possibility exists that development of the same project at the Off-Site Alternative A location could result in significant intersection impacts at:

- Covell Boulevard/John Jones Road
- Covell Boulevard/Risling Court/Shasta Drive
- SR 113 NB Ramps/County Road 29

This is similar to the proposed project, which was determined to have significant impacts at three intersections within the Mace Boulevard interchange area. While mitigation measures may be available to reduce these intersection impacts to a less-than-significant level, they would likely

require Caltrans approval. Therefore, similar to the proposed project, impacts to freeway interchange intersections, would be expected to be significant and unavoidable.

4.14-3 Impacts to Regional Roadways.

Based upon preliminary traffic engineering analysis performed by Fehr & Peers, it is anticipated that implementation of Off-Site Alternative A would not result in impacts to regional facilities. This preliminary determination is consistent with the EIR's conclusion for the proposed project. Therefore, impacts to regional roadways would be similar to the proposed project under the Off-Site Alternative A.

4.14-4 Impacts to Freeways.

Based upon preliminary traffic engineering analysis performed by Fehr & Peers, it is anticipated that implementation of Off-Site Alternative A would not result in impacts to freeway facilities. This preliminary determination is consistent with the EIR's conclusion for the proposed project. Therefore, impacts to freeways as a result of the Off-Site Alternative A would be similar to what is anticipated for the proposed project.

4.14-5 Impacts to Local Neighborhood Street Traffic.

The Davis General Plan includes policy direction (Policy TRANS 2.7) to minimize impacts of vehicle traffic on local streets to maintain or enhance livability of the neighborhoods. The EIR determined that the proposed project is forecast to add 100 to 130 peak hour trips to Alhambra Drive; and Korematsu Elementary School is located at the junction of Alhambra Drive and Loyola Drive. While development of the same square footage and land uses on the Davis IC site would not be expected to pose safety issues at Korematsu Elementary School, and the surrounding neighborhoods, the Davis IC site is located near Patwin Elementary School; and similar issues could ensue from trips generated by this Alternative. Accordingly, this Alternative would be expected to have similar impacts, as compared to the proposed project, both of which would likely be significant and unavoidable.

4.14-6 Increase in Vehicle Miles Traveled

According to Fehr & Peers, buildout of the same square footage and land uses at the Off-Site Alternative A location would generate similar vehicle trips and approximate VMT as the proposed project site. Therefore, impacts related to VMT as a result of the Off-Site Alternative A would be similar to what is anticipated for the proposed project; and a TDM mitigation measure would be required for both scenarios.

4.14-7 Impacts to Emergency Vehicle Access.

Similar to the proposed project, the Off-Site Alternative A would be able to provide adequate emergency vehicle access points. As such this Alternative's impacts to emergency vehicle access would be similar to the proposed project (i.e., less than significant) under the Off-Site Alternative A.

4.14-8 Impacts associated with Construction Vehicle Traffic.

As the overall development footprint and total square footage for the Off-Site Alternative A would be similar to the proposed project, the associated short-term construction-related traffic conditions would be similar for the Off-Site Alternative A, as compared to the proposed project. However, given the close proximity of Sutter-Davis Hospital to the Off-Site Alternative A location, secondary traffic disruption impacts associated with construction vehicle traffic could be more than the proposed project.

4.14-9 Impacts to Pedestrian and Bicycle Facilities.

Implementation of the same project (2,654,000) at Off-Site Alternative A would be expected to introduce several hundred new peak hour vehicle trips along CR 99D, which could increase the potential for bicycle and car incidents. A separated pedestrian/bicycle path along CR 99D would help minimize the potential for accidents to occur between bicyclists and motorists. In addition, according to "Appendix K: Davis Greenways Plan," of the City of Davis Bicycle Action Plan, a "grade separation" has been identified over SR 113, at the approximate southeast corner of the "T" portion of the project site, where the proposed Davis IC hotel would be located.

In a similar fashion, implementation of the proposed project at the MRIC site could result in increased safety issues for bicyclists traveling along CR 32A, thus requiring improvements. This EIR has also determined that, at some point in time, buildout of the proposed project would warrant a grade-separated bike/ped crossing at Mace Boulevard, near Alhambra Drive. Therefore, although at different locations, both the proposed project and Off-Site Alternative A would have similar impacts related to pedestrian and bicycle facilities.

4.14-10 Impacts to Transit Services.

It has been preliminarily determined that Off-Site Alternative A may need to provide new bus stops with turnouts on both sides of West Covell Boulevard at any new primary project access point. This is similar to the proposed project, for which the traffic study determined that bus stops should be provided along both sides of Mace Boulevard at the primary project access. Therefore, this Alternative would have similar impacts to transit services as compared to the proposed project, and similar mitigation would be required. This impact was determined to be less-than significant with mitigation for both sites.

4.14-11Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to transportation/traffic.

General Plan consistency as related to the City's adopted circulation exhibit and applicable transportation and circulation policies would be similar under this alternative as compared to the proposed project.

Utilities

The impacts related to utilities as a result of buildout of Off-Site Alternative A, in comparison to that of the proposed project, are presented below.

4.15-1 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

This impact was found to be less-than-significant for the proposed project. The same finding would apply to this alternative.

4.15-2 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Buildout of the Off-Site Alternative A would result in the same intensity and land uses as the proposed project, including the same square footage and employees, at an alternate site. As such, similar demands as the proposed project for domestic water supply and delivery would occur for the Off-Site Alternative A. Therefore, this Alternative's impacts related to sufficient water supplies available to serve the project would be similar to the proposed project, for which the impact finding is less than significant.

4.15-3 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Because Off-Site Alternative A would involve the same building square footage and number of employees as the proposed project, the amount of wastewater generation associated with the Off-Site Alternative A would be expected to be similar as well. Therefore, impacts related to whether the wastewater treatment provider which serves or may serve the project has adequate capacity to serve the project's projected demand would be similar to the proposed project under the Off-Site Alternative A, and similar mitigation would be required. With respect to wastewater conveyance, it should be noted that Off-Site Alternative A may result in impacts to the Covell sewer trunk line, which could require mitigation. However, this EIR has determined that the proposed project would also require sewer conveyance improvements; and two off-site alignments have been identified and evaluated.

4.15-4 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Because Off-Site Alternative A would involve the same building square footage and number of employees as the proposed project, the amount of solid waste generation associated with the Off-Site Alternative A would be expected to be similar as well. Therefore, this Alternative's impacts related to whether the project could be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs would be similar to the proposed project.

4.15-5 Gas and electric facilities.

Buildout of the Off-Site Alternative A would result in the same intensity and land uses as the proposed project, including the same square footage and number of employees, but in a different area. As such, similar demands as the proposed project for gas and electric services and facilities would be occur for the Off-Site Alternative A. Thus, this Alternative's impacts related to gas and electric facilities would be similar to the proposed project.

4.15-6 Adequate telecommunication facilities.

Buildout of the Off-Site Alternative A would result in the same intensity and land uses as the proposed project, including the same square footage and number of employees, but in a different. As such, similar demands as the proposed project for telecommunication services and facilities would be occur for the Off-Site Alternative A. Thus, this Alternative's impacts related to adequate telecommunication facilities would be similar to the proposed project.

4.15-7 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to utilities.

For the reasons identified above, General Plan consistency as related to utilities policies would be similar under this alternative as compared to the proposed project.

Cumulative Impacts

For conservative analysis purposes, this cumulative impact comparison is based upon the CEQA Cumulative Scenario.

This section compares the Off-Site Alternative A's incremental contributions to cumulative impacts with the incremental contribution of the proposed project.

5-1 Cumulative impacts related to long-term changes in visual character of the region associated with development of the proposed project in combination with future buildout in the City of Davis.

This EIR has determined that the proposed project's incremental contribution to cumulative impacts related to long-term changes in visual character would be cumulatively considerable. Development of the same 2,654,000 sf project on this Alternative site would also be expected to result in a significant contribution to cumulative aesthetic impacts. Both sites are similar in size and agricultural in character, and viewed by similar receptors (residents, motorists, and bicyclists). The incremental contributions of the proposed project and Off-Site Alternative A would be significant and unavoidable.

5-2 Cumulative impacts related to the creation of new sources of light or glare associated with development of the proposed project in combination with future buildout in the City of Davis.

Off-Site Alternative A would result in the development of the same square footage and building heights, as is proposed for the MRIC, but at an alternate site. Similar to the proposed project site, this alternate site (Davis IC site) is partially surrounded by developed areas, and partially by open agricultural fields. Incremental lighting effects associated with both the proposed project and Off-Site Alternative A would be expected to have similar contributions to the cumulative scenario. Overall, Off-Site Alternative A would result in similar cumulative impacts related to light and glare, as the proposed project, and similar mitigation would be required.

5-3 Impacts related to cumulative loss of agricultural land

The California Department of Conservation has defined the Davis IC site as Farmland of Local Importance (approximately 200 acres or 96.6 percent of the project site), Farmland of Local Potential (approximately five acres or 2.4 percent of the project site), and Urban Land (approximately 2 acres or 1.0 percent of the project site). Therefore, Off-Site Alternative A would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. In contrast, the proposed project would convert Prime Farmland (159 acres) and Farmland of Statewide Importance (39 acres).

However, under City regulations, conversion of the Davis IC site would be considered a significant and unavoidable impact and would require off-site agricultural land mitigation at a ratio of two acres to one acre. The impact for Off-Site Alternative A would be similar to the proposed project; however, Off-Site Alternative A is slightly smaller (207 acres under Off-Site Alternative A and 212 acres under the proposed project) and less valuable farmland. Thus, this Alternative's incremental contribution to cumulative loss of agricultural land would be less than the proposed project. Because active agricultural land would still be permanently converted to urban uses, a significant and unavoidable cumulative impact would remain under Off-Site Alternative A.

5-4 A cumulatively considerable net increase of any criteria pollutant.

Because the Off-Site Alternative A includes the same buildout intensity and land uses as the proposed project, the operational criteria air pollutant emissions would be similar to those estimated for the proposed project. Due to the similar area of disturbance necessary for construction of the Off-Site Alternative A in comparison to the proposed project, the associated air pollutant emissions would be similar to what is expected for the proposed project. In addition, Off-Site Alternative A would result in similar impacts as the proposed project associated with a violation of air quality standards or substantial contribution to an existing or projected air quality violation during operations, and a conflict or obstruction of implementation of applicable air quality plans. As such, the cumulatively considerable and significant and unavoidable impact related to air quality and identified for the proposed project would remain under the Off-Site Alternative A.

5-5 Cumulative habitat loss in the City of Davis.

The Covell Drain, located immediately south of the Davis IC Site, contains sensitive natural habitats. Improvements to the Covell Drain may be required for the Off-Site Alternative A. In addition, the Off-Site Alternative A site would, similar to the proposed project site, provide suitable habitat for protected species, such as Swainson's hawk, burrowing owl, and VELB. Therefore, this Alternative would be expected to have similar cumulative impacts, as compared to the proposed project, related to loss of habitat in the City of Davis.

5-6 Cumulative impacts to movement corridors in the City of Davis area.

Similar to the proposed project site, the Off-Site Alternative A site currently provides open spaces for wildlife movements. Also similar to the proposed project, it is anticipated that this Alternative site would continue to provide movement corridors within the perimeter buffers and drainage areas. Therefore, the incremental contribution of both the proposed project and Off-Site Alternative to this cumulative impact would be similar (i.e., less than cumulatively considerable).

5-7 Cumulative loss of cultural resources.

While some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site are generally not made worse by impacts from another project to a cultural resource at another site. Rather the resources and the effects upon them are generally independent. Similar to the proposed project, site-specific impacts to cultural resources would be avoided during construction of this Alternative, via implementation of standard mitigation measures.

5-8 Cumulative increase in the potential for geological related impacts and hazards.

Potentially adverse environmental effects associated with geologic or soils constraints, topographic alteration, and erosion, are usually site-specific and generally would not combine with similar effects that could occur with other projects in Davis. Furthermore, all projects in the cumulative scenario would be required to comply with the California Building Code, the City of Davis's General Plan, and other applicable regulations. Consequently, Off-Site Alternative A, similar to the proposed project, would generally not be affected by, nor would it affect, other development approved by the City of Davis. Therefore, Alternative impacts related to a cumulative increase in the potential for geological related impacts and hazards would be less than cumulatively considerable, similar to the proposed project.

5-9 Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.

GHG is a cumulative impact. Therefore, similar to the conclusion for impacts 4.7-1 and 4.7-2, this Alternative's incremental contribution to GHG emissions would be similar to the proposed project's incremental contribution, and both scenarios would result in significant and unavoidable impacts. Implementation of Mitigation Measure 4.7-2 sets GHG reduction targets

and accountability for the proposed project, but it would not guarantee reductions that show that the development would be able to achieve the City's carbon neutral target by 2050. This mitigation measure would also be applicable to Off-Site Alternative A. Therefore, this impact would be significant and unavoidable for both the proposed project and Off-Site Alternative A.

5-10 Cumulative impacts related to energy.

Similar to the proposed project, buildout of Off-Site Alternative A in conjunction with buildout of the General Plan, Davis IC, and Nishi Gateway would result in a substantial increase in demand on energy resources from existing levels that would represent a large commitment of non-renewable resources. Although cumulative buildout would cause an irreversible consumption of energy, because each project, similar to the proposed project, would be required to comply with all applicable regulations for reducing energy demand, cumulative development would not be expected to result in an inefficient, wasteful, and unnecessary consumption of energy. Overall, this Alternative's incremental contribution to cumulative impacts on energy would be similar to the proposed project.

5-11 Increase in the number of people who could be exposed to potential hazards or hazardous materials and an increase in the transport, storage, and use of hazardous materials due to development of the proposed project in combination with future buildout in the City of Davis.

Project-specific impacts related to hazards and hazardous materials under Off-Site Alternative A would be similar to the proposed project, which were found to be less-than-significant with implementation of mitigation measures. In addition, this Alternative and surrounding development would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community, including potential effects, if any, on the project site. Compliance with all applicable regulations would ensure that development of the this Alternative in conjunction with the Davis IC, Nishi Gateway, and buildout of the City's General Plan would not result in any substantial increases in the potential for people to be exposed to hazards or hazardous materials due to an increase in the transport, storage, and use of hazardous materials. Therefore, Off-Site Alternative A would result in similar impacts as the proposed project related to such.

5-12 Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area.

Off-Site Alternative A is anticipated to discharge treated runoff into the Covell Drain, which is hydrologically connected to the Willow Slough Bypass. Therefore, the increase in runoff volume resulting from development of Off-Site Alternative A would combine with other flows from planned developments and result in possible backup of floodwaters onto off-site properties during storm events when water in the Willow Slough Bypass is high. Some of these off-site properties are located within FEMA Special Flood Hazard Area and contain residences. This cumulative condition is similar to the condition projected for the proposed project, with the exception that the backup of runoff would occur onto uninhabited properties adjacent to the Yolo

Bypass, given the Mace Drainage Channel's connectivity to the Yolo Bypass. Therefore, this Alternative's incremental contribution to cumulative runoff volume effects would be more than the proposed project.

5-13 Cumulative impacts to water quality within the City of Davis.

As construction activities would occur over a similar disturbance area, Off-Site Alternative A would result in a similar potential as the proposed project to create or contribute additional sources of polluted runoff, violate water quality standards or waste discharge requirements, or otherwise degrade water quality during construction. In addition, Off-Site Alternative A includes the same buildout intensity and land uses as the proposed project. As such, the same potential for sources of polluted runoff would occur for the Off-Site Alternative A as the proposed project. Therefore, Off-Site Alternative A would result in similar cumulative impacts as the proposed project related to water quality within the City of Davis.

5-14 Cumulative land use incompatibilities.

Land use conflicts are site-specific and would not result in a cumulative impact. Incompatibility issues are addressed and mitigated on a project-by-project basis. The Off-Site Alternative A would be designed to be consistent with applicable aspects of the City's General Plan.

5-15 Cumulative urban decay.

Because the Off-Site Alternative A includes the same buildout intensity and land uses as the proposed project, the same potential for urban decay to occur would result from the Off-Site Alternative A, as compared to the proposed project. Therefore, cumulative impacts related to urban decay would be similar to the proposed project.

5-16 Cumulative impacts on noise-sensitive receptors.

As the same buildout and land uses would occur under Off-Site Alternative A, as compared to the proposed project, the project traffic consultant has indicated that the same number of associated vehicle trips and approximate VMT would occur. Consequently, similar traffic conditions would be expected on area roadways, which would result in similar traffic-related noise in the area, as compared to the proposed project. Thus, impacts under the Off-Site Alternative A would be similar to the proposed project associated with transportation noise at existing sensitive receptors.. The EIR determined that the proposed project's traffic noise contribution would not result in impacts to existing receptors along roadways surrounding the MRIC site. Given that this Alternative is located at a different site, where residential receptors, are in some cases, located in closer proximity to heavily traveled roadways, as compared to the proposed project, the possibility exists that the Off-Site Alternative A could result in more traffic noise impacts to existing sensitive receptors. In such an event, this Alternative's incremental contribution to cumulative traffic noise effects on sensitive receptors would be more than the proposed project's incremental contribution.

5-17 Cumulative traffic noise effects on proposed uses.

Although the project's sensitive uses would be located along different roadways under this Alternative, it is anticipated, similar to the conclusion for the proposed project, that site design (e.g., building orientation) and building construction (e.g., STC-rated windows) can be carried out in such a manner as to ensure that outdoor and indoor noise levels, resulting from cumulative traffic, are at or below the City's relevant standards. Thus, cumulative impacts under the Off-Site Alternative A would be similar to the proposed project associated with transportation noise at new sensitive receptors.

5-18 Cumulative population and housing impacts.

As shown in Table 4.12-12 of the Population and Housing section, the estimated employee housing demand at buildout of the MRIC is 3,763, which would be the same for this Alternative given the similar land uses and buildout square footages. Using the methodology described in Table 4.12-12, out of the total employee housing demand of the MRIC of 3,763 units, an employee housing demand for 2,053 units would occur within the City of Davis.[16] The remaining housing units (1,710) needed to meet the MRIC's employee housing demand would be met outside of the City of Davis, within the six-county SACOG region.

Assuming that 1,238 housing units out of the 2,053 units would be available to accommodate the MRIC's total employee housing demand within the City of Davis, the resultant MRIC employee housing demand that cannot be accommodated in the City of Davis would be 815 housing units. This unmet housing demand within the City of Davis would then need to be met within surrounding jurisdictions.

Under the CEQA Cumulative Scenario, the proposed project, in combination with the Davis IC and Nishi Gateway projects, and General Plan buildout, is projected to result in an unmet housing demand within the City of Davis of 4,530 units.[17] This unmet cumulative total is substantially more than the project's incremental unmet total of 815 units. As such, the combined effect of this unmet housing demand on other jurisdictions within the SACOG region would be significant with respect to inducing substantial population growth.

The 4,530 residential units that cannot be accommodated within the City of Davis, however, could be accommodated within the SACOG region, as evidenced in the MTP/SCS EIR, which concluded that the SACOG region would be sufficient to house all of the projected population and housing units expected to reside in the region through 2035.[18] According to SACOG, the entire proposed project (comprising the MRIC and Mace Triangle) and Davis IC project would not exceed SACOG's regional employment projections; and therefore the employee household demand from the CEQA Cumulative Scenario is already accounted for in the MTP/SCS

[16] See Table 4.12-12.
[17] BAE Urban Economics. *City of Davis Economic Evaluation of Innovation Park Proposals.* May 11, 2015, Table C1.
[18] Sacramento Area Council of Governments. *Metropolitan Transportation Plan/Sustainable Communities Strategy EIR [pg. 14-16]*. February 2012.

projections. [19] Notwithstanding this, because the City of Davis is not anticipated to provide its share of employee-generated housing for the MRIC, this Alternative, similar to the proposed project, would result in a cumulatively considerable incremental impact with respect to inducing substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

5-19 Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.

Because Off-Site Alternative A would involve the same development as the proposed project, but at an alternative site, the Alternative would result in similar demand for fire protection services as the proposed project. However, similar to the proposed project, the concern arises when one considers a scenario during which Station 32 (or Station 33 for the proposed project) would not able to provide needed back-up response to the downtown core station because Station 32 would already be responding to a fire/medical incident at the Off-Site Alternative A site. In other words, similar to the proposed project, the Alternative could exacerbate the existing response time deficiency experienced in certain areas of the City of Davis by precluding Station 32 from being able to provide back-up to already impacted areas. Overall, this Alternative, in combination with past, present, and probable future projects, would result in similar cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis as the proposed project, which were identified as cumulatively considerable and significant and unavoidable. Similar mitigation as the proposed project would be required for this Alternative.

5-20 Cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis.

Similar to the proposed project, Off-Site Alternative A, as well as each future development project including buildout of the City's General Plan, Davis IC, the Mace Triangle Site, and the Nishi Gateway Property, would be required by the City of Davis to pay adopted development impact fees, which include fees for such services as public safety, general facilities, roadways, parks, and open space. Each project's payment of adopted City impact fees for public services and recreation would ensure that the combined, related effects of cumulative development on public services and recreation would not be significant. Therefore, Off-Site Alternative A would result in a similar incremental contribution towards cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis as the proposed project, which were identified as being less than cumulatively considerable.

[19] Gordon Garry, Director of Research and Analysis, SACOG. Employment and Housing Demand Associated with Innovation Center Development *Letter*. April 10, 2015.

5-21 Cumulative Impacts to Intersections Within the Freeway Interchange Area.

Based upon preliminary traffic engineering analysis conducted by Fehr & Peers, it is anticipated that this Alternative's incremental contribution to the cumulative traffic scenario would result in impacts to four (4) SR 113/Covell Boulevard interchange intersections.

In comparison, this EIR has determined that the proposed project's incremental contribution to cumulative traffic would result in impacts to two (2) intersections within the Mace Boulevard interchange area. Because the proposed project's incremental traffic contribution would impact two intersections within freeway interchange areas, whereas this Alternative's incremental contribution is anticipated to impact four freeway interchange intersections, this Alternative could generate more impacts.

While mitigation measures may be available to reduce this Alternative's incremental contribution to cumulative intersection impacts to a less-than-significant level, they would likely require Caltrans approval. Therefore, similar to the proposed project, impacts to freeway interchange intersections, would be expected to be significant and unavoidable.

5-22 Cumulative Impacts to Roadway Segments.

Based upon preliminary traffic engineering analysis conducted by Fehr & Peers, it is anticipated that this Alternative's incremental contribution to the cumulative traffic scenario would result in impacts to six (6) roadway segments.

In comparison, this EIR has determined that the proposed project's incremental contribution to cumulative traffic would result in impacts to five (5) roadway segments. Overall, cumulative roadway impacts under both scenarios would be expected to be similar and significant and unavoidable.

5-23 Cumulative Impacts to Local Area Freeway Segments.

This EIR has determined that the proposed project's incremental contribution to cumulative traffic would result in impacts to four (4) freeway segments:

1. I-80 Eastbound, PM peak hour, Mace to Chiles
2. I-80 Eastbound, PM peak hour, Chiles to Enterprise
3. I-80 Westbound, AM peak hour, Enterprise to Chiles
4. I-80 Westbound, AM peak hour, Chiles to Mace

Based upon preliminary traffic engineering analysis conducted by Fehr & Peers, it is anticipated that this Alternative's incremental contribution to the cumulative traffic scenario would result in impacts to the same five (5) freeway segments.

While mitigation measures may be available to reduce this Alternative's incremental contribution to cumulative intersection impacts to a less-than-significant level, they would

require Caltrans approval. Therefore, similar to the proposed project, impacts to freeway facilities, would be expected to be significant and unavoidable.

5-24 Cumulative Impacts to Regional Transportation Facilities.

Unlike the proposed project, whose incremental traffic contribution in the cumulative setting was determined not to have a significant impact to regional facilities, preliminary traffic engineering performed by Fehr & Peers suggests that development of the same project on Off-Site Alternative A could result in a significant impact to one regional facility (Elkhorn east of SR 70/99). Therefore, this Alternative could result in more cumulative impacts to regional facilities, the mitigation for which may be infeasible due to its location within other jurisdiction.

5-25 Cumulative water system impacts.

Buildout of the Off-Site Alternative A would result in the same intensity and land uses as the proposed project, including the same square footage and employees. As such, similar demands as the proposed project for domestic water supply and delivery would occur for the Off-Site Alternative A. Therefore, this Alternative's incremental contribution to cumulative impacts related to the water system would be similar to the proposed project, which was determined to be less than cumulatively considerable.

5-26 Cumulative wastewater treatment and collection system impacts.

Because the Off-Site Alternative A would involve the same building square footage and number of employees as the proposed project, the amount of wastewater generation associated with the Off-Site Alternative A would be expected to be similar as well. Therefore, this Alternative's incremental contribution to cumulative impacts related to wastewater treatment and collection would be similar to the proposed project: and similar mitigation would be required.

5-27 The project may contribute to cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications.

Because the Off-Site Alternative A would involve the same building square footage and number of employees as the proposed project, the amount of solid waste generation associated with the Off-Site Alternative A would be expected to be similar as well. In addition, similar demands as the proposed project for gas, electric, and telecommunication services and facilities would occur for the Off-Site Alternative A. Therefore, cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications would be similar to the proposed project under the Off-Site Alternative A.

Off-Site Alternative B (Covell Property)

The Off-Site Alternative B is defined as continuation of existing agriculture and related uses over the entire 229-acre project site, and development of the MRIC component only at an alternate site near the Cannery project. The Mace Triangle component of the project would not be built under this alternative. Off-Site Alternative B (Covell Property) would assume development of

the proposed project at an alternative site, which in this case is the portion of the Covell Property south of drainage Channel A (APN: 035-970-033). Generally, the property is north of East Covell Boulevard, east of the Cannery Project, west of Pole Line Road, and south of the City's old landfill site. The Off-Site Alternative B (Covell Property) acreage would be approximately 236 acres.

The following general notes pertain to the conceptual site plan for this off-site alternative, illustrated in Figure 7-4.

1. The gray areas represent parking area, roughly sized to accommodate current City standards.
2. The exhibit shows an agricultural/landscape buffer all the way around the project, both adjacent to active agricultural properties and along urbanized edges, similar to MRIC.
3. The open space/recreation/potential detention area located above Cannery is intended to provide green space acreage and function with uses similar to what is proposed within MRIC.
4. The lighter green represents green space that is not agricultural/landscape buffer. It may be put to any number of recreation or open space uses.

The Off-Site Alternative B (Covell Property) acreage totals approximately 236 acres. The proposed alternative site plan is anticipated to include the same approximate development area as the proposed project, including a similar amount of open space area. Access to Off-Site Alternative B (Covell Property) would be provided along Covell Boulevard and Pole Line Road. The Covell Property site has one residence and associated outbuildings. The site has historically been and is currently used for agricultural purposes (row crops), and is surrounded by the City limits and urban uses on three sides. The site is designated in the County General Plan and Zoning Ordinance as Specific Plan (S-P). According to the Yolo County General Plan, Specific Plan (SP) allows uses in the AG designation to continue temporarily until such time as the Specific Plan has been adopted, or the land use designation is otherwise amended. Ultimate land uses must be consistent with the adopted Specific Plan. Capital intensive agricultural uses are discouraged in lands designated Specific Plan so as not to preclude later planned uses. The site is identified by LAFCO as falling within the 10-year sphere-of-influence for the City.

Off-Site Alternative B (Covell Property) would result in greater impacts, as compared to the proposed project, particularly in the areas of loss of agricultural land, biological resources, flooding, and noise. This alternative would meet many objectives of the proposed project. However, the property is not controlled by, nor available to the applicant, and would not meet their objective related to proximity to I-80 and logical extension of the 2nd Street corridor, where existing technology businesses are located. This Alternative also would not provide an opportunity for the Mace Triangle agricultural retail business to expand as that property would remain in the County.

Detailed discussions of impacts to each environmental resource area as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

Figure 7-4
Off-Site Alternative B (Covell Property)

Aesthetics and Visual Resources

The impacts related to aesthetics and visual resources as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.1-1 Substantial adverse effect on a scenic vista.

There are no officially designated scenic highways, corridors, vistas, or viewing areas in the City's planning area; and there are no established scenic vistas located on or adjacent to the site. This impact was found to be less-than-significant for the proposed project. This finding would also apply to this alternative.

4.1-2 Substantially degrade the existing visual character or quality of the project site and/or the site's surroundings.

Off-Site Alternative B (Covell Property) would involve the same development as the proposed project, but at an off-site location that has similar agricultural characteristics as the proposed project site. As such, development of Off-Site Alternative B (Covell Property) would still be considered to substantially degrade the existing visual character or quality of the site and/or the site's surroundings. Similar to the proposed project, it is anticipated that a significant and unavoidable impact would occur.

4.1-3 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Because Off-Site Alternative B (Covell Property) would involve the same development as the proposed project, but at an off-site location, the new sources of light and glare per Off-Site Alternative B (Covell Property) would be similar to the proposed project. As such, similar impacts as the proposed project would occur under Off-Site Alternative B (Covell Property) related to creation of a new source of substantial light or glare that would adversely affect day or nighttime views in the area. This impact was found to be less-than-significant for the proposed project. The same determination would apply to the alternative site.

4.1-4 Conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and visual resources.

General Plan consistency as related to aesthetic policies would be similar to the determinations made for the proposed project.

Agriculture and Forest Resources

The impacts related to agriculture and forest resources as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

According to the Yolo County Important Farmland map,[20] the Covell Property contains approximately 170 acres of Prime Farmland, approximately one acre of Farmland of Statewide Importance, approximately 30 acres of Unique Farmland, approximately 30 acres of Grazing Land, and approximately six acres of Farmland of Local Importance. In comparison, the proposed 212-acre project site contains approximately 159 acres (or 76.1 percent of the MRIC site) of Prime Farmland, approximately 39 acres (or 18.7 percent of the MRIC site) of Farmland of Statewide Importance, and approximately 11 acres (or 5.3 percent of the MRIC site) of Farmland of Local Importance. . Accordingly, impacts related to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use would be similar, but more with Off-Site Alternative B (Covell Property) than the proposed project and would be significant and unavoidable.

4.2-2 Impacts related to conflicting with existing zoning for agricultural use.

The Covell Property is zoned S-P. The purpose of the Specific Plan (S-P) zone is to identify lands that are planned for future urban growth but which cannot be developed until detailed development standards as outlined in a "specific plan" are adopted. The S-P zoning allows agricultural uses in the zoned area to continue temporarily until such time as a specific plan has been adopted, or until the zoning or land use designation is otherwise amended. Therefore, similar to the proposed project, the development of which would require prezoning to the City's P-D zone, development of Off-Site Alternative B would result in conflicts with existing zoning for agricultural use. Overall, this Alternative's impacts related to a conflict with existing zoning for agricultural use would be similar to the proposed project.

4.2-3 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use.

As discussed above, the Covell Property, similar to the proposed project site, is currently in agricultural use and contains areas designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Grazing Land, and Farmland of Local Importance. Accordingly, Off-Site Alternative B (Covell Property) would result in the conversion of active agricultural land to non-agricultural use; and as such, would be subject to the City's regulations regarding agricultural land mitigation at a 2:1 ratio. Therefore, impacts related to such would be similar to the proposed project under Off-Site Alternative B (Covell Property); and the significant and unavoidable impact identified for the proposed project would remain.

[20] California Department of Conservation, Division of Land Resources Protection. *Yolo County Important Farmland 2012*. April 2014.

4.2-4 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

The Covell Property is currently used for agricultural purposes, and existing agricultural uses occur to the north of the site. The existing agricultural uses in the vicinity could continue to occur after implementation of Off-Site Alternative B (Covell Property), which could have effects on the Alternative site. Similar to the proposed project, the Alternative would incorporate agricultural buffers along the northern perimeter of the site. In contrast to the proposed project, this Alternative would not require an agricultural buffer along its eastern boundary, though a landscape buffer may be included, as reflected in Figure 7-4. While this buffer would help minimize conflicts with adjacent agricultural operations, Yolo County's 500-foot aerial spraying restrictions for pesticides would still require a spray buffer to encroach onto adjacent agricultural areas. Therefore, during times when aerial application of pesticides is deemed necessary by the farmer, the proposed innovation center at the Off-Site Alternative B location will indirectly result in what might be considered "induced" conversion of off-site agricultural land by disrupting the ability to farm a portion of the adjacent property. However, the fact that an agricultural buffer would only be required along the site's northern perimeter, as compared to the northern and eastern perimeters for the proposed project, this Alternative would result in reduced effects on adjacent farming operations.

Off-Site Alternative B would, similar to the proposed project, also be required to comply with existing law, including provision of a deed restriction per the City's Municipal Code. Therefore, Off-Site Alternative B would result in less impacts as compared to the proposed project related to other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. This Alternative would, however, still result in a significant and unavoidable impact.

4.2-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.

Because Off-Site Alternative B (Covell Property) would involve buildout of the same project and would be within the same jurisdictional area as the proposed project, impacts related to conflicting or creating an inconsistency with an applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources would be similar to the proposed project.

Air Quality

The impacts related to air quality as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.3-1 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.

Off-Site Alternative B (Covell Property) would consist of buildout of the same intensity as the proposed project, but at an off-site location. Because Off-Site Alternative B (Covell Property) would consist of disturbance of a greater area (i.e., 236 acres, as compared to the approximately 212-acre proposed project site), the construction-related criteria air pollutant emissions would likely be more than what is expected for the proposed project. As a result, impacts related to a violation of air quality standards or substantial contribution to an existing or projected air quality violation during construction would be more under Off-Site Alternative B (Covell Property), as compared to the proposed project.

4.3-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during operations, and a conflict with or obstruction of implementation of applicable air quality plans.

Because Off-Site Alternative B (Covell Property) would consist of the same buildout intensity and land uses as the proposed project, the operational criteria air pollutant emissions would be similar to those estimated for the proposed project. As a result, Off-Site Alternative B (Covell Property) would result in similar impacts as the proposed project associated with a violation of air quality standards or substantial contribution to an existing or projected air quality violation during operations, and conflict with or obstruction of implementation of applicable air quality plans. The significant and unavoidable impacts related to air quality identified for the proposed project would remain under Off-Site Alternative B (Covell Property).

4.3-3 Expose sensitive receptors to substantial pollutant concentrations.

Because Off-Site Alternative B (Covell Property) would involve the same buildout intensity and land uses as the proposed project, the same number of associated vehicle trips and VMT would occur. As such, although the project would be built at a different location, similar impacts related to traffic conditions would be expected, but at different area intersections and roadways. Thus, a similar potential exists for Off-Site Alternative B (Covell Property) to cause localized CO concentrations as the proposed project. Similarly, the same potential to generate emissions of TACs during construction or associated with operations would occur for Off-Site Alternative B (Covell Property). The nearest sensitive receptor to Off-Site Alternative B (Covell Property) site would be located within similar distance as the nearest sensitive receptor to the proposed project site. As such, the potential for the nearest sensitive receptor to be exposed to such concentrations would be similar under Off-Site Alternative B (Covell Property), as compared to the proposed project. Therefore, impacts related to exposure of nearby sensitive receptors to substantial pollutant concentrations would similar to the proposed project under Off-Site Alternative B (Covell Property). Therefore, impacts associated with exposure of any on-site receptors to existing TAC emissions in the area would be similar to the proposed project for Off-Site Alternative B (Covell Property).

4.3-4 Create objectionable odors affecting a substantial number of people.

As Off-Site Alternative B (Covell Property) would involve the same buildout intensity and land uses as the proposed project, impacts associated with objectionable odors would be the same under Off-Site Alternative B (Covell Property) as the proposed project.

4.3-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to air quality.

General Plan consistency as related to air quality policies would be similar between the proposed project and this alternative.

Biological Resources

The impacts related to biological resources as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.4-1 Impacts related to special-status plant species.

Previous biological surveys conducted in 2004 at the Covell property determined that suitable habitat for special-status plant species occurs on-site. At the then-current time, brittlescale and San Joaquin Saltbush were known to occur within the seasonal wetlands south of Channel A. A review of current aerial photography suggests that wetland habitat may still occur on the northern and central portions of the site, though this would need to be confirmed through current on-site biological surveys. While not detected on the proposed project site,[21] this EIR determined that special-status plant species could occur on the proposed project site. Therefore, this Alternative is expected to have similar, or possible more, impacts to special-status plants, as compared to the proposed project.

4.4-2 Impacts to Valley elderberry longhorn beetle.

Previous biological surveys within the Off-Site Alternative B site detected two elderberry shrubs within its southern portion, near drainage features. If these shrubs still exist within their previously identified location, development of this Alternative would result in impacts to both elderberry shrubs, which could result in adverse impacts to VELB. Therefore, the possibility exists that this Alternative could result in similar impacts to VELB, as compared to the proposed project, though this conclusion would require verification through updated biological surveys.

[21] The exception being Parry's rough tarplant on the Triangle site. Mitigation Measure 4.4-1 requires future Triangle applicant(s) to conduct preconstruction surveys and implement propagation measures, should special-status plants be found on the Triangle.

4.4-3 Impacts to Giant garter snake.

Based on 2003 biological field observations, it was determined that Channel "A" and the Covell Drain (north of Covell Boulevard) provide marginal suitable foraging and basking opportunities for giant garter snake; however, minimal winter retreat habitat exists on-site due to agricultural activities such as discing and planting of crops. It is anticipated that these findings remain valid today. Records of giant garter snake exist for Willow Slough, to which Channel A and the Covell Drain eventually connect. Therefore, similar to the proposed project, the possibility exists that development of Off-Site Alternative B could result in adverse impacts to giant garter snake, thus requiring mitigation.

4.4-4 Impacts to Burrowing owl.

Due to similar habitat types at both locations, the same potential exists for burrowing owl to be located at the Off-Site Alternative B site, as compared to the proposed project site. As such, similar mitigation measures identified for the proposed project would be required for Off-Site Alternative B in order to protect burrowing owl and ensure impacts are less than significant. Because Off-Site Alternative B is expected to disturb a similar amount of land as the proposed project, Off-Site Alternative B would be equally as likely to disturb any potential on-site burrowing owl, as compared to the proposed project.[22] Therefore, this Alternative's impacts related to burrowing owl would be similar to the proposed project.

4.4-5 Impacts to Swainson's hawk.

Similar to the proposed project site, the Off-Site Alternative B site is considered Swainson's hawk foraging habitat. Therefore, both the proposed project and Off-Site Alternative B would require foraging habitat replacement mitigation for Swainson's hawk. In addition, impacts to nesting Swainson's hawk could potentially occur under both scenarios. As a result, this Alternative would have similar impacts to Swainson's hawk, as compared to the proposed project. The significant and unavoidable impact finding for the proposed project would also apply to this Alternative.

4.4-6 Impacts to raptors, nesting birds, or other birds protected under the MBTA.

Previous surveys at the Covell property determined that suitable nesting habitat for raptors and other migratory birds occurs along Channel A and the valley oak trees on the site, which remain today. Therefore, similar to the proposed project, this Alternative could result in adverse impacts to nesting raptors and other migratory birds, thus requiring mitigation.

[22] Although the Covell Site is 24 acres greater than the proposed project site, this analysis assumes that the overall development acreage will be equivalent to the proposed project. This, then, could result in additional landscape/agricultural buffer area, or park/open space acreage under this Off-Site Alternative scenario.

4.4-7 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

Previous biological surveys at the Covell property determined that valley foothill riparian vegetation occurs along Channel A, which is included along the northern border of this Alternative. It is anticipated, based upon a review of aerial photography, that this habitat, or at least some portion of it, remains today. Though this alternative is conceptual at this time, it is anticipated that improvements would occur to Channel A as a result of development of the innovation center at this time, much like the proposed project improvements to the Mace Drainage Channel. If such were to be the case, this Alternative would result in similar impacts to sensitive habitat compared to the proposed project.

4.4-8 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

This EIR has determined that federally protected wetlands do not occur on the proposed project site. Previous biological surveys conducted at the Covell property found jurisdictional wetlands on the site. A review of current aerial photography suggests that seasonal wetland habitat may still occur on-site, though this would need to be confirmed through current on-site biological surveys. If wetlands remain on-site, this Alternative would have more impacts to federally protected wetlands, as compared to the proposed project.

4.4-9 Interfere substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.

Because Off-Site Alternative B (Covell Property) would consist of buildout of the proposed project, just at an off-site location, the potential for development on the site to interfere with the movement of species would be similar to what is expected for the proposed project. In addition, similar to the proposed project, Off-Site Alternative B (Covell Property) would include an agricultural buffer along the northern perimeter of the site and open space areas within the site, which could allow for wildlife movement. Similar to the MDC, Channel A located along the northern boundary of the Covell Property could continue to serve as a wildlife corridor upon development of the site. Overall, Off-Site Alternative B (Covell Property) would result in similar impacts to the proposed project related to interfering substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.

4.4-10 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The City of Davis Municipal Code requires permits for the removal of some species and sizes of trees pursuant to Chapter 37 of Davis Municipal Code. The Off-Site Alternative B (Covell Property) site contains trees along Channel A and scattered throughout the site; and thus, it is anticipated that tree removal would occur. Similar to the proposed project, which could require

removal of trees along the MDC, this Alternative would be required to comply with the requirements of the City's Municipal Code. Overall, similar impacts related to a conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, would be expected to occur under Off-Site Alternative B (Covell Property) in comparison to the proposed project.

4.4-13 Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

The YNHP is anticipated to be adopted by May 2017. The Off-Site Alternative B (Covell Property) would be subject to the same mitigation/conservation requirements of the future YNHP as would the project. Therefore, impacts related to a conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan would be similar.

4.4-14 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to biological resources.

General Plan consistency as related to biological resources policies would generally be the same under this alternative as compared to the proposed project.

Cultural Resources

The impacts related to cultural resources as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.5-1 Cause a substantial adverse change in the significance of a historical resource.

Previous cultural resources assessment at the Covell property identified one recorded potential historic resource on the site. This site consists of the former Harbin Ranch headquarters (Site P-57-000199). The previous assessment determined that this site has no known association with historic persons or events, is not considered architecturally significant, and is considered ineligible for the National Register of Historic Places or the California Register of Historical Resources. However, the age and purpose of the stone monument associated with the ranch buildings have not been determined. Therefore, it is anticipated that prior to development of Off-Site Alternative B, a subsurface investigation would need to be conducted near the stone monument at Site P-57-000199. This potential impact would be similar to the impact identified for the proposed project if the northerly off-site sewer pipe alignment is selected. As discussed in the EIR, excavation activities associated with this off-site sewer pipe, could impact the Wright Farm, depending upon the final design of this alignment. Therefore, this Alternative's impacts to historic resources could be similar to the proposed project impacts, should the northerly off-site sewer alignment be selected for the proposed project, and construction within said alignment impacts to Wright Farm.

4.5-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

Similar to the proposed project site, no archaeological resources have been found on the Covell property during previous investigations. However, like the proposed project site, the possibility exists that unknown resources could be discovered at the Off-Site Alternative B site during grading and excavation. Therefore, this Alternative could result in similar impacts to archaeological resources, as compared to the proposed project.

4.5-3 Directly or indirectly destroy a unique paleontological resource or unique geologic feature on the project site.

Similar to the proposed project site, no paleontological resources have been found on the Covell property. However, like the proposed project site, the possibility exists that unknown resources could be discovered at the Off-Site Alternative B site during excavation. Therefore, this Alternative could result in similar impacts to paleontological resources, as compared to the proposed project.

4.5-4 Disturb any human remains, including those interred outside of formal cemeteries.

Similar to the proposed project site, no human remains have been found on the Covell property. However, like the proposed project site, the possibility exists that unknown remains could be discovered at the Off-Site Alternative B site during excavation. Therefore, this Alternative could result in similar impacts to human remains, as compared to the proposed project.

4.5-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to cultural resources.

General Plan consistency as related to cultural resources policies would be similar under this alternative as compared to the proposed project.

<u>Geology, Soils, and Mineral Resources</u>

The impacts related to geology, soils, and mineral resources as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.6-1 Risks to people and structures associated with seismic activity, including ground shaking and ground failure.

Off-Site Alternative B (Covell Property) would be located within the same seismic activity area as the proposed project. As such, the Alternative could result in similar impacts related to risks to people and structures associated with seismic activity, including ground shaking and ground failure. This impact would be less-than-significant for both sites.

4.6-2 Result in substantial soil erosion or loss of topsoil.

Because Off-Site Alternative B (Covell Property) would involve disturbance of a slightly larger area (i.e., 236 acres, as compared to the approximately 212-acre proposed project site), the potential for erosion or loss of topsoil would be greater than the proposed project; however, similar mitigation measures would be required to reduce associated impacts. Overall, impacts related to risks associated with substantial erosion or loss of topsoil would be more than the proposed project under Off-Site Alternative B (Covell Property). This impact was found to be less-than-significant with mitigation for the proposed project site. The same determination would apply to the Covell Site.

4.6-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse.

Previous geotechnical investigations at the Covell property identified liquefiable soils, and some fill material, within certain areas of the Off-Site Alternative B site. Therefore, similar to the proposed project, mitigation would be required to ensure that soil impacts do not result in adverse impacts to project structures.

4.6-4 Be located on expansive soil, as defined in Table 118-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Previous geotechnical investigations at the Covell property identified expansive soils within certain areas of the Off-Site Alternative B site. Therefore, similar to the proposed project, mitigation would be required to ensure that expansive soil impacts do not result in adverse impacts to project structures.

4.6-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology and soils.

General Plan consistency as related to geology and soils policies would be similar under this alternative as compared to the proposed project.

Greenhouse Gas Emissions and Energy

The impacts related to GHG emissions and energy as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.7-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Because Off-Site Alternative B (Covell Property) includes the same buildout intensity and land uses as the proposed project, the operational GHG emissions would be similar to those estimated for the proposed project. The impact related to generation of GHG emissions as a result of the

proposed project, in comparison to existing conditions, was determined to be significant and unavoidable. As a result, Off-Site Alternative B (Covell Property) would result in similar impacts as the proposed project associated with the generation of GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

4.7-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Off-Site Alternative B includes the same buildout square footage and land uses as the proposed project; thus vehicle trips and daily VMT would be similar for both. As stated above, the operational GHG emissions associated with Off-Site Alternative B would be similar to those estimated for the proposed project. Implementation of Mitigation Measure 4.7-2 sets GHG reduction targets and accountability for the proposed project, but it would not guarantee reductions that show that the development would be able to achieve the City's carbon neutral target by 2050. This mitigation measure would also be applicable to Off-Site Alternative B. Therefore, this impact would be significant and unavoidable for both the proposed project and Off-Site Alternative B.

4.7-3 Impacts related to energy associated with construction.

Off-Site Alternative B would consist of the same buildout square footage and land uses as the proposed project. Due to the similar extent of development, and area of disturbance necessary for construction of the Off-Site Alternative B, in comparison to the proposed project, the associated energy consumption would be similar to what is expected for the proposed project. Therefore, this Alternative's impacts related to energy used during construction would be similar to the proposed project. Impacts related to energy associated with construction as a result of the proposed project were determined to be less than significant.

4.7-4 Impacts related to energy associated with operations.

Off-Site Alternative B includes the same buildout intensity and land uses as the proposed project. Thus, as stated above, the operational GHG emissions associated with Off-Site Alternative B would be similar to those estimated for the proposed project. Therefore, Off-Site Alternative B would result in similar demands and consumption of energy during operations. Impacts related to energy associated with operations would be similar to the proposed project under the Off-Site Alternative B. Impacts related to energy associated with operations as a result of the proposed project were determined to be less-than-significant with mitigation.

4.7-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to GHG emissions and energy conservation.

General Plan consistency as related to greenhouse gas emissions policies would be similar for the proposed project and this alternative due to similar VMT.

Hazards and Hazardous Materials

The impacts related to hazards and hazardous materials as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.8-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Because Off-Site Alternative B (Covell Property) includes the same buildout intensity and land uses as the proposed project, similar on-site operations would be expected. Because any businesses that may involve the use and/or storage of hazardous materials would be required to use and store such materials in accordance with state and local regulations, similar impacts related to the routine transport, use, or disposal of hazardous materials would occur under Off-Site Alternative B (Covell Property) as the proposed project. This impact was found to be less-than-significant for the proposed project. The same finding would apply to this alternative.

4.8-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with the existing on-site wells, canals, nearby uses, or soil contamination.

Previous Phase 1 environmental site assessments have identified potential hazards at the Covell property, including pesticide containers within the farm complex, potential asbestos-containing materials and lead-based paints at the farm site, and PCB transformers. These potential hazards exceed the known potential hazards on the proposed project site, which are limited to irrigation wells and unknown fill materials. Thus, impacts related to a reasonably foreseeable upset or accident condition involving the release of hazardous materials into the environment could be more under Off-Site Alternative B (Covell Property), as compared to the proposed project.

4.8-3 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Because Off-Site Alternative B (Covell Property), similar to the proposed project, would not involve any operations or changes to the existing roadway network that would impair implementation or physically interfere with any adopted emergency response plan or emergency evacuation plan, similar impacts associated with such would occur for Off-Site Alternative B (Covell Property) as the proposed project. This impact was found to be less-than-significant for the proposed project. This same finding would apply to this alternative.

4.8-4 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

According to Cal Fire maps for Yolo County, the City of Davis is not within a State or local fire hazard severity zone. Therefore, implementation of Off-Site Alternative B (Covell Property),

similar to the proposed project, would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

4.8-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to hazards and hazardous materials.

General Plan consistency as related to hazards and hazardous materials policies would be similar under this alternative as compared to the proposed project.

Hydrology and Water Quality

The impacts related to hydrology and water quality as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.9-1 Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems.

Although the total site acreage of Off-Site Alternative B (Covell Property) would be 24 acres more than that of the proposed project, the development footprint would is assumed to be similar to the proposed project. Accordingly, the amount of impervious surfaces under Off-Site Alternative B (Covell Property) would be similar to that of the proposed project, which would result the same potential to alter the drainage pattern of the site or area, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage system.

Similar to previous development proposals for the Covell property, it is anticipated that off-channel detention would be required for this Alternative to reduce peak post-project runoff in the Covell Drain adjacent to the Covell site. The off-channel detention pond(s) would detain peak stormwater runoff until downstream facilities could accept the water. This would allow the Alterantive's runoff to be conveyed via gravity drainage pipes and surface drainage to Channel "A," and then routed east off the project site to the Willow Slough Bypass. Implementation of any of the four drainage options listed below would not be expected to result in adverse post-project impacts to downstream properties because the drainage options are designed to accommodate stormwater runoff generated by the project in order that post-project flow conditions are equal to pre-project conditions. The proposed project at the MRIC site includes a similar system, though for the proposed project, much of the drainage would be detained within the agricultural buffer areas.

Therefore, impacts related to such would be similar to the proposed project under Off-Site Alternative B (Covell Property). This impact was found to be less-than-significant with mitigation for the proposed project site. The same determination would apply to the Covell Site.

4.9-2 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality through erosion during construction.

The total site acreage of Off-Site Alternative B (Covell Property) would be more than that of the proposed project; thus, a larger area of disturbance would be expected. Accordingly, Off-Site Alternative B (Covell Property) could result in a greater potential to create or contribute additional sources of polluted runoff, violate water quality standards or waste discharge requirements, or otherwise degrade water quality during construction activities as the proposed project. This Alternative's impacts associated with construction-related hydrology and water quality could be slightly more than the proposed project. This impact was found to be less-than-significant with mitigation for the proposed project site. The same determination would apply to the Covell Site.

4.9-3 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations.

Because the development footprint of Off-Site Alternative B (Covell Property) would be similar to the proposed project, the amount of impervious surfaces would be similar to that of the proposed project. As such, the same potential to create or contribute additional sources of polluted runoff, violate water quality standards or waste discharge requirements, or otherwise degrade water quality during operations would occur. Therefore, impacts related to violation of water quality standards or waste discharge requirements, provision of substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations would be similar to the proposed project under Off-Site Alternative B (Covell Property). This impact was found to be less-than-significant with mitigation for the proposed project site. The same determination would apply to the Covell Site.

4.9-4 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).

If wells currently exist on the Covell Property, a well permit would be required by the Yolo County Environmental Health Services Department for the installation, modification, or abandonment of water wells, as well as a groundwater analysis. Because the development footprint of Off-Site Alternative B (Covell Property) would be similar to the proposed project, the amount of impervious surfaces would be similar to that of the proposed project. As such, the same potential as the proposed project to interfere with groundwater recharge would occur under Off-Site Alternative B (Covell Property). Therefore, impacts related to substantially depleting groundwater supplies or interfering substantially with groundwater recharge would be similar to the proposed project under Off-Site Alternative B (Covell Property). This impact was found to be less-than-significant for the proposed project site. The same determination would apply to the Covell Site.

4.9-5 Place structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or flood hazard delineation map; or place within a 100-year floodplain structures which would impede or redirect flood flows; or expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

The proposed project was determined to lie outside of the 100-year FEMA floodplain. According to FEMA FIRM number 06113C0603G, dated June 18, 2010, a portion of the Covell Property is within flood hazard Zone A, which is an area subject to inundation by the one percent annual chance flood event or within the 100-year floodplain. As such, development of the project on the Covell alternative site would result in more impacts than development on the proposed project site, related to flooding. Impacts would be less-than-significant with mitigation.

4.9-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality.

General Plan consistency as related to hydrology and water quality policies would be similar under this alternative as compared to the proposed project.

Land Use and Urban Decay

The impacts related to land use and urban decay as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.10-1 Physical division of an established community.

The Off-Site Alternative B (Covell Property) site is located within Yolo County, just north of the City limits of Davis. Off-Site Alternative B (Covell Property) would result in development of land currently used for agricultural purposes adjacent to urbanized areas of Davis to the west, south, and east. Existing agricultural uses are located north of the Alternative site. The site is within the City's 10-year SOI and is, therefore, within the assumed growth limits of the City of Davis. As a result, similar to the proposed project, Off-Site Alternative B (Covell Property) would not result in any division of an established community and a less-than-significant impact would occur.

4.10-2 Economic and social changes and/or effects that result in urban decay.

Because Off-Site Alternative B (Covell Property) includes the same buildout intensity and land uses as the proposed project, the same potential for urban decay to occur would result from Off-Site Alternative B (Covell Property) as the proposed project. Therefore, impacts related to economic and social changes and/or effects that result in urban decay would be similar to the proposed project under Off-Site Alternative B (Covell Property).

4.10-3 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to land use and urban decay.

General Plan consistency as related to land use designations on the City's adopted land use exhibit would be achieved with approval of the requested project approvals. General Plan consistency as related to land use policies would be similar under this alternative as compared to the proposed project.

Noise and Vibration

The impacts related to noise and vibration as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.11-1 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project.

The total site acreage of Off-Site Alternative B (Covell Property) would be 24 acres more than that of the proposed project; thus, a larger area of disturbance could be expected. Accordingly, Off-Site Alternative B (Covell Property) could result in a greater potential to generate construction-related noise and vibration that could affect nearby sensitive receptors. By the time the first phase of an innovation center could be built at this off-site location, residential units at the adjacent Cannery site will be occupied. It is anticipated, thusly, that sensitive receptors would be located in proximity to the Off-Site Alternative B (Covell Property) site, as compared to the proximity of receptors to the proposed project site, the closest of which are located approximately 660 feet to the northwest. Due to the potential increase in construction-related noise and vibration, and closer distances to nearby sensitive receptors, development of Off-Site Alternative B (Covell Property) could be expected to result in more impacts than the proposed project related to a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project. This impact would be less-than-significant for both sites.

4.11-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. As discussed above, construction of Off-Site Alternative B (Covell Property) would involve a larger area of disturbance than the proposed project. Accordingly, Off-Site Alternative B (Covell Property) could result in a greater potential to generate construction-related vibration that could affect nearby sensitive receptors. The nearest sensitive receptor to Off-Site Alternative B (Covell Property) site would be located within a closer distance as compared the nearest sensitive receptor to the proposed project site. Due to the potential increase in construction-related vibration and similar distances to nearby sensitive receptors, development of Off-Site Alternative B (Covell Property) would be expected to result in slightly more impacts than the proposed project related to exposure of persons to or generation of excessive

groundborne vibration or groundborne noise levels. This impact would be less-than-significant for both sites.

4.11-3 Transportation noise impacts to existing sensitive receptors in the project vicinity.

The previously proposed Covell Village project was predicted to generate approximately 20,400 daily trips to the surrounding roadway network. At the then-current time (2004), these traffic noise level increases were predicted to result in significant noise impacts along L street segments, where residential receptors exist, using a significance criterion of a 3dB increase.

In comparison, this EIR has determined that the approximately 15,550 new daily vehicle trips resulting from the proposed project would not create traffic noise impacts to existing sensitive receptors along nearby roadways, using similar criteria as the previously completed Covell Village analysis. Thus, while an updated noise study would need to be completed to determine whether development of the innovation center at the Covell site would result in traffic noise impacts, the possibility exists that this Alternative would result in more impacts to existing sensitive receptors in the project vicinity, as compared to the proposed project.

4.11-4 Transportation noise impacts to new sensitive receptors in the project vicinity.

Off-Site Alternative B includes the same types of sensitive land uses as the proposed project, albeit they are limited in nature (hotel use, outdoor use areas). Although the project's sensitive uses would be located along different roadways under this Alternative, it is anticipated that site design (e.g., building orientation) and building construction (e.g., STC-rated windows) can be carried out in such a manner as to ensure that outdoor and indoor noise levels are at or below the City's relevant standards. Thus, impacts under the Off-Site Alternative B would be similar to the proposed project associated with transportation noise at new sensitive receptors.

4.11-5 Operational noise.

Under this alternative, the same buildout intensity and land uses as the proposed project are assumed to occur on an alternative off-site location. Therefore, similar operational noise levels would be expected to occur. The nearest sensitive receptor to Off-Site Alternative B (Covell Property) site (i.e., the Cannery project) would be located closer to innovation center operational noise sources, as compared to the nearest sensitive receptors to the proposed project site. Therefore, impacts related to operational noise could be more than the proposed project under Off-Site Alternative B (Covell Property). This impact would be less-than-significant for both sites.

4.11-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise.

General Plan consistency as related to noise policies would be similar under this alternative as compared to the proposed project.

Population and Housing

The impacts related to population and housing as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.12-1 Induce substantial population growth.

According to the Sacramento Area Council of Governments (SACOG), the Davis IC, MRIC site, Mace Ranch Triangle property, and the Nishi Gateway Project would not exceed SACOG's regional employment projections. Therefore, the employee household demand from the Davis IC, MRIC, Mace Triangle, and the Nishi Gateway Project is already accounted for in the MTP/SCS projections.

With respect to growth-inducement on the local scale, as a result of the Alternative's increase in employment, the City of Davis likely cannot accommodate the expected demand for housing that would result from MRIC employees. The City determined that a total of 1,238 housing units could reasonably be expected to be available for MRIC employees. This available housing supply falls short of the project's anticipated need for 2,053 units within the City of Davis. This EIR recognizes that provision of additional housing units within Davis, above the potentially available supply of 1,238 units, would likely require annexation and development of additional land within Davis' SOI, which would require voter approval through Measure R. It is somewhat speculative to determine that the MRIC would lead to indirect residential growth within the City of Davis, above and beyond that which can be accommodated by the potentially available supply of 1,238 units. Rather, this EIR recognizes that the MRIC employee-generated demand for housing within Davis, above that which can be accommodated by 1,238 units, would need to be met within other jurisdictions. Similar to the proposed project, the City's anticipated inability to meet the Alternative's fair share of employee-generated housing is considered a significant population growth impact.

4.12-2 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating environmental effects related to population and housing.

General Plan consistency as related to population and housing policies would be similar under this alternative as compared to the proposed project.

Public Services and Recreation

The impacts related to public services and recreation as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.13-1 Result in substantial adverse physical impacts associated with the provisions of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection facilities.

The 2001 General Plan states that the Fire Department attempts to operate within a standard of a five-minute response time 90 percent of the time. The Covell site is outside of the Department's five-minute response time standard. This is evidenced, in part, by the recent analysis conducted for the adjacent Cannery Project, for which it was estimated that the Cannery site is within a 6-7 minute response time of Station 31. This includes dispatch, turnout, and travel time. The 2004 Covell Village Project, in recognition of this issue, included a fourth City fire station site.

This EIR has determined that the proposed project site (MRIC site) can be adequately served by Station 33. While a fire services impact is not anticipated in the near-term, a cumulative fire protection impact was identified for the proposed project because ultimate development of the proposed project would exacerbate existing demands on the City's downtown fire station. Overall, this Alternative would be expected to have more impacts to fire protection services than the proposed project.

4.13-2 Result in substantial adverse physical impacts associated with the provisions of new or physically altered police protection facilities, and/or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police protection facilities.

Buildout of Off-Site Alternative B (Covell Property) would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but at a different site. As such, similar demands as the proposed project for police protection services and facilities would occur under Off-Site Alternative B (Covell Property). Thus, similar impacts related to adequate police protection services would occur for Off-Site Alternative B (Covell Property). Impacts would be less-than-significant for both sites.

4.13-3 Result in substantial adverse physical impacts associated with the provisions of new or physically altered school facilities, and/or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for school facilities.

Similar to the proposed project, while this Alternative would not introduce housing that could directly lead to greater demands on local schools, children of people who work in Davis may be eligible to attend Davis schools through an interdistrict school transfer. If a parent/guardian of a student is employed in Davis a minimum of 10 hours per week, they are eligible for the transfer based upon parent/guardian employment. Therefore, this Alternative, similar to the proposed project, would not generate additional students within the DJUSD unless the District approves interdistrict transfer students.

In addition, the Davis Joint Unified School District (DJUSD) collects $0.47 per square foot for commercial and industrial uses, which would include the Reduced Site Size Alternative's uses. Pursuant to State law (SB 50), payment of school impact fees is deemed to be full and satisfactory mitigation for development projects. Overall, similar impacts as the proposed project related to adequate school capacity would occur under Off-Site Alternative B Alternative.

4.13-4 Result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for park facilities.

Off-Site Alternative B (Covell Property), based upon its lack of housing, is not strictly subject to the City's parkland dedication requirements. However, the resulting employees which would be accommodated from the Alternative at buildout are expected to have impacts on local parks and recreation if sufficient facilities are not provided on-site. Off-Site Alternative B (Covell Property) employees would be within the City for five or more days per week for at least 8 to 12 hours per day. Given the potential employee use of the project amenities, the parks and recreation facilities are evaluated similar to residential subdivision requirements.

Off-Site Alternative B (Covell Property), given its comparable acreage and employment density, is anticipated to include a similar amount of on-site park/open space acreage as the proposed project (64.6 acres), thus satisfying its internally-generated demand upon parks and recreation facilities. Therefore, similar impacts as the proposed project related to an increased demand for parks and recreation facilities would occur under the Off-Site Alternative B (Covell Property).

4.13-5 Result in substantial adverse physical impacts associated with the provisions of new or physically altered other public facilities, and/or the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.

Buildout of Off-Site Alternative B (Covell Property) would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but at an off-site location. Off-Site Alternative B (Covell Property) would not involve a direct increase in population or housing in the project area. Consequently, similar demands as the proposed project for other public facilities, such as libraries or community centers, would occur under Off-Site Alternative B (Covell Property). Thus, similar impacts as the proposed project related to increased demand for other public facilities would occur under Off-Site Alternative B (Covell Property).

4.13-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public services and recreation.

General Plan consistency as related to public services and recreation policies would be similar under this alternative as compared to the proposed project.

Transportation and Circulation

The impacts related to transportation and circulation as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.14-1 Impacts to Intersections Outside Freeway Interchange Areas.

This EIR has determined that the proposed project at the MRIC site would result in an impact to the intersection of Covell Boulevard/Monarch Lane. Because Off-Site Alternative B (Covell Property) would involve the same buildout square footage and land uses as the proposed project, Fehr & Peers has indicated that the same number of associated vehicle trips and approximate VMT would be generated if the proposed project were to be built at the Covell Site. However, due to its different location, Off-Site Alternative B would not be expected to result in an impact to the Covell Boulevard/Monarch Lane intersection. Rather, intersection impacts outside freeway interchange areas would be more localized to the Covell Site under this Alternative. For example, Fehr & Peers has indicated that development of the same innovation center (2,654,000 sf) at the Covell Site would be expected to require improvements to Pole Line Road, north of Covell Boulevard, given that 20.7 percent of MRIC employees living outside Davis were projected by BAE to live in Woodland. This Alternative is also anticipated to require mitigation improvements to the Covell Boulevard/Pole Line Road intersection. Fehr & Peers has also projected the need to widen the Mace Boulevard curve, under this Alternative, from 2-4 lanes, given that all I-80 destined project traffic would have to use Mace/Covell to travel to/from the Covell Village site.

Therefore, this Alternative would be anticipated to result in more impacts to intersections outside freeway interchange areas, as compared to the proposed project.

4.14-2 Impacts to Intersections within the Mace Boulevard Interchange Area.

According to Fehr & Peers, the traffic modeling for the project indicates that the majority of employees living outside Davis would live east of the I-80 causeway; and they would still use the I-80/Mace interchange as this represents the most direct route to the Covell Site. Therefore, Fehr & Peers anticipates that Off-Site Alternative B would result in the same impacts and mitigation measures to the I-80/Mace interchange that are identified for the proposed project in Section 4.14 of this EIR. As indicated in Section 4.14, the following three intersections would fall to LOS F with the addition of proposed project traffic:

1. Mace Boulevard/I-80 Westbound Ramps

2. Mace Boulevard/2nd Street/County Road 32A
3. Mace Boulevard/Alhambra Drive

As is the case for the proposed project (see Mitigation Measures 4.14-2ff), while mitigation measures may be available to reduce these intersection impacts to a less-than-significant level, they would likely require Caltrans approval. Therefore, similar to the proposed project, impacts to freeway interchange intersections, would be expected to be significant and unavoidable for Off-Site Alternative B.

4.14-3 Impacts to Regional Roadways.

Off-Site Alternative B would result in the same square footage and land uses at buildout, as compared to the proposed project; therefore, this Alternative would generate similar vehicle trips and approximate VMT. Similar to the analysis conducted for the proposed project, this Alternative would not result in significant impacts to regional roadways. Therefore, this Alternative would have similar impacts to regional roadways, when compared to the proposed project, for which this impact was found to be less than significant.

4.14-4 Impacts to Freeways.

Off-Site Alternative B would result in the same square footage and land uses at buildout, as compared to the proposed project; therefore, this Alternative would generate similar vehicle trips and approximate VMT. Similar to the analysis conducted for the proposed project, this Alternative would not result in significant impacts to freeways. Therefore, this Alternative would have similar impacts to freeways, when compared to the proposed project, for which this impact was found to be less than significant.

4.14-5 Impacts to Local Neighborhood Street Traffic.

The Davis General Plan includes policy direction (Policy TRANS 2.7) to minimize impacts of vehicle traffic on local streets to maintain or enhance livability of the neighborhoods. Implementation of the same innovation center project (2,654,000 sf) on the Covell Site would add a substantial amount of AM vehicles to Covell Boulevard, along which is located Davis High School and North Davis Elementary. During a portion of the AM peak hour, parents and students would be making trips to/from the school. Therefore, whereas the proposed project could result in safety issues associated with the addition of project vehicle trips within the neighborhoods surrounding Korematsu Elementary School, this alternative could result in safety issues associated with the proximity of the Covell site to Davis High School. Accordingly, this Alternative would be expected to have similar impacts, as compared to the proposed project.

4.14-6 Increase in Vehicle Miles Traveled

According to Fehr & Peers, buildout of the same square footage and land uses at the Off-Site Alternative B location would generate similar vehicle trips and approximate VMT as the proposed project site. Therefore, impacts related to VMT as a result of the Off-Site Alternative B

would be similar to what is anticipated for the proposed project; and a TDM mitigation measure would be required for both scenarios.

4.14-7 Impacts to Emergency Vehicle Access.

Similar to the proposed project, Off-Site Alternative B (Covell Property) would provide emergency vehicle access points. As such impacts to emergency vehicle access would be similar to the proposed project under Off-Site Alternative B (Covell Property).

4.14-8 Impacts associated with Construction Vehicle Traffic.

As the overall area of disturbance for Off-Site Alternative B (Covell Property) would be greater than that of the proposed project, and would occur in a more urbanized area, the associated short-term construction-related traffic impacts could be more for the Off-Site Alternative B (Covell Property), as compared to the proposed project. The same mitigation measure would be required to reduce impacts.

4.14-9 Impacts to Pedestrian and Bicycle Facilities.

Similar to the proposed project, Off-Site Alternative B would contribute towards the need for additional grade-separated bike/pedestrian facilities. The former Covell Village project proposed to address this by installing three new grade-separated bike crossings: an undercrossing for Covell Boulevard; an undercrossing for Pole Line Road; and an undercrossing at F Street/UPRR tracks. This Alternative would be required to contribute a fair share contribution to the bike/pedestrian grade separation of Covell Boulevard, which the Cannery is required to build. Therefore, impacts to pedestrian and bicycle facilities would be similar to the proposed project under Off-Site Alternative B (Covell Property); and similar mitigation could be required.

4.14-10 Impacts to Transit Services.

Buildout of Off-Site Alternative B (Covell Property) would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but at a different location. Because Off-Site Alternative B (Covell Property) would involve the same number of employees, the same potential to increase future transit riders and demand for transit services would occur. Therefore, impacts to transit services would be similar to the proposed project under Off-Site Alternative B (Covell Property); and it is anticipated that similar mitigation would be required, which may include installation of new bus turnouts along Covell Boulevard and/or Pole Line Road, near the project access. A similar approach was proposed for the Covell Village project.

4.14-11Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to transportation/traffic.

General Plan consistency as related to the City's adopted circulation exhibit and applicable transportation and circulation policies would be similar under this alternative as compared to the proposed project.

Utilities

The impacts related to utilities as a result of buildout of Off-Site Alternative B (Covell Property), in comparison to that of the proposed project, are presented below.

4.15-1 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

This impact was found to be less-than-significant for the proposed project. The same finding would apply to this alternative.

4.15-2 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Buildout of Off-Site Alternative B (Covell Property) would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but at a different site. As such, similar demands as the proposed project for domestic water supply and delivery would occur for Off-Site Alternative B (Covell Property). This EIR has determined that adequate water supply is available to serve the proposed project and future planned development.

4.15-3 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Buildout of Off-Site Alternative B (Covell Property) would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but at a different site. As such, similar demands as the proposed project for wastewater collection and treatment would occur for Off-Site Alternative B (Covell Property). Off-Site Alternative B (Covell Property) would, similar to the proposed project, connect to the City's wastewater collection system and treatment facilities. Because Off-Site Alternative B (Covell Property) would generate the same amount of wastewater as the proposed project, the same impact as the proposed project related to wastewater treatment capacity would occur, and the same mitigation measures would be required. With respect to wastewater conveyance, it should be noted that Off-Site Alternative B may result in impacts to the Covell sewer trunk line, which could require mitigation. However, this EIR has determined that the proposed project would also require sewer conveyance improvements; and two off-site alignments have been identified and evaluated.

4.15-4 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Buildout of Off-Site Alternative B (Covell Property) would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but at a different site. As such, similar demands as the proposed project for solid waste disposal would occur for Off-Site Alternative B (Covell Property). Similar to the proposed project, Off-Site Alternative B (Covell Property) would use the City's solid waste services, and solid wastes would be transferred to the Yolo County Central Landfill for disposal. Because Off-Site Alternative B (Covell Property) would generate the same amount of solid waste as the proposed project, the same impact as the proposed project related to landfill capacity would occur.

4.15-5 Gas and electric facilities.

Buildout of Off-Site Alternative B (Covell Property) would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but at a different site. As such, similar demands as the proposed project for electricity and natural gas would occur for Off-Site Alternative B (Covell Property). According to PG&E, the load demand created by the proposed project would be able to be accommodated by existing substations in the area. As Off-Site Alternative B (Covell Property) would result in the same demand for energy, existing substations would be expected to be adequate to accommodate Off-Site Alternative B (Covell Property) as well. In addition, because the Covell Property is located adjacent to other existing development, existing gas and electric infrastructure would be expected to be located within the roadways surrounding the site. Funding for the installation of necessary gas and electric infrastructure, in coordination with PG&E's planning staff, would still be required for the Off-Site Alternative B (Covell Property). Thus, impacts related to gas and electric facilities would be similar to those of the proposed project under Off-Site Alternative B (Covell Property).

4.15-6 Adequate telecommunication facilities.

Buildout of Off-Site Alternative B (Covell Property) would result in the same intensity and land uses as the proposed project, including the same square footage and employees, but at a different site. As such, similar demands as the proposed project for telecommunication services and facilities would occur for Off-Site Alternative B (Covell Property). The provision of telecommunications services is a collaborative effort between the end-users and the service providers. Similar to the proposed project, prior to constructing each phase of Off-Site Alternative B (Covell Property), the applicant would coordinate with the service providers to identify points of connection to existing telecommunications lines and any needed upgrades to the existing system, which would be designed to occur within existing development areas. As a result, the Off-Site Alternative B (Covell Property) would have a less-than-significant impact to telecommunications facilities, similar to the proposed project.

4.15-7 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to utilities.

General Plan consistency as related to utilities policies would be similar under this alternative as compared to the proposed project.

Cumulative Impacts

For conservative analysis purposes, this cumulative impact comparison is based upon the CEQA Cumulative Scenario.

Off-Site Alternative B's incremental contributions to cumulative impacts, in comparison to the proposed project's incremental contributions to cumulative impacts, are presented below.

5-1 Cumulative impacts related to long-term changes in visual character of the region.

This EIR has determined that the proposed project's incremental contribution to cumulative impacts related to long-term changes in visual character would be cumulatively considerable. Development of the same 2,654,000 sf project on this Alternative site would also be expected to result in a significant contribution to cumulative aesthetic impacts. Both sites are similar in size and agricultural in character, and viewed by similar receptors (residents, motorists, and bicyclists). The incremental contributions of the proposed project and Off-Site Alternative B would be significant and unavoidable.

5-2 Cumulative impacts related to the creation of new sources of light or glare associated with development of the proposed project in combination with future buildout in the City of Davis.

Off-Site Alternative B would result in the development of the same square footage and building heights, as is proposed for the MRIC site, but at an alternate site. Similar to the proposed project site, this alternate site (Covell Site) is partially surrounded by developed areas, and partially by open agricultural fields. Incremental lighting effects associated with both the proposed project and Off-Site Alternative B would be expected to have similar contributions to the cumulative scenario. Overall, Off-Site Alternative B would result in similar cumulative impacts related to light and glare, as the proposed project, and similar mitigation would be required.

5-3 Impacts related to cumulative loss of agricultural land

Due to the farmland designations and current agricultural land uses on Off-Site Alternative B (Covell Property) site, the Alternative would have adverse impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Development of other cumulative projects, such as the Davis IC and Nishi Gateway projects, the sites of which are primarily active agricultural sites, would result in related impacts associated with conversion of farmland. Similar to the proposed project, Off-Site Alternative B (Covell Property), in combination with other cumulative development, would be required to set

aside agricultural mitigation acreage at a 2:1 ratio (two acres of agricultural land for every acre impacted) per City of Davis Municipal Code requirements, which would help to minimize the effects of agricultural land conversion. Nonetheless, the cumulative impacts related to cumulative loss of agricultural land under the Off-Site Alternative B (Covell Property) would be more than the proposed project given that it is 24 acres larger, and the cumulatively considerable and significant and unavoidable impact identified for the proposed project would remain.

5-4 A cumulatively considerable net increase of any criteria pollutant.

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Air pollution is largely a cumulative impact. Consequently, the YSAQMD's approach to cumulative thresholds of significance is relevant to whether a project's individual emissions would result in a cumulatively considerable contribution to the SVAB's existing cumulative impacts related to air quality conditions. If a project's emissions would be less than YSAQMD thresholds, the project would not be expected to result in a cumulatively considerable contribution to a significant cumulative impact. However, exceedance of the project-level thresholds would not necessarily constitute a significant cumulative impact. Because Off-Site Alternative B (Covell Property) would involve the same development as the proposed project, but at an off-site location, similar criteria air pollutant emission would be generated by the Alternative. Accordingly, Off-Site Alternative B (Covell Property) would result in the same cumulatively considerable net increase of criteria pollutants, and related impacts would be similar to the proposed project. Therefore, buildout of Off-Site Alternative B (Covell Property) in conjunction with buildout of the General Plan, Davis IC, and Nishi Gateway would result in a substantial increase in regional emissions from what has been anticipated for the area, and the cumulatively considerable and significant and unavoidable impact identified for the proposed project would remain under Off-Site Alternative B (Covell Property).

5-5 Cumulative habitat loss in the City of Davis.

The habitat loss resulting from Off-Site Alternative B (Covell Property) would combine with related impacts resulting from development of the Davis IC Project, the Nishi Gateway Project, and buildout of the Davis General Plan. The combined effects of the cumulative development scenario would lead to a significant cumulative impact on habitat loss within the cumulative geographic setting. Although Off-Site Alternative B (Covell Property), in combination with other cumulative development, would be required to implement mitigation measures to minimize the effects of habitat loss, the cumulative impact, as well as Off-Site Alternative B (Covell Property)'s incremental contribution, would, similar to the proposed project, be cumulatively considerable. The significant and unavoidable impact identified for the proposed project would remain under Off-Site Alternative B (Covell Property).

5-6 Cumulative impacts to movement corridors in the City of Davis area.

Similar to the proposed project site, the Off-Site Alternative B site currently provides open spaces for wildlife movements. Also similar to the proposed project, it is anticipated that this Alternative site would continue to provide movement corridors within the perimeter buffers and

drainage areas. Therefore, the incremental contribution of both the proposed project and Off-Site Alternative to this cumulative impact would be similar (i.e., less than cumulatively considerable).

5-7 Cumulative loss of cultural resources.

While some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site are generally not made worse by impacts from another project to a cultural resource at another site. Rather the resources and the effects upon them are generally independent. Similar to the proposed project, site-specific impacts to cultural resources would be avoided during construction of this Alternative, via implementation of standard mitigation measures.

5-8 Cumulative increase in the potential for geological related impacts and hazards.

Potentially adverse environmental effects associated with geologic or soils constraints, topographic alteration, and erosion, are usually site-specific and generally would not combine with similar effects that could occur with other projects in Davis. Furthermore, all projects in the cumulative scenario would be required to comply with the California Building Code, the City of Davis's General Plan, and other applicable regulations. Consequently, Off-Site Alternative B, similar to the proposed project, would generally not be affected by, nor would it affect, other development approved by the City of Davis. Therefore, Alternative impacts related to a cumulative increase in the potential for geological related impacts and hazards would be less than cumulatively considerable, similar to the proposed project.

5-9 Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.

GHG is a cumulative impact. Therefore, similar to the conclusion for impacts 4.7-1 and 4.7-2, this Alternative's incremental contribution to GHG emissions would be similar to the proposed project's incremental contribution, and both scenarios would result in significant and unavoidable impacts. Implementation of Mitigation Measure 4.7-2 sets GHG reduction targets and accountability for the proposed project, but it would not guarantee reductions that show that the development would be able to achieve the City's carbon neutral target by 2050. This mitigation measure would also be applicable to Off-Site Alternative B. Therefore, this impact would be significant and unavoidable for both the proposed project and Off-Site Alternative B.

5-10 Cumulative impacts related to energy.

Similar to the proposed project, buildout of Off-Site Alternative B in conjunction with buildout of the General Plan, Davis IC, and Nishi Gateway would result in a substantial increase in demand on energy resources from existing levels that would represent a large commitment of non-renewable resources. Although cumulative buildout would cause an irreversible consumption of energy, because each project, similar to the proposed project, would be required to comply with all applicable regulations for reducing energy demand, cumulative development would not be expected to result in an inefficient, wasteful, and unnecessary consumption of

energy. Overall, this Alternative's incremental contribution to cumulative impacts on energy would be similar to the proposed project.

5-11 Increase in the number of people who could be exposed to potential hazards or hazardous materials and an increase in the transport, storage, and use of hazardous materials due to development of the proposed project in combination with future buildout in the City of Davis.

Project-specific impacts related to hazards and hazardous materials under Off-Site Alternative B (Covell Property) would be similar to the proposed project, which were found to be less-than-significant with implementation of mitigation measures. In addition, Off-Site Alternative B (Covell Property) and surrounding development would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community, including potential effects, if any, on the project site. Compliance with all applicable regulations would ensure that development of Off-Site Alternative B (Covell Property) in conjunction with the Davis IC, Nishi Gateway, and buildout of the City's General Plan would not result in any substantial increases in the potential for people to be exposed to hazards or hazardous materials due to an increase in the transport, storage, and use of hazardous materials. Therefore, Off-Site Alternative B (Covell Property) would result in similar impacts as the proposed project related to such.

5-12 Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area.

Off-Site Alternative B is anticipated to discharge treated runoff into Channel A, which is hydrologically connected to the Willow Slough Bypass. Therefore, the increase in runoff volume resulting from development of Off-Site Alternative B would combine with other flows from planned developments and result in possible backup of floodwaters onto off-site properties during storm events when water in the Willow Slough Bypass is high. This cumulative condition is similar to the condition projected for the proposed project, with the exception that the backup of runoff would occur onto properties adjacent to the Yolo Bypass, given the Mace Drainage Channel's connectivity to the Yolo Bypass. Therefore, this Alternative's incremental contribution to cumulative runoff volume effects would be similar to the proposed project.

5-13 Cumulative impacts to water quality within the City of Davis.

Continued development within the City of Davis, including Off-Site Alternative B (Covell Property), would result in additional stormwater runoff and entry of pollutants into receiving waters via construction and operation of future projects. However, Off-Site Alternative B (Covell Property) and each future project would be required to comply with the City's regulatory stormwater documents, standards, and requirements. Similar to the proposed project, Off-Site Alternative B (Covell Property) would integrate Low Impact Development measures throughout the project to provide stormwater quality treatment. Although Off-Site Alternative B (Covell Property), similar to the proposed project, would not result in any significant impacts related to water quality or stormwater quality, the combined effects of increased runoff flows resulting

from construction and operation of cumulative projects could be considered significant. However, as similar mitigation as the proposed project would be required for Off-Site Alternative B (Covell Property), as well as compliance with City ordinances, the incremental contribution resulting from the Alternative would be considered less than cumulatively considerable, similar to the proposed project.

5-14 Cumulative land use incompatibilities.

Land use conflicts are site-specific and would not result in a cumulative impact. Incompatibility issues are addressed and mitigated on a project-by-project basis. The Off-Site Alternative B would be designed to be consistent with applicable aspects of the City's General Plan.

5-15 Cumulative urban decay.

Because Off-Site Alternative B (Covell Property) would involve the same development as the proposed project, but at an off-site location, the Alternative would result in a similar contribution to cumulative urban decay impacts. Therefore, while Off-Site Alternative B (Covell Property) would result in effects to urban decay, in combination with related effects of other cumulative development, that would be considered significant, the Alternative's contribution to the significant cumulative impact would be less than cumulatively considerable, similar to the proposed project.

5-16 Cumulative impacts on noise-sensitive receptors.

As the same buildout and land uses would occur under Off-Site Alternative B, as compared to the proposed project, the project traffic consultant has indicated that the same number of associated vehicle trips and approximate VMT would occur. Consequently, similar traffic conditions would be expected on area roadways, which would result in similar traffic-related noise in the area, as compared to the proposed project. Thus, impacts under the Off-Site Alternative B would be similar to the proposed project associated with transportation noise at existing sensitive receptors.

The EIR determined that the proposed project's traffic noise contribution would not result in impacts to existing receptors along roadways surrounding the MRIC site. Given that this Alternative is located at a different site, where residential receptors, are in some cases, located in closer proximity to heavily traveled roadways, as compared to the proposed project, the possibility exists that the Off-Site Alternative A could result in more traffic noise impacts to existing sensitive receptors. In such an event, this Alternative's incremental contribution to cumulative traffic noise effects on sensitive receptors would be more than the proposed project's incremental contribution.

5-17 Cumulative traffic noise effects on proposed uses.

Although the project's sensitive uses would be located along different roadways under this Alternative, it is anticipated, similar to the conclusion for the proposed project, that site design (e.g., building orientation) and building construction (e.g., STC-rated windows) can be carried

out in such a manner as to ensure that outdoor and indoor noise levels, resulting from cumulative traffic, are at or below the City's relevant standards. Thus, cumulative impacts under the Off-Site Alternative B would be similar to the proposed project associated with transportation noise at new sensitive receptors.

5-18 Cumulative population and housing impacts.

As shown in Table 4.12-12 of the Population and Housing section, the estimated employee housing demand at buildout of the MRIC is 3,763, which would be the same for this Alternative given the similar land uses and buildout square footages. Using the methodology described in Table 4.12-12, out of the total employee housing demand of the MRIC of 3,763 units, an employee housing demand for 2,053 units would occur within the City of Davis.[23] The remaining housing units (1,710) needed to meet the MRIC's employee housing demand would be met outside of the City of Davis, within the six-county SACOG region.

Assuming that 1,238 housing units out of the 2,053 units would be available to accommodate the MRIC's total employee housing demand within the City of Davis, the resultant MRIC employee housing demand that cannot be accommodated in the City of Davis would be 815 housing units. This unmet housing demand within the City of Davis would then need to be met within surrounding jurisdictions.

Under the CEQA Cumulative Scenario, the MRIC project, in combination with the Davis IC and Nishi Gateway projects, and General Plan buildout, is projected to result in an unmet housing demand within the City of Davis of 4,530 units.[24] This unmet cumulative total is substantially more than the project's incremental unmet total of 815 units. As such, the combined effect of this unmet housing demand on other jurisdictions within the SACOG region would be significant with respect to inducing substantial population growth.

The 4,530 residential units that cannot be accommodated within the City of Davis, however, could be accommodated within the SACOG region, as evidenced in the MTP/SCS EIR, which concluded that the SACOG region would be sufficient to house all of the projected population and housing units expected to reside in the region through 2035.[25] According to SACOG, the entire proposed project (comprising the MRIC and Mace Triangle) and Davis IC project would not exceed SACOG's regional employment projections; and therefore the employee household demand from the CEQA Cumulative Scenario is already accounted for in the MTP/SCS projections. [26] Notwithstanding this, because the City of Davis is not anticipated to provide its share of employee-generated housing for the MRIC, this Alternative, similar to the proposed project, would result in a cumulatively considerable incremental impact with respect to inducing

[23] See Table 4.12-12.

[24] BAE Urban Economics. *City of Davis Economic Evaluation of Innovation Park Proposals.* May 11, 2015, Table C1.

[25] Sacramento Area Council of Governments. *Metropolitan Transportation Plan/Sustainable Communities Strategy EIR [pg. 14-16]*. February 2012.

[26] Gordon Garry, Director of Research and Analysis, SACOG. Employment and Housing Demand Associated with Innovation Center Development *Letter*. April 10, 2015.

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

5-19 Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.

Both Off-Site Alternative B and the proposed project would result in a significant incremental contribution to cumulative fire protection services impacts given that they will exacerbate existing demands experienced at the Fire Department's downtown station. The relative contribution of each scenario to this cumulative impact would be the same given that Off-Site Alternative B includes the same square footage and types of land uses as the proposed project. Overall, the Off-Site Alternative B (Covell Property), in combination with past, present, and probable future projects, would result in similar cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis as the proposed project, which were identified as cumulatively considerable and significant and unavoidable. Similar mitigation as the proposed project would be required for Off-Site Alternative B (Covell Property).

5-20 Cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis.

Similar to the proposed project, Off-Site Alternative B (Covell Property), as well as each future development project including buildout of the City's General Plan, Davis IC, the Mace Triangle Site, and the Nishi Gateway Property, would be required by the City of Davis to pay adopted development impact fees, which include fees for such services as public safety, general facilities, roadways, parks, and open space. Each project's payment of adopted City impact fees for public services and recreation would ensure that the combined, related effects of cumulative development on public services and recreation would not be significant. Therefore, Off-Site Alternative B (Covell Property) would result in a similar incremental contribution towards cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis as the proposed project, which were identified as being less than cumulatively considerable.

5-21 Cumulative Impacts to Intersections Within the Freeway Interchange Area.

According to Fehr & Peers, the traffic modeling for the project indicates that the majority of employees living outside Davis would live east of the I-80 causeway; and they would still use the I-80/Mace interchange as this represents the most direct route to the Covell Site. Therefore, Fehr & Peers anticipates that Off-Site Alternative B would result in the same cumulative impacts and mitigation measures to the I-80/Mace interchange that are identified for the proposed project in Chapter 5 of this EIR. As indicated in Chapter 5, the following two intersections would be impacted with the addition of proposed project traffic:

1. Mace Boulevard/I-80 Westbound Ramps
2. Mace Boulevard/2nd Street/County Road 32A

While mitigation measures are available to reduce this Alternative's incremental contribution to cumulative intersection impacts to a less-than-significant level, they would require Caltrans approval. Therefore, similar to the proposed project, impacts to freeway interchange intersections, would be expected to be significant and unavoidable.

5-22 Cumulative Impacts to Roadway Segments.

Because Off-Site Alternative B (Covell Property) would involve the same development as the proposed project, but at an off-site location, the Alternative would result in the same number of associated vehicle trips and approximate VMT. This EIR determined that the proposed project's incremental traffic would result in significant cumulative impacts to five (5) roadways segments. The preliminary analysis conducted for the Davis Innovation Center site has indicated that up to six (6) roadway segments could be impacts if an innovation center was built at the west Davis location. While development of the same MRIC project on the Covell Site may not impact the same segments, the magnitude of roadway segments impacts would be expected to be similar. Therefore, a similar incremental contribution towards cumulative impacts to roadway segments would occur, and impacts would be expected to remain cumulatively considerable and significant and unavoidable under Off-Site Alternative B (Covell Property).

5-23 Cumulative Impacts to Local Area Freeway Segments.

This EIR has determined that the proposed project's incremental contribution to cumulative traffic would result in impacts to four (4) freeway segments:

1. I-80 Eastbound, PM peak hour, Mace to Chiles
2. I-80 Eastbound, PM peak hour, Chiles to Enterprise
3. I-80 Westbound, AM peak hour, Enterprise to Chiles
4. I-80 Westbound, AM peak hour, Chiles to Mace

Based upon preliminary traffic engineering analysis conducted by Fehr & Peers, it is anticipated that this Alternative's incremental contribution to the cumulative traffic scenario would result in impacts to the same four (4) freeway segments.

While mitigation measures may be available to reduce this Alternative's incremental contribution to cumulative intersection impacts to a less-than-significant level, they would require Caltrans approval. Therefore, similar to the proposed project, impacts to freeway facilities, would be expected to be significant and unavoidable.

5-24 Cumulative Impacts to Regional Transportation Facilities.

Similar to the proposed project, whose incremental traffic contribution in the cumulative setting was determined not to have a significant impact to regional facilities, Off-Site Alternative B is not anticipated to result in cumulatively considerable impacts to regional transportation facilities given the expectation that regional trips to/from the Covell Site would be similarly distributed to regional trips to/from the proposed MRIC site. Therefore, this Alternative would result in similar cumulative impacts to regional facilities.

5-25 Cumulative water system impacts.

As discussed in the Utilities section of this EIR, sufficient water supplies are available to serve the proposed project and other proposed projects, as well as the buildout demands of the City's current service area, over the next 20 years during normal-year, single-dry year, and multiple-dry year scenarios. Because Off-Site Alternative B (Covell Property) would involve the same development as the proposed project, but at an off-site location, the Alternative would result in a similar demand for water supply and delivery. As such, sufficient water supplies would be available to serve Off-Site Alternative B (Covell Property). As also discussed in the Utilities section of this EIR, the City's existing water delivery infrastructure system would be able to accommodate the domestic and fire flow demands associated with the proposed project and cumulative development, including General Plan buildout and the Davis IC and Nishi Gateway projects. Therefore, cumulative water system impacts would be similar to the proposed project under Off-Site Alternative B (Covell Property), and would be less than cumulatively considerable.

5-26 Cumulative wastewater treatment and collection system impacts.

Based on flow considerations alone, the WWTP would have the capacity to accommodate flows from all future General Plan buildout development, plus the flows from the proposed, Davis IC, and Nishi Gateway projects. However, based on BOD loading considerations, adequate WWTP capacity does not appear to exist to fully accommodate the proposed cumulative projects not anticipated in the General Plan. Because Off-Site Alternative B (Covell Property) would involve the same development as the proposed project, but at an off-site location, the Alternative would result in a similar demand for wastewater treatment and collection system services. Therefore, the same mitigation measures as identified for the proposed project would be required for Off-Site Alternative B (Covell Property) in order to ensure the Alternative's wastewater effects, in combination with related effects from cumulative development, would be reduced to less than cumulatively considerable. Overall, cumulative wastewater treatment and collection system impacts would be similar to the proposed project under Off-Site Alternative B (Covell Property).

5-27 The project may contribute to cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications.

Because Off-Site Alternative B (Covell Property) would involve the same development as the proposed project, but at an off-site location, the Alternative would result in a similar demand for utilities, including solid waste, natural gas, electricity, and telecommunications. Therefore, cumulative impacts related to such would be similar to the proposed project under Off-Site Alternative B (Covell Property), which were identified as less than cumulatively considerable.

7.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally

superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

A comparison of the proposed project to the project alternatives, discussed in detail above, is provided in Table 7-8, below. Although the No Project (No Build) Alternative would result in the fewest impacts in all resources areas compared to the proposed project, and all other alternatives even after accounting for anticipated mitigation measures, the No Project (No Build) Alternative would not satisfy any of the project objectives.

The next most environmentally superior alternative is the Reduced Project Alternative.[27] This alternative would result in less impact as compared to the project; however, it fails to achieve the fundamental objectives of the City or the applicant to develop an integrated innovation center campus of approximately 200 acres in size, with sufficient land to meet demand over a 20 to 25 year period, and a critical mass of users of various sizes sufficient to support the necessary infrastructure and amenities to allow for a full range of research and market uses.

The Reduced Site Size Alternative would also result in less impact overall as compared to the proposed project simply because the site size is reduced. This alternative would meet some of the objectives of the proposed project. However, the smaller site size would make it difficult to achieve a sufficient long term land supply for the full range of projected uses including those that require larger building footprints. The smaller site would double the intensity of development over the site, which would result in design challenges and may be too dense to attract some desirable R&D users. The ability to attract medium scale and large-scale users would be affected by the small footprint and there would be less flexibility in the user space to address the specific needs of some tenants as a result.

The most environmentally superior alternative that appears to best meet the project objectives is the Mixed Use Alternative. The Mixed Use Alternative would result in greater impacts than the proposed project related to BOD loading at the wastewater treatment plant and aesthetics related to increased building heights. However, as compared to the project, this alternative will achieve reductions in daily VMT and GHG emissions, lower AM and PM peak hour vehicle trips, fewer impacts at Mace Boulevard, and elimination of impacts related to population and housing (see Table 7-7). This alternative is thus environmentally superior and meets all of the objectives of the City and applicant. However, it should be noted that because it includes housing it is not consistent with the City's expressed goal of having only non-residential uses within the innovation center.

[27] For example, Fehr & Peers has concluded that two significant and unavoidable proposed project impacts would likely be eliminated under the Reduced Project Alternative, as follows: intersections within the Mace Boulevard Interchange Area (Impact 4.14-2), and local neighborhood street traffic (Impact 4.14-5). Also, with respect to air quality, this chapter has determined that the Reduced Project Alternative's criteria air pollutant emissions would be below the YSAQMD's thresholds of significance for ROG, NO_X, and PM_{10}. Therefore, the Reduced Project Alternative would avoid the proposed project's significant and unavoidable operational air quality impact (Impact 4.3-2). Other significant and unavoidable impacts avoided by the Reduced Project Alternative are those related to population and housing (Impact 4.12-1 and Impact 5-18). This is because this Alternative's reduced demand for employee housing with the City of Davis can be accommodated by the projected available housing stock within Davis.

While the Mixed Use Alternative is identified as the Environmentally Superior alternative under CEQA, the ultimate decision regarding feasibility of the alternatives lies with the City Council. The Council will make findings regarding the desirability of the proposed project and the feasibility of each alternative. In their deliberations, the Council may consider the following related to the feasibility of each alternative:

- Attainment of Project Objectives
- Avoidance or Substantial Lessening of Significant Effects
- Suitability of Alternative Sites or Site Layouts
- Economic Viability
- Availability of Infrastructure
- General Plan Consistency
- Other Plans or Regulatory Limitations
- Jurisdictional Boundaries/Regional Context
- Property Ownership and Control
- Other Reasons for Rejecting as Infeasible

An assessment of how these factors apply to each alternative will be prepared for the Council to consider and adopt at the time final action is taken on the project.

Table 7-7
Mixed-Use Alternative in Comparison to the Proposed Project
Environmental Benefits vs. Increased Impacts

Environmental Benefits			
	Proposed Project	**Mixed-Use Alternative**	**Comments**
VMT (daily)	196,000	139,000	Mixed-Use Alt reduces daily VMT by approx. 29%.
AM Peak Hour Trips	2,361 (+92 for Mace Triangle)	1,480 (+92 for Mace Triangle)	Mixed-Use Alt reduces AM peak hour trips by approx. 37%.
PM Peak Hour Trips	2,175 (+87 for Mace Triangle)	1,435 (+87 for Mace Triangle)	Mixed-Use Alt reduces PM peak hour trips by approx. 34%.
Annual GHG Emissions (Mitigated)	26,043 MTCO2e/yr	22,128 MTCO2e/yr	Mixed-Use Alt reduces annual GHG emissions by approx. 15%.
Project-Level Impacts to Intersections within the Mace Boulevard Interchange Area	Three Mace interchange intersections impacted by proposed project traffic. Impact is significant and unavoidable.	No Mace interchange intersections impacted. Impact is less-than-significant.	The three intersections impacted by proposed project are: 1. Mace Boulevard/I-80 Westbound Ramps 2. Mace Boulevard/2nd Street/CR 32A 3. Mace Boulevard/Alhambra Drive
Project-Level and Cumulative Population and Housing Impacts	Impact is significant and unavoidable.	Impact is less-than-significant.	For the proposed project, City of Davis cannot fully meet its projected share of MRIC employee housing demand, possibly resulting in increased urbanization pressures for the City of Davis environs and/or the need to accommodate this unmet demand within neighboring jurisdictions. For the Mixed-Use Alt, the unmet demand for employee housing in Davis, resulting from the innovation center, will be provided on-site.
Increased Impacts			
	Proposed Project	**Mixed-Use Alternative**	**Comments**
Wastewater (Average Dry Weather BOD[1] Load)	440 lbs/day	700 lbs/day	Proposed Project BOD impact to the City's WWTP is less-than-significant. Mixed-Use Alt BOD impact to the WWTP is significant, thus requiring mitigation.
Aesthetics (i.e., Building Heights)	R&D Max Height: 55 ft Hotel Max Height: 75 ft	R&D Max Height: 65 ft Hotel and Housing Max Height: 85 ft.	For the Mixed-Use Alt, over 50% of the site will contain taller buildings. Though, the magnitude of the building heights will be less for the proposed project, impacts associated with change in visual character of the site will be SU for both the proposed project and the Mixed-Use Alt.

[1] (BOD) Biochemical Oxygen Demand

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
Aesthetics and Visual Resources							
4.1-1 Substantial adverse effect on a scenic vista.	Less Than Significant	N/A	Similar	Similar	Similar	Similar	Less Than Significant
4.1-2 Substantially degrade the existing visual character or quality of the project site and its surroundings.	Significant and Unavoidable	Less[1]	Less[2]	Less[2]	Similar[2]	Similar[2]	Significant and Unavoidable
4.1-3 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.1-4 Conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and visual resources.	Less Than Significant with Mitigation	Similar	Similar	Similar	Similar	Similar	Less Than Significant with Mitigation
Agriculture and Forest Resources							
4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands), as shown on the maps	Significant and Unavoidable	Less[1]	Less[2]	Less[2]	Less[1]	More[2]	Significant and Unavoidable

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.							
4.2-2 Impacts related to conflicting with existing zoning for agricultural use.	Less Than Significant	Less	Less	Less	Similar	Similar	Less Than Significant
4.2-3 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use.	Significant and Unavoidable	Less[1]	Less[2]	Less[2]	Less[2]	Similar[2]	Significant and Unavoidable
4.2-4 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.	Significant and Unavoidable	Less[1]	Less[2]	Less[2]	Similar[2]	Less[2]	Significant and Unavoidable
4.2-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental	Less Than Significant	Similar	Less	Less	Less	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
effects related to agricultural resources.							
Air Quality							
4.3-1 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.	Less Than Significant	More	Less	Less	Similar	More	Less Than Significant
4.3-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during operations, and a conflict with or obstruction of implementation of applicable air quality plans.	Significant and Unavoidable	Less[1]	Similar[2]	Less[1]	Similar[2]	Similar[2]	Significant and Unavoidable
4.3-3 Expose sensitive receptors to substantial pollutant concentrations.	Less Than Significant	Similar	Similar	Less	Similar	Similar	Less Than Significant
4.3-4 Create objectionable odors affecting a substantial number of people.	Less Than Significant	Similar	Similar	Less	Similar	Similar	Less Than Significant
4.3-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the	Less Than Significant	Similar	Similar	Similar or Less	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
purpose of avoiding or mitigating environmental effects related to air quality.							
Biological Resources							
4.4-1 Impacts to Special-status plant species.	Less Than Significant with Mitigation	Similar	Less	Less	Similar	Similar	Less Than Significant with Mitigation
4.4-2 Impacts to Valley elderberry longhorn beetle.	Less Than Significant with Mitigation	Less	Similar	Less	Similar or Less	Similar	Less Than Significant with Mitigation
4.4-3 Impacts to Giant garter snake.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.4-4 Impacts to Burrowing owl.	Less Than Significant with Mitigation	Less	Less	Less	Similar	Similar	Less Than Significant with Mitigation
4.4-5 Impacts to Swainson's hawk.	Significant and Unavoidable	Less	Less[2]	Less[2]	Less[2]	Similar[2]	Significant and Unavoidable
4.4-6 Impacts to raptors, nesting birds, or other birds protected under the MBTA.	Less Than Significant with Mitigation	Similar	Less	Less	More	Similar	Less Than Significant with Mitigation

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
4.4-7 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.4-8 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Less Than Significant	Similar (no wetlands on-site)	Similar (no wetlands on-site)	Similar	Similar or Possibly More	More	Less Than Significant
4.4-9 Interfere substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.	Less Than Significant	Less	Less	Less	Similar	Similar	Less Than Significant
4.4-10 Conflict with any local policies or ordinances protecting biological	Less Than Significant	Less	Similar	Less	More	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

	Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
	resources, such as a tree preservation policy or ordinance.							
4.4-11	Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.	Less Than Significant with Mitigation	More	Similar	Similar	Similar	Similar	Less Than Significant with Mitigation
4.4-12	Conflict, or create an inconsistency, with any applicable biological resources plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant with Mitigation	Similar	Similar	Similar	Similar	Similar	Less Than Significant with Mitigation
	Cultural Resources							
4.5-1	Cause a substantial adverse change in the significance of a historical resource.	Less Than Significant with Mitigation	Less	Similar	Less	Less	Similar	Less Than Significant with Mitigation
4.5-2	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5	Less Than Significant with Mitigation	Less	Less	Less	Similar	Similar	Less Than Significant with Mitigation
4.5-3	Directly or indirectly destroy a unique	Less Than Significant	Less	Less	Less	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

	Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
	paleontological resource or unique geologic feature on the project site.	with Mitigation						with Mitigation
4.5-4	Disturb any human remains, including those interred outside of formal cemeteries.	Less Than Significant with Mitigation	Less	Less	Less	Similar	Similar	Less Than Significant with Mitigation
4.5-5	Conflict, or create an inconsistency, with any applicable cultural resources plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant	Similar	Similar	Less	Similar	Similar	Less Than Significant
	Geology, Soils, and Mineral Resources							
4.6-1	Risks to people and structures associated with seismic activity, including ground shaking and ground failure.	Less Than Significant	Less	Similar	Less	Similar	Similar	Less Than Significant
4.6-2	Result in substantial soil erosion or loss of topsoil.	Less Than Significant with Mitigation	More	Less	Less	Similar	More	Less Than Significant with Mitigation
4.6-3	Be located on a geologic unit or soil that is unstable, or that would become	Less Than Significant with	Less	Similar	Less	Similar	Similar	Less Than Significant with

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
unstable as a result of the project, and potentially result in lateral spreading, subsidence, liquefaction, or collapse.	Mitigation						Mitigation
4.6-4 Be located on expansive soil, as defined in Table 118-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.6-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology, soils, and mineral resources.	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant
Greenhouse Gas Emissions and Energy							
4.7-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	Significant and Unavoidable	Fewer	Similar[2]	Less[2]	Similar[2]	Similar[2]	Significant and Unavoidable
4.7-2 Conflict with an applicable plan, policy or regulation	Significant and	None	Similar[2]	Less[2]	Similar[2]	Similar[2]	Significant and

Table 7-8
Alternative Environmental Impacts Comparison

	Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
	adopted for the purpose of reducing the emissions of greenhouse gases?	Unavoidable						Unavoidable
4.7-3	Impacts related to energy associated with construction.	Less Than Significant	None	Similar	Less	Similar	Similar	Less Than Significant
4.7-4	Impacts related to energy associated with operations.	Less Than Significant with Mitigation	Fewer	Similar or Less	Less	Similar	Similar	Less Than Significant with Mitigation
4.7-5	Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to GHG emissions and energy conservation.	Less Than Significant	None	Similar	Less	Similar	Similar	Less Than Significant
	Hazards and Hazardous Materials							
4.8-1	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Less Than Significant	More	Similar	Similar	Similar	Similar	Less Than Significant
4.8-2	Create a significant hazard to the public or the	Less Than Significant	Similar	Similar	Similar	Similar	More	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with the existing on-site wells, canals, nearby uses, or soil contamination.	with Mitigation						with Mitigation
4.8-3 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant
4.8-4 Expose people or structure to a significant risk of loss, injury, or death involving widland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	Less Than Significant	Less	Similar	Similar	Similar	Similar	Less Than Significant
4.8-5 Conflict, or create an inconsistency, with applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

	Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
	effects related to hazards and hazardous materials.							
	Hydrology and Water Quality							
4.9-1	Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.	Less Than Significant with Mitigation	Less	Less	Less	Similar	Similar	Less Than Significant with Mitigation
4.9-2	Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality through erosion during construction.	Less Than Significant with Mitigation	Less	Less	Less	Similar	More	Less Than Significant with Mitigation
4.9-3	Violate any water quality standards or waste	Less Than Significant	Less	Less	Less	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

	Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
	discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations.							
4.9-4	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g, the production rate or preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).	Less Than Significant	More	Similar	Less	Similar	Similar	Less Than Significant
4.9-5	Place structure within a 100-year flood hazard as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or flood hazard delineation map; or place within a 100-	Less Than Significant	Similar	Similar	Similar	More	More	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
year floodplain structures which would impede or redirect flood flows; or expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.							
4.9-6 Impacts related to conflicts, or creation of an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality.	Less Than Significant	Similar	Similar	Similar	More	Similar	Less Than Significant
Land Use and Urban Decay							
4.10-1 Physical division of an established community.	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant
4.10-2 Economic and social change and/or effect that result in urban decay.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.10-3 Conflict, or create an inconsistency, with any applicable land use and	Less Than Significant	Similar	Similar	Similar or More	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
urban decay plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.							
Noise and Vibration							
4.11-1 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project.	Less Than Significant	More	Less	Less	More	More	Less Than Significant
4.11-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	Less Than Significant	More	Less	Less	More	More	Less Than Significant
4.11-3 Transportation noise impacts to existing sensitive receptors in the project vicinity.	Less Than Significant	Less	Similar	Less	More	More	Less Than Significant
4.11-4 Transportation noise impacts to new sensitive receptors in the project vicinity.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.11-5 Operational noise.	Less Than Significant	Less	Less	Less	Similar	More	Less Than Significant
4.11-6 Conflict, or create an inconsistency, with any applicable plan, policy, or	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise.							
Population and Housing							
4.12-1 Induce substantial population growth.	Significant and Unavoidable	Less	Similar[2]	Less[1]	Similar[2]	Similar[2]	Less Than Significant
4.12-2 Conflict, or create an inconsistency, with any applicable population and housing plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant
Public Services and Recreation							
4.13-1 Result in substantial adverse physical impacts associated with the provisions of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant	Less Than Significant	Less	Similar	Less	Similar	More	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection facilities.							
4.13-2 Result in substantial adverse physical impacts associated with the provisions of new or physically altered police protection facilities, and/or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police protection facilities.	Less Than Significant	Less	Similar	Less	Similar	Similar	Less Than Significant
4.13-3 Result in substantial adverse physical impacts associated with the provisions of new or physically altered school facilities, and/or the need	Less Than Significant	Less	Similar	Less	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
for new or physically altered school facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for school facilities.							
4.13-4 Result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for park facilities.	Less Than Significant with Mitigation	Less	More	Similar	Similar	Similar	Less Than Significant
4.13-5 Result in substantial adverse physical impacts associated with the	Less Than Significant	Less	Similar	Less	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
provisions of new or physically altered other public facilities, and/or the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.							
4.13-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public services and recreation.	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant
Transportation and Circulation							
4.14-1 Impacts to Intersections Outside Freeway Interchange Areas.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	More	Less Than Significant with Mitigation
4.14-2 Impacts to Intersections within the Mace Boulevard	Significant and	Less[1]	Similar[2]	Less[3]	Similar[2]	Similar	Less than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
Interchange Area.	Unavoidable						
4.14-3 Impacts to Regional Roadways.	Less than Significant	Less	Similar	Less	Similar	Similar	Less than Significant
4.14-4 Impacts to Freeways.	Less Than Significant	Less	Similar	Less	Similar	Similar	Less Than Significant
4.14-5 Impacts to Local Neighborhood Street Traffic.	Significant and Unavoidable	Less	Similar[2]	Less[3]	Similar[2]	Similar	Significant and Unavoidable
4.14-6 Increase in Vehicle Miles Traveled	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.14-7 Impacts to Emergency Vehicle Access.	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant
4.14-8 Impacts associated with Construction Vehicle Traffic.	Less Than Significant with Mitigation	Less	Similar	Less	More	More	Less Than Significant with Mitigation
4.14-9 Impacts to Pedestrian and Bicycle Facilities.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.14-10 Impacts to Transit Services.	Less Than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Significant with Mitigation
4.14-11 Conflict, or create an inconsistency, with any	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to transportation/traffic.	with Mitigation						with Mitigation
Utilities							
4.15-1 Would the project exceed wa	Less Than Significant	Less	Similar	Similar	Similar	Similar	Less Than Significant
4.15-2 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.	Less Than Significant	Similar	Similar	Less	Similar	Similar	Less Than Significant
4.15-3 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than Significant with Mitigation	Less	Similar	Less	Similar	Similar	Less than Significant with Mitigation
4.15-4 Would the project be served by a landfill with sufficient	Less Than Significant	Less	Similar	Less	Similar	Similar	Less Than Significant

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
permitted capacity to accommodate the project's solid waste disposal needs or fail to comply with federal, State, and local statutes and regulations related to solid waste.							
4.15-5 Gas and electric facilities.	Less Than Significant	Less	Similar	Less	Similar	Similar	Less Than Significant
4.15-6 Adequate telecommunication facilities.	Less Than Significant	Less	Similar	Less	Similar	Similar	Less Than Significant
4.15-7 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to utilities.	Less Than Significant	Similar	Similar	Similar	Similar	Similar	Less Than Significant
Cumulative Impacts							
5-1 Cumulative impacts related to long-term changes in visual character of the region associated with development of the proposed project in combination with future buildout in the City of	Cumulatively Considerable and Significant and Unavoidable	Less[1]	Similar[2]	Less[2]	Similar[2]	Similar[2]	Cumulatively Considerable and Significant and Unavoidable

Table 7-8
Alternative Environmental Impacts Comparison

	Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
	Davis.							
5-2	Cumulative impacts related to the creation of new sources of light or glare associated with development of the proposed project in combination with future buildout in the City of Davis.	Less Than Cumulatively Considerable with Mitigation	Less	Similar	Less	Similar	Similar	Less Than Cumulatively Considerable with Mitigation
5-3	Impacts related to cumulative loss of agricultural land.	Cumulatively Considerable and Significant and Unavoidable	Less[1]	Less[2]	Less[2]	Less[2]	More[2]	Cumulatively Considerable and Significant and Unavoidable
5-4	A cumulatively considerable net increase of any criteria pollutant.	Cumulatively Considerable and Significant and Unavoidable	Less[1]	Similar[2]	Less[1]	Similar[2]	Similar[2]	Cumulatively Considerable and Significant and Unavoidable
5-5	Cumulative habitat loss in the City of Davis area for special-status species.	Cumulatively Considerable and Significant and Unavoidable	Less	Less[2]	Less[2]	Similar[2]	Similar[2]	Cumulatively Considerable and Significant and Unavoidable

Table 7-8
Alternative Environmental Impacts Comparison

	Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
5-6	Cumulative impacts to movement corridors in the City of Davis area.	Less Than Cumulatively Considerable	Less	Less	Less	Similar	Similar	Less Than Cumulatively Considerable
5-7	Cumulative loss of cultural resources.	Less Than Cumulatively Considerable	N/A Site-specific	N/A Site-specific	N/A Site-specific	N/A Site-specific	Similar	Less Than Cumulatively Considerable
5-8	Cumulative increase in the potential for geological related impacts and hazards.	Less Than Cumulatively Considerable	N/A Site-specific	N/A Site-specific	N/A Site-specific	N/A Site-specific	Similar	Less Than Cumulatively Considerable
5-9	Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.	Cumulatively Considerable and Significant and Unavoidable	Less	Similar[2]	Less[2]	Similar[2]	Similar[2]	Cumulatively Considerable and Significant and Unavoidable
5-10	Cumulative impacts related to energy.	Less Than Cumulatively Considerable	Less	Similar or Less	Less	Similar	Similar	Less Than Cumulatively Considerable
5-11	Increase in the number of people who could be exposed to potential hazards or hazardous materials and an increase in the transport, storage, and use of hazardous materials due to development of the proposed project in combination with future buildout in the City of	Less Than Cumulatively Considerable	N/A Site-specific	N/A Site-specific	N/A Site-specific	N/A Site-specific	Similar	Less Than Cumulatively Considerable

Table 7-8
Alternative Environmental Impacts Comparison

	Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
	Davis.							
5-12	Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area.	Less Than Cumulatively Considerable	Less	Less	Less	More	Similar	Less Than Cumulatively Considerable
5-13	Cumulative impacts to water quality within the City of Davis.	Less Than Cumulatively Considerable	Similar	Less	Less	Similar	Similar	Less Than Cumulatively Considerable
5-14	Cumulative land use incompatibilities.	Less Than Cumulatively Considerable	N/A Site-specific	N/A Site-specific	N/A Site-specific	N/A Site-specific	Similar	Less Than Cumulatively Considerable
5-15	Cumulative urban decay.	Less Than Cumulatively Considerable	Less	Similar	Less	Similar	Similar	Less Than Cumulatively Considerable
5-16	Cumulative impacts on noise-sensitive receptors.	Less Than Cumulatively Considerable	Less	Similar	Less	More	More	Less Than Cumulatively Considerable
5-17	Cumulative traffic noise effects on proposed uses.	Less Than Cumulatively Considerable	Less	Similar	Less	Similar	Similar	Less Than Cumulatively Considerable
5-18	Cumulative population and housing impacts.	Cumulatively Considerable and Significant and Unavoidable	Less	Similar[2]	Less[1]	Similar[2]	Similar	Less Than Cumulatively Considerable

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area		Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
5-19	Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.	Cumulatively Considerable and Significant and Unavoidable	Less	Similar[2]	Less[2]	Similar[2]	Similar[2]	Cumulatively Considerable and Significant and Unavoidable
5-20	Cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis.	Less Than Cumulatively Considerable	Less	Similar	Less	Similar	Similar	Less Than Cumulatively Considerable
5-21	Cumulative Impacts to Intersections Within the Freeway Interchange Area.	Cumulatively Considerable and Significant and Unavoidable	Less[1]	Similar[2]	Less[2]	More[2]	Similar[2]	Cumulatively Considerable and Significant and Unavoidable (CEQA and Modified)
5-22	Cumulative Impacts to Roadway Segments.	Cumulatively Considerable and Significant and Unavoidable	Less[1]	Similar[2]	Less[3]	Similar[2]	Similar[2]	Cumulatively Considerable and Significant and Unavoidable (CEQA and Modified)

Table 7-8
Alternative Environmental Impacts Comparison

Resource Area		Proposed Project	No Project (No Build) Alternative	Reduced Site Size Alternative	Reduced Project Alternative	Off-Site Alternative A (Davis IC Site)	Off-Site Alternative B (Covell Property)	Mixed-Use Alternative
5-23	Cumulative Impacts to Local Area Freeway Segments.	Cumulatively Considerable and Significant and Unavoidable	Less[1]	Similar[2]	Less[2]	Similar[2]	Similar[2]	Cumulatively Considerable and Significant and Unavoidable (CEQA and Modified)
5-24	Cumulative Impacts to Regional Transportation Facilities.	Less Than Cumulatively Considerable	More	Similar	Less	More	Similar	Less Than Cumulatively Considerable
5-25	Cumulative water system impacts.	Less Than Cumulatively Considerable	Similar	Similar	Less	Similar	Similar	Less Than Cumulatively Considerable
5-26	Cumulative wastewater treatment and collection system impacts.	Less Than Cumulatively Considerable	Less	Similar	Less	Similar	Similar	Less Than Cumulatively Considerable
5-27	The project may contribute to cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications.	Less Than Cumulatively Considerable	Less	Similar	Less	Similar	Similar	Less Than Cumulatively Considerable

No Impact = "None;" Less than Proposed Project = "Less;" Similar to Proposed Project = "Similar;" and More than Proposed Project = "More."

[1] Proposed Project SU impact would be eliminated.
[2] Significant and Unavoidable impact(s) determined for the proposed project would still be expected to occur under the Alternative.
[3] Significant and Unavoidable impact(s) determined for the proposed project are not expected for the Alternative, but requires confirmation through equal-level analysis.