

AGGIE RESEARCH CAMPUS PROJECT

SCH# 2014112012

DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

PREPARED FOR



MARCH 2020

PREPARED BY



1501 SPORTS DRIVE, SUITE A, SACRAMENTO, CA 95834

**Draft Subsequent Environmental Impact Report
Aggie Research Campus Project**

SCH # 2014112012

Lead Agency:

City of Davis
23 Russell Boulevard, Suite 2
Davis, CA 95616

Prepared By:

Raney Planning and Management, Inc.
1501 Sports Drive, Suite A
Sacramento, CA 95834
(916) 372-6100

Contact:
Nick Pappani
Vice President

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1. INTRODUCTION

1	INTRODUCTION
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1.1 INTRODUCTION

The City of Davis, acting as the lead agency¹ for the review of the Aggie Research Campus (ARC) Project under the California Environmental Quality Act (CEQA), has prepared this Subsequent Environmental Impact Report (SEIR). This chapter will describe the background of the project, the regulations and requirements regarding subsequent environmental review, an overview of the processing of the ARC Project to date, and a look ahead to the contents of this SEIR.

1.2 BACKGROUND

An EIR for the formerly proposed Mace Ranch Innovation Center (MRIC) Project was prepared by the City of Davis, and at the applicant’s request, brought before Davis City Council for consideration to certify the document without concurrent consideration to approve a project. On September 19, 2017, the City Council adopted Resolution 17-125, certifying the Final MRIC EIR (State Clearinghouse # 2014112012) for the MRIC. By certifying the Final MRIC EIR, the City determined that the EIR adequately evaluated the environmental impacts of the proposed MRIC Project and a related Mixed-Use Alternative. In 2019, the project applicant team (Buzz Oates, Reynolds & Brown, and Ramco Enterprises) reengaged with the City and expressed their desire to proceed with bringing a project before the Davis decision-makers for consideration of approval. The applicant team has chosen to bring forward a mixed-use project that is substantially similar to the Mixed-Use Alternative evaluated in the certified EIR at an equal-weight to the MRIC Project. The equal-weight analysis of the Mixed-Use Alternative is contained in Chapter 8 of the certified EIR. As part of the applicant’s current proposal, referred to as “Aggie Research Campus”, minor changes to the Mixed-Use Alternative have been proposed.

Former Mace Ranch Innovation Center Project

The MRIC Project, as evaluated in the MRIC EIR, included two distinct components: buildout of the 212-acre MRIC site, and future development of the 16.5-acre Mace Triangle site. The two sites are located immediately east of the City of Davis city limits, near the “Mace Curve”, in unincorporated Yolo County, approximately 2.5 miles east of Downtown Davis.

The MRIC Project included up to 2,654,000 square feet (sf) of innovation center uses and dedication of 64.6 acres of green space (including parks and open space) on the 212-acre site. The MRIC Project included approximately 1,510,000 sf for research/office/R&D uses; approximately 884,000 sf for manufacturing and research uses; up to 260,000 sf (10 percent) of supportive

¹ Pursuant to CEQA Guidelines Section 15367, “Lead Agency” means the public agency which has the principal responsibility for carrying out or approving a project. The Lead Agency will decide whether an EIR or Negative Declaration will be required for the project and will cause the document to be prepared.

commercial uses, including a 160,000-sf hotel/conference center; and 100,000 sf of supportive retail throughout the MRIC. The City of Davis included the 16.5-acre Mace Triangle Site within the overall project boundaries to ensure that an agricultural and unincorporated island would not be created, and to allow the continuation and expansion of existing uses. The EIR evaluated development of up to 71,056 sf of general commercial uses including up to 45,900 sf of research, office, and R&D, and up to 25,155 sf of retail on the Mace Triangle properties.

Mixed-Use Alternative

The certified MRIC EIR also included an equal weight analysis of a Mixed-Use Alternative in Chapter 8. The Mixed-Use Alternative provided the same non-residential square footage and land uses as the proposed MRIC Project, but included up to 850 workforce housing units intended to support the innovation center’s employee-generated demand for housing within the City. Other ways in which the Mixed-Use Alternative differed from the MRIC Project include proposed building heights (max height of 85 feet for the Mixed-Use Alternative, whereas max height for MRIC Project was 75 feet). The circulation network for this alternative was generally the same as the MRIC Project with the exception of the additional northwesterly access along the “Mace Curve”, at its intersection with County Road (CR) 104.

1.3 COMPARISON OF ARC PROJECT AND MIXED-USE ALTERNATIVE

The currently proposed Aggie Research Campus is in substantial conformance with the Mixed-Use Alternative version evaluated in the 2017 certified EIR. Relatively minor differences are described in what follows.

Development Footprint

The ARC Project removes the City-owned 25-acre parcel from the proposed development area. The property would still be included in the proposed annexation limits, but the City’s Agriculture zone designation would be applied to the parcel, rather than the previously proposed Planned Development zoning. Due to the exclusion of the 25-acre City-owned property from the proposed development footprint, the ARC Project would involve a slightly reduced development area. It is important to note, however, that the applicant proposes to establish a 6.8-acre easement on this property to satisfy the City’s 150-foot Agricultural Buffer requirements along a portion of the project’s northern boundary.²

In addition to having the same number of residential workforce units, the ARC Project would include the same amount of non-residential square footage as the Mixed-Use Alternative: 1,510,000 sf of research, office and R&D uses, 884,000 sf of manufacturing and research uses, 100,000 sf of ancillary retail, and 160,000 sf of hotel/conference space. Due to rearrangement of the aforementioned land uses within the ARC site, the overall floor-to-area ratio (FAR) would increase slightly, from 0.82 to 0.93.

² The applicant does not currently have any rights to the City property; the terms of this easement would have to be negotiated with the City.

Parking

The Mixed-Use Alternative included 6,032 on-site parking spaces, whereas the ARC Project includes 5,858 parking spaces, a reduction of 174 parking spaces. While the applicant's original submittal materials for the ARC Project identified a parking total of 4,340 on-site spaces, during the environmental review process, the number of on-site parking spaces was increased, upon recommendation of the traffic consultant, to be consistent with the parking demand estimate calculated for the project using the Institute of Transportation Engineers Parking Generation Manual.

Green Space

The Mixed-Use Alternative would have incorporated several privately maintained parks and open space areas throughout the site, totaling approximately 75.8 acres of green space. In comparison, the ARC Project would incorporate several privately maintained parks and open space areas throughout the site, totaling approximately 49.2 acres of green space. While this is a reduction of 26.6 acres, it is nearly entirely offset by the removal of the City's 25-acre property from the development footprint. That the methodology for calculating this reduced green space requirement is consistent with the City's methodology for calculating park/green space acreage requirements, will be demonstrated in Chapter 3 of this SEIR (see Impact 3-67).

Circulation

The ARC Project roadway alignment is still a modified grid with two access points onto CR 32A, two full access points onto Mace Boulevard at Alhambra Drive and CR 30B, and a third right-in and right-out onto Mace Boulevard.

As part of ARC Project, the right-in and right-out onto Mace Boulevard has been moved approximately 500 feet further north in response to prior traffic engineering comments. In addition, the internal east/west roadways have been shortened in length and now end at the vertical extension of the eastern north/south roadway. This is an overall reduction in project roadways.

Phasing

The phasing plan has been modified to more clearly tie the construction of housing to the creation of jobs. The phasing now permits the construction of one (1) housing unit for every 2,000 sf of jobs-creating space until the maximum 850 units are built. The modified phasing allows housing to be built in phases 1, 2 and 3 of ARC. In the MRIC Mixed-Use Alternative, housing was only in phases 2, 3, and 4. However, no housing can be constructed until 200,000 sf of non-residential uses are built. Thereafter, building permits for housing may be sought at the ratio of 1 unit/2,000 sf to ensure that housing is and continues to be supportive of the jobs created.

1.4 SUBSEQUENT EIR PROCESS AND SCOPE

In situations when a lead agency has certified an EIR for a project, and then the project is modified, requiring additional environmental review, the lead agency has a few options for conducting such

review. Depending on the nature of the project modifications, a lead agency may prepare an addendum, a supplement to the EIR, or a subsequent EIR. According to Section 15164, a lead agency can prepare an addendum to a previously certified EIR if some changes or additions to an EIR are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. The 15162 conditions are as follows:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

As will be demonstrated in Chapter 3 of this SEIR, substantial changes have occurred with respect to circumstances under which the project would be undertaken, thus, requiring major revisions of the previous EIR in select sections due to either the involvement of new significant effects (e.g., construction NO_x emissions) or substantial increase in the severity of previously identified significant effects (circulation system effects), though such is the case for a small subset of environmental topics. As a result, the City of Davis, as the CEQA lead agency, has prepared a SEIR for the ARC Project.

Although the CEQA Guidelines do not contain a description of a subsequent EIR, the meaning of the term may be inferred by comparing it with an EIR supplement.³ A supplement to an EIR is a document that contains additions or changes needed to make the previous EIR adequate. In

³ See Stephen L. Kostka and Michael H. Zischke. *Practice Under the California Environmental Quality Act, Second Edition*. March 2019 Update, pg. 19-8.

contrast, to make the EIR adequate for the project, a subsequent EIR revises the previous EIR, rather than simply supplementing it, as has been done here. *City of Irvine v County of Orange* (2015) 238 CA4th 526, 538, is also instructive here. As the court states:

One, as CEQA Guideline 15162's [sic] "may choose" language shows, the choice to proceed by way of a "supplemental" as distinct from a "subsequent" EIR is a discretionary one with the lead agency, thus tested under a reasonableness standard. Two, as shown recently by *Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) 227 Cal.App.4th 1036, 1047-1048 (*Treasure Island*), the appropriate judicial approach is to look to the substance of the EIR, not its nominal title.⁷ (Accord, *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 271, fn. 25 ["The fact that this EIR is labeled a 'project' rather than a 'program' EIR matters little for purposes of this inquiry. 'The level of specificity of an EIR is determined by the nature of the project and the "rule of reason" . . . rather than any semantic label accorded to the EIR.'"].)

While the notice prepared for the meeting held on December 2, 2019 to receive comments on the range of topics the public feels should be addressed in this environmental document referred to the document as a Supplemental EIR, after conducting the environmental review, the City, in its discretion, chose to prepare a SEIR. Though, as discussed above, the title matters little. The appropriate judicial approach is to look at the substance of the EIR.

According to CEQA Guidelines Section 15162(d), a subsequent EIR shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR shall state where the previous document is available and can be reviewed.

The Mace Ranch Innovation Center Draft and Final EIR documents are available at the City of Davis Department of Community Development and Sustainability, 23 Russell Boulevard, Suite 2, Davis, CA 95616, between the hours of 8AM to 5PM, Monday through Friday. The documents are also available for review on the City's website at:

<https://www.cityofdavis.org/city-hall/community-development-and-sustainability/development-projects/aggie-research-campus>

Environmental Issues Addressed in this Subsequent EIR

Chapter 3 of this Draft SEIR includes an analysis of all relevant issue areas that were previously evaluated in the MRIC EIR, as follows:

- Aesthetics and Visual Resources;
- Agriculture and Forestry Resources
- Air Quality;
- Biological Resources
- Cultural Resources;
- Geology, Soils, and Mineral Resources;
- Greenhouse Gas Emissions and Energy;

- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Urban Decay;
- Noise and Vibration;
- Population and Housing;
- Public Services and Recreation;
- Transportation and Circulation;
- Utilities; and
- Cumulative Impacts.

While the basic requirement for a subsequent EIR, as discussed above, is to revise the previous EIR to make it adequate for the project as modified, as well as changes in circumstances, this SEIR goes above and beyond by providing an overview of the changes in circumstances and changes to the project for each topic area, as applicable, in an effort to provide additional disclosure to the public regarding the severity of changed circumstances and the extent to which changes to the project affect the previous analysis.

Thus, for each issue area, this SEIR includes subheaders titled “Changes in Circumstances” and “Changes in the Project”. The Changes in Circumstances subheaders include an overview of changes in circumstance that have occurred since the release of the MRIC EIR, including any changes to the environmental setting since certification of the MRIC EIR. The “Changes in the Project” subheaders include a comparison of the ARC Project components with the MRIC Project, as well as the Mixed-Use Alternative, and identify any new or more severe impacts that could result from the ARC changes.

1.5 SUMMARY OF COMMENTS RECEIVED DURING THE INITIAL COMMENT PERIOD

While preparation of a new Notice of Preparation (NOP) and subsequent scoping meeting are not required for a subsequent EIR or supplemental EIR, the City of Davis chose to hold a meeting to receive comments on the range of issues that the public believes should be studied in the subsequent environmental document, much like an initial scoping meeting for new projects under CEQA review. As a result, the City held a public comment meeting for the proposed ARC Project on December 2, 2019 (Davis City Hall Conference Room, 23 Russell Blvd, Davis, CA 95616). As advertised, the meeting was intended to focus more appropriately on collecting comments related to the changes in circumstances that may have occurred in the project vicinity since the certification of the MRIC EIR in 2017, given that this is an important criterion to consider when preparing further environmental documents for projects, according to CEQA Guidelines Section 15162(a)(2).

The City also voluntarily extended the period to accept written comments from public agencies and the general public that are interested in providing input as to the range of issues to be studied in the environmental document. The public was informed that they could submit comments in person at the December 2, 2019 meeting or written comments could be delivered to the City of Davis Community Development and Sustainability Department, 23 Russell Boulevard, Suite 2

Davis, CA 95616 Attn: Sherri Metzker, Principal Planner, or via electronic mail to smetzker@cityofdavis.org up until Monday, December 16, 2019 at 5:00 PM.

The City of Davis received 25 comment letters during the open comment period for the ARC Project SEIR. A copy of each letter is provided in this EIR (see Appendix A). The following letters were authored by public agencies and residents.

Agencies

1. Blacklock, Patrick, County of Yolo
2. Boyd, Ian, CDFW
3. Echiburu, Taro, County of Yolo Department of Community Services
4. Portman, Catherine, Burrowing Owl Preservation Society

Interested Persons

5. Cunningham, Lynne
6. Edelman, Todd
7. Fleeman, William
8. Gunnell, Pamela
9. Keller, Rik
10. Lamb-Bang, Gayna
11. Martin, Billie
12. Millstein, Roberta
13. Nieberg, Pam
14. Oertel, Ron
15. Portman, Catherine
16. Prindle, Robert
17. Pryor, Alan
18. Rasmusson, Cathy
19. Rowe, Greg
20. Samitz, Eileen
21. Smallwood, Shawn
22. Walsh, Colin
23. Williams, Matt

The following list, categorized by issue, summarizes the concerns addressed in the comment letters:

<u>Agricultural Resources</u>	<ul style="list-style-type: none"> • 6.5 acres of required Ag Buffer should not be on City’s 25-acre property, purchased with Measure O funds. • Agricultural land mitigation. • Changes in surrounding agricultural conditions and pesticide use.
<u>Air Quality</u>	<ul style="list-style-type: none"> • What dust mitigation during construction is proposed?

<p><u>Biological Resources</u></p>	<ul style="list-style-type: none"> • Bird and bat strike concerns. • Effects on the Yolo Causeway bat colony. • Causeway is also part of Pacific Flyway where many waterfowl migrate. • Wind turbines also generate noise and effects on nearby houses should be addressed. • Visual; shadow flicker effects; and aviation lighting from turbines also need to be considered. • Cumulative effects to Western Burrowing Owl (BUOW) need to be addressed – Marriot Residence Inn built on BUOW habitat. • California Department of Fish and Wildlife (CDFW) may potentially be a responsible agency if it may need to make a discretionary action under the Fish and Game Code, such as Lake and Streambed Alteration Agreement. • Rewrite Mitigation Measure 4.4-11 to include updated status of Yolo Habitat Conservation Plan and description of procedures applicant will take to obtain coverage. • MRIC Certified Final EIR analysis of BUOW inadequate because: <ul style="list-style-type: none"> ○ Surveys for certified EIR not conducted in accordance with CDFW 2012 Staff Report. ○ Cumulative impacts to regional burrowing owl population were not assessed. ○ Mitigations, including preconstruction survey and passive relocation are not mitigation. • Per the 2012 Staff Report, eviction of BUOW (passive relocation) is a potentially significant impact under CEQA. • MRIC Certified Final EIR did not assess impacts to BUOW habitat from construction activities. The majority of available burrows near the project site are at the edge of county roads. Heavy equipment and staging may impact BUOW. • Ag Buffer on City 25-acres: project proposes planting trees and other vegetation. This loss of habitat should be included in the impact assessment.
<p><u>Hazards and Hazardous Materials</u></p>	<ul style="list-style-type: none"> • Issue of potential use of hazardous materials in close proximity to on-site residential. • Hazardous materials response plan.
<p><u>Hydrology and Water Quality</u></p>	<ul style="list-style-type: none"> • What are effects of reduced park/green space acreage on drainage and infiltration to underlying aquifer? • Climate change affects related to flooding and how the ARC Project could contribute to this.
<p><u>Land Use</u></p>	<ul style="list-style-type: none"> • Additional regional innovation center projects competing with ARC Project.

<p><u>Population and Housing</u></p>	<ul style="list-style-type: none"> • Concerns re: assumptions about employees living on-site. • Project provides no mechanism to ensure employees live in the on-site housing; thus, the EIR analysis must be done assuming few employees living on-site. • Provision of affordable housing. • If applicable provides affordable housing off-site – induced growth needs to be evaluated.
<p><u>Public Services</u></p>	<ul style="list-style-type: none"> • Demand on County library services.
<p><u>Transportation and Circulation</u></p>	<ul style="list-style-type: none"> • More CR 32A vehicular traffic will further affect bike travel on 32A, which is primary route to Sacramento. • Closure of CR 32A crossing – plan for replacement road needs to be in place before this project is approved. • Since certification of EIR, CR 32A has become a popular alternative to I-80 and receives much heavier traffic than before. • Ride share cars produce twice the trips. This doubling of trips must be considered in the GHG emissions and traffic study. • The developer offers no evidence or plan that would justify the low amount of parking. • Changes in projected growth in Woodland needs to be considered in traffic analysis. • Mace Boulevard needs to be widened to 4-lanes north of freeway and through the Mace Curve. • Traffic analysis should address Covell Blvd, east of State Route 113, Mace Boulevard, CR 32A, and routes used to avoid traffic on Interstate 80 (including CR 27 and 28H). • Mitigation regarding any safety impacts along heavily travelled routes (due to traffic apps) should be addressed. • How will the level of fire response time to ARC be impacted if new or more severe traffic impacts are identified in the SEIR?
<p><u>Cumulative Impacts</u></p>	<ul style="list-style-type: none"> • New cumulative impacts analysis required for traffic, water, wastewater treatment, flood control, and City services, including police and fire.
<p><u>Alternatives</u></p>	<ul style="list-style-type: none"> • Evaluate all housing alternative. • City and Project objectives are too narrowly defined; thus, alternatives analysis is deficient. • Alternatives Analysis in Chapter 7 of EIR should be redone given changes. A much-reduced amount of land could now be considered sufficient. • Commenter references January 2019 Commercial Land inventory prepared by the City. Infill Alternative should be re-evaluated in light of this new information.

All of the above issues are addressed in this SEIR, in the relevant sections identified in the first column.

1.6 ORGANIZATION OF THE EIR

The Aggie Research Campus Project Draft SEIR is organized into the following sections:

Chapter 1 – Introduction

Provides an introduction and overview describing the intended use of the SEIR and the review and certification process, as well as summaries of the chapters included in the SEIR.

Chapter 2 – Executive Summary

Provides a summary of the ARC Project and whether the changes in circumstances under which the project is undertaken would result in a new significant effect or a substantial increase in the severity of previously identified significant effects. Similarly, the chapter summarizes whether the modifications to the project evaluated in the Certified Final EIR would result in a new significant effect or a substantial increase in the severity of previously identified significant effects. The impacts and mitigation measures identified for the ARC Project are presented in table format.

Chapter 3 – Aggie Research Campus Analyses

Includes a detailed project description of the Aggie Research Campus Project (ARC Project), and subsequently, a detailed evaluation of the potential physical environmental impacts that may result from implementation of the ARC Project. The format of this chapter intentionally matches that of the Mixed-Use Alternative Analysis chapter in the Certified Final EIR, given the similarities between the Mixed-Use Alternative and the proposed ARC Project.

Chapter 4 – Authors

Provides a list of authors involved in writing the SEIR.

Chapter 5 – References

Provides bibliographic information for all references and resources cited.

Appendices

Includes the comments received during the public scoping period for the Draft SEIR, as well as additional technical information.

2. EXECUTIVE SUMMARY

2

EXECUTIVE SUMMARY

2.1 INTRODUCTION

The Executive Summary chapter of this SEIR provides an overview of the Aggie Research Campus (ARC) Project and summarizes the conclusions of the environmental analysis provided in Chapter 3. In addition, the chapter outlines the mitigation, monitoring, and reporting program, summarizes the alternatives that are described in the Alternatives Analysis chapter of the Certified Final EIR, identifies the Environmentally Superior Alternative, and discusses areas of controversy and issues to be resolved. Table 2-2 at the end of this chapter contains a summary of the potential environmental impacts associated with the ARC Project, as described in Chapter 3 of this SEIR, including the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

2.2 SUMMARY DESCRIPTION OF THE ARC PROJECT

The proposed annexation area includes the 187-acre privately-owned Aggie Research Campus site, 25-acre City parcel, and the 16.5-acre Mace Triangle Site, which are collectively the 228.5 acres proposed for annexation. The ARC Project is anticipated to include up to approximately 2,654,000 square feet (sf) of innovation center/business uses, of which up to 260,000 sf may be developed with supportive commercial uses. The ARC Project also incorporates up to 850 workforce housing units on-site.

The City of Davis has included the Mace Triangle within the overall project boundaries to ensure that an agricultural and unincorporated island is not created and to allow the continuation and expansion of existing uses. This SEIR evaluates the potential for expansion of the Ikeda’s farm stand and additional urban development on the Ikeda’s parcel and adjacent agricultural parcel. Specifically, this SEIR assumes development of up to 71,056 sf of general commercial uses, including up to 45,900 sf of research, office, and R&D, and up to 25,155 sf of retail.

Generally, the ARC Project requires the following approvals from the City of Davis: General Plan Amendment, prezone, development agreement, and action by the City Council to set the baseline features of the project and call for an election. In addition, the ARC Project would require a Combined Municipal Service Review (MSR) and Sphere of Influence (SOI) Amendment in order to bring the 229-acre project site, including the Mace Triangle Site, within the City of Davis’s SOI; annexation of the entire 229-acre project site, including the Mace Triangle Site, into the City of Davis; and detachment of the entire 229-acre project site, including the Mace Triangle Site, from the East Davis County Fire Protection District. The City will need to issue additional discretionary approvals for the ARC Project prior to any on-site development being allowed.

2.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND REQUIRED MITIGATION MEASURES (TABLE 2-2)

A summary of the identified impacts in Chapter 3 of this SEIR is presented in Table 2-2 at the end of this Chapter. In Table 2-2, the ARC Project impacts are identified for each issue area presented within Chapter 3. In addition, Table 2-2 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

It should be noted that the level of significance reflects the overall severity of the impact, considering both the ARC Project and the Mace Triangle. For example, in cases where the impact has been determined to be *significant* for the ARC Project and *less than significant* for the Mace Triangle, the overall impact is characterized as significant in Table 2-2 will be *significant*. Similarly, where an impact is determined to be *significant and unavoidable* for the ARC Project and *less than significant* for the Mace Triangle, the overall impact is characterized as *significant and unavoidable*.

2.4 MITIGATION MONITORING AND REPORTING PROGRAM

Section 15097 of the California Environmental Quality Act (CEQA) requires all State and local agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of environmental findings related to environmental impact reports (see Guidelines Section 15091 for Findings). In order to ensure that the mitigation measures and project revisions identified in the EIR are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

The ARC Project will be built-out over an extended period of time, a factor which is relevant to successful monitoring and reporting of the mitigation measure requirements set forth in this SEIR. As a result, the list of mitigation measures in the Mitigation Monitoring and Reporting Program (MMRP) for this SEIR will be arranged in chronological order with respect to the order of approvals needed to enable physical development of the property.

Mitigation Trigger Points

The “trigger” points for the mitigation measure requirements include but are not necessarily limited to the following actions, for each phase of development:

- In conjunction with submittal of a final planned development or tentative map
- Prior to approval of a final planned development
- In conjunction with submittal of improvement plans

- Prior to issuance of any building permits
- Prior to initiation of grading activities

Establishment of Master Owners’ Association

As part of the overall ARC management, the ARC Project applicant has proposed to form a Master Owners’ Association (“MOA”) that will oversee and perform various management and marketing tasks associated with the ARC Project, including, but not limited to:

- Managing and maintaining the common areas and facilities;
- Enforcing site-wide covenants, conditions and restrictions (“CC&Rs”);
- Serving as a point of contact for, and reporting to, the City, on a regular basis, the ARC Project’s compliance with project approvals, including, but not limited to, the ARC Project conditions of approval, the mitigation monitoring and reporting program, and the transportation demand management plan (TDM);
- Providing and pursuing ongoing branding, marketing and operational programs that will facilitate collaborative innovation partnerships, provide opportunities for increased UC Davis and public and private research engagement; and assist in the growth of new business ventures; and
- Account for and collect MOA assessments from the project owners/members.

The MOA will perform such further tasks and obligations as the City and the applicant may agree upon.

The MOA would not extend to the Mace Triangle, which would be developed separately from the ARC Project, by different landowners.

2.5 SUMMARY OF ALTERNATIVES TO THE ARC PROJECT

Chapter 7, Alternatives Analysis, of the Certified Final EIR evaluated the following range of alternatives:

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); and
6. Mixed-Use Alternative.

Table 2-1 provides a summary of the basic components of each alternative evaluated for the proposed project. It is important to note that changes in circumstances have occurred since the preparation of the alternatives analysis with respect to Off-Site Alternative A (Davis Innovation Center Site). This off-site alternative assumed development of the MRIC Project on the 207-acre Davis Innovation Center (IC) site. However, the West Davis Active Adult project has since been approved on the southerly 74 acres of the Davis IC site. Thus, this off-site alternative would have

to be shifted to the northerly 133 acres, which would mean that this off-site alternative would have to become either a reduced project alternative, or an intensified alternative similar to the Reduced Site Size Alternative, meaning the same amount of development for the MRIC Project would be located on smaller site acreage. It is assumed for purposes of the following comparative discussion, that this off-site alternative would become another “reduced site size” alternative.

Other than the above noted change in circumstance related to Off-Site Alternative A (Davis IC Site), substantial changes in circumstances have not occurred since the 2015 alternatives analysis that would require major revisions to the previous EIR. The following section has been prepared to qualitatively compare the significant impacts identified for the ARC Project with the alternatives evaluated in the EIR.

It is noted that the Certified Final EIR considered but dismissed from further consideration the Infill Alternative. Pursuant to CEQA Guidelines 15126.6(f)(1), among the reasons for determining feasibility of alternative locations are site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; whether the project proponent already owns the site; and whether the project proponent can acquire, control, or have access to the site if it does not own it. In addition, pursuant to 15126.6(a), an alternative should feasibly attain most of the basic objectives of the project. As discussed in the Certified Final EIR (pp. 7-16 to 7-19), the majority of vacant sites, appropriately zoned for office and industrial building types, are small; thus, development of the same amount of proposed uses as the project would require development scattered across multiple infill parcels throughout the City.¹ The passage of time has not materially changed this situation, as evidenced by City staff’s recent vacant property inventory, which determined that there are approximately 124.22 acres of vacant, privately held commercially-zoned land within the City limits (approximately 80 percent of the parcels are below seven acres in size).² This inventory does not account for City-owned properties, potential commercially viable property(ies) outside the City limits, nor does it attempt to identify those properties which may be commercially zoned and developed within the City limits, but underutilized and pose potential redevelopment opportunities (such as the PG&E corporation yard site, for example). While other underutilized sites not accounted for in the 124-acre vacant land inventory could be considered, these sites are located in closer proximity to existing residential neighborhoods, as compared to the ARC Site.

¹ As stated in the Certified Final EIR, 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 (e.g., Applicant Objective #2 and City Objective #1). 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. On the basis of not meeting this basic project objective, the Infill Alternative is infeasible.

² City of Davis City Council Staff Report. *Undeveloped Property in the City of Davis*. January 8, 2019.

**Table 2-1
 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
MRIC Project	228.5	212.0	16.5	N/A	2,725,056	2,654,000	71,056	N/A	--	--	--	N/A
ARC Project	228.5	187 ¹	16.5	N/A	2,725,056	2,654,000	71,056	N/A	850	--	--	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) ²	133	--	--	133	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	--	--	--	--
Mixed-Use Alternative	228.5	212.0	16.5	N/A	2,725,056	2,654,000	71,056	--	850	850	--	--

¹ Does not include 25-acre City Parcel, as it has been removed from the development footprint. The total acreage remains at 228.5 as the overall annexation area would include the 25-acre City Parcel.

² Assumes Off-Site Alternative A is shifted to northerly 133 acres of former Davis Innovation Center site, due to the approval of the West Davis Active Adult Project.

Thus, placing the proposed residential and non-residential uses within these locations could reasonably be expected to have greater noise and local traffic impacts to these communities. While the extent of some project impacts could be reduced (e.g., agricultural land conversion), the Infill Alternative would be expected to have greater environmental impacts overall, as discussed in the Certified Final EIR (pp. 7-17 to 7-19).

Aesthetics

The ARC Project would have a greater aesthetic impact related to substantially degrading the existing visual character or quality of a site and its surroundings, as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative, Reduced Project Alternative, and Off-Site Alternative A (due to the now reduced site size of 133 acres). However, the ARC Project would have a reduced aesthetic impact compared to the MRIC Project, Off-Site Alternative B (Covell Property), and the Mixed-Use Alternative given the reduced ARC development footprint (i.e., 187-acre ARC development area vs. 229 to 236 acres, depending upon the alternative). It is important to note, however, that similar to the ARC Project, each of the alternatives, excepting the No Project (No Build) Alternative, would still be anticipated to have a significant and unavoidable aesthetic effect due to the permanent alteration of visual character.

Agriculture and Forestry Resources

The ARC Project would have a greater impact related to conversion of agricultural land, as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative, Reduced Project Alternative, and Off-Site Alternative A (due to the now reduced site size of 133 acres). However, the ARC Project would have a reduced impact to agricultural land conversion compared to the MRIC Project, Off-Site Alternative B (Covell Property), and the Mixed-Use Alternative. It is important to note, however, that similar to the ARC Project, each of the alternatives, excepting the No Project (No Build) Alternative, would still be anticipated to have a significant and unavoidable effect due to the permanent conversion of agricultural lands.

Air Quality

The ARC Project would have a greater potential impact related to air quality, as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative (specifically, construction AQ emissions), Reduced Project Alternative, and Off-Site Alternative A (specifically, construction AQ emissions).

In relation to construction air quality emissions, grading is generally one of the most emissions intensive phases of construction. Because the ARC Project would result in grading activity over a greater area as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative, Reduced Project Alternative, and Off-Site Alternative A, the ARC Project would be anticipated to result in greater AQ emissions and potential impacts. Considering that both the Mixed-Use Alternative and MRIC Project would involve disturbance over similar areas as the ARC Project, construction emissions and potential impacts would likely be similar between the ARC Project, Mixed-Use Alternative, and MRIC Project.

With the exception of the No Project (No Build) Alternative, Reduced Project Alternative, and Mixed-Use Alternative, the remainder of alternatives include an amount of development equivalent to the MRIC Project. As shown in Table 3-30 of the SEIR, the ARC Project would

have substantially more trips than both the MRIC Project and the Mixed-Use Alternative. In terms of mobile air quality emissions, the number of vehicle trips related to project operations largely dictates the magnitude of operational emissions; as a result, an increased number of trips would be likely to result in an increased rate of operational emissions associated with the ARC Project. However, it is important to understand that the increase in traffic from the Mixed-Use Alternative is not due to changes in land uses, but rather changes in the methodology for calculating trip generation, primarily related to internalization of trips due to the mix of uses. In other words, if the trip generation was recalculated for the Mixed-Use Alternative using the same methodology now employed for the ARC Project, the total trips would be equivalent for ARC and the Mixed-Use Alternative. In this way, it can be seen that the mobile AQ emissions (and non-mobile) associated with the ARC Project would be equivalent to the Mixed-Use Alternative. With respect to the MRIC Project, the ARC Project, using the new trip generation methodology employed in this SEIR, would have a greater number of trips than the MRIC Project, and thus, a greater potential to generate mobile AQ emissions.³ In addition to considering the effect of alterations in trip generation rates, it should be noted that the emissions modeling software employed in this environmental analysis, CalEEMod, has been updated since preparation of the MRIC EIR. The updates to the CalEEMod software have included changes to emissions rates, which generally result in estimated emissions being higher than estimated emissions from previous versions. As such, it is important to consider that if emissions from the Mixed-Use Alternative and MRIC Project were re-analyzed using updated trip generation estimates and the updated version of CalEEMod, the estimated emissions would likely be higher than those presented in the MRIC EIR. When considering both the updated trip generation rates as well as the updated modeling software, operational impacts of the ARC Project would likely remain greater than operational impacts of the MRIC Project, No Project (No Build) Alternative, the Reduced Site Size Alternative, Reduced Project Alternative, and Off-Site Alternative A, but would be similar to impacts estimated for the Mixed-Use Alternative.

Biological Resources

The ARC Project would have a greater potential impact related to biological resources, as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative, Reduced Project Alternative, and Off-Site Alternative A (due to the now reduced site size of 133 acres). However, the ARC Project could have a reduced impact to biological resources compared to the MRIC Project, Off-Site Alternative B (Covell Property), and the Mixed-Use Alternative given the reduced ARC development footprint (i.e., 187-acre ARC development area vs. 229 to 236 acres).

Cultural Resources

The ARC Project would have a greater potential impact related to cultural resources, as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative, Reduced Project Alternative, and Off-Site Alternative A (due to the now reduced site size of 133 acres). However, the ARC Project could have a reduced impact to cultural resources compared to the

³ Since the Reduced Site Size Alternative, Off-Site Alternative A, and Off-Site Alternative B include the same amount of development as the MRIC Project, the ARC Project could also be expected to have greater air quality effects than these alternatives.

MRIC Project, Off-Site Alternative B (Covell Property), and the Mixed-Use Alternative given the reduced ARC development footprint (i.e., 187-acre ARC development area vs. 229 to 236 acres).

Geology, Soils, and Mineral Resources

The ARC Project would have a greater potential impact related to geology and soils, as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative (specifically, soil erosion), Reduced Project Alternative, and Off-Site Alternative A (i.e., soil erosion, due to the now reduced site size of 133 acres). However, the ARC Project could have a reduced impact to geology and soils compared to the MRIC Project, Off-Site Alternative B (Covell Property), and the Mixed-Use Alternative given the reduced ARC development footprint (i.e., 187-acre ARC development area vs. 229 to 236 acres).

Greenhouse Gas Emissions and Energy

The ARC Project would have a greater potential impact related to greenhouse gas emissions and energy, as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative (specifically, construction GHG emissions), Reduced Project Alternative, and Off-Site Alternative A (specifically, construction GHG emissions).

With the exception of the No Project (No Build) Alternative, Reduced Project Alternative, and Mixed-Use Alternative, the remainder of alternatives include an amount of development equivalent to the MRIC Project. As shown in Table 3-30 of the SEIR, the ARC Project would have substantially more trips than both the MRIC Project and the Mixed-Use Alternative. However, it is important to understand that the increase in traffic from the Mixed-Use Alternative is not due to changes in land uses, but rather changes in the methodology for calculating trip generation, primarily related to internalization of trips due to the mix of uses. In other words, if the trip generation was recalculated for the Mixed-Use Alternative using the same methodology now employed for the ARC Project, the total trips would be equivalent for ARC and the Mixed-Use Alternative. In this way, it can be seen that the mobile GHG emissions (and non-mobile) associated with the ARC Project would be equivalent to the Mixed-Use Alternative. With respect to the MRIC Project, the ARC Project, using the new trip generation methodology employed in this SEIR, would have a greater number of trips than the MRIC Project, and thus, a greater potential to generate mobile GHG emissions.⁴

Hazards and Hazardous Materials

Overall, the ARC Project would be anticipated to have similar impacts associated with hazards and hazardous materials, as compared to the range of project alternatives, for reasons set forth in the EIR. For example, the types of chemicals that could be used at ARC businesses could also be used at the similar businesses anticipated for the alternatives; and the use and storage of such chemicals would be done in accordance with applicable state and local regulations. In addition, the agricultural nature of each alternative site renders the probability of encountering upset

⁴ Since the Reduced Site Size Alternative, Off-Site Alternative A, and Off-Site Alternative B include the same amount of development as the MRIC Project, the ARC Project could also be expected to have greater mobile GHG emissions than these alternatives.

conditions during construction similar. Some exceptions may exist, however, as noted in the certified EIR. For example, previous Phase I environmental site assessments have identified potential hazards on the Covell property, such as pesticide containers and potential asbestos-containing materials and lead-based paints. Such features are absent from the ARC Site.

Hydrology and Water Quality

The ARC Project would have a greater potential impact related to hydrology and water quality, as compared to the No Project (No Build) Alternative, the Reduced Site Size Alternative, Reduced Project Alternative, Off-Site Alternative A, and for flooding specifically, Off-Site Alternatives A and B, given that at least a portion of their sites are within a FEMA floodplain. However, the ARC Project could have a reduced impact to water quality during construction compared to the MRIC Project, Off-Site Alternative B (Covell Property), and the Mixed-Use Alternative given the reduced ARC development footprint (i.e., 187-acre ARC development area vs. 229 to 236 acres). Operational effects to water quality and increases in peak flows would be similar between the ARC Project and the MRIC Project, Off-Site Alternative B, and the Mixed-Use Alternative.

Land Use and Urban Decay

The ARC Project would have a greater potential impact related to urban decay, as compared to the No Project (No Build) Alternative, and the Reduced Project Alternative, due to the reduced amount of development that could compete with existing businesses. However, the ARC Project would have a similar potential impact related to urban decay compared to the MRIC Project, Off-Site Alternative A, Off-Site Alternative B (Covell Property), and the Mixed-Use Alternative.

Noise and Vibration

This SEIR did not identify any significant noise effects resulting from the ARC Project, given required compliance with the City's Noise Ordinance; thus, a comparative analysis of alternatives is not required.

Population and Housing

This SEIR did not identify any significant population and housing effects resulting from the ARC Project; thus, a comparative analysis of alternatives is not required.

Public Services and Recreation

This SEIR did not identify any significant public services and recreation effects resulting from the ARC Project, given required compliance with the City's Municipal Code and other regulations; thus, a comparative analysis of alternatives is not required.

Transportation and Circulation

The ARC Project would have greater operational traffic impacts compared to the No Project (No Build) Alternative and the Reduced Project Alternative, due to the substantially reduced scale of operations. With the exception of the Mixed-Use Alternative, the remainder of alternatives include an amount of development equivalent to the MRIC Project. As shown in Table 3-30 of the SEIR, the ARC Project would have substantially more trips than both the MRIC Project and the Mixed-Use Alternative. However, it is important to understand that the increase in traffic from the Mixed-Use Alternative is not due to changes in proposed land uses, but rather changes

in the methodology for calculating trip generation, primarily related to internalization of trips due to the mix of uses and prior assumptions related to the number of MRIC employees that would live on-site. In other words, if the trip generation was recalculated for the Mixed-Use Alternative using the same methodology now employed for the ARC Project, the total trips would be equivalent for ARC and the Mixed-Use Alternative. In this way, it can be seen that the ARC Project would have similar traffic impacts as compared to the Mixed-Use Alternative. However, this SEIR also considers the changes in circumstances since preparation of the EIR and how that affects the previous analysis. As discussed in this SEIR, due to the substantial increase in background traffic, the ARC Project would now have greater traffic impacts than the Mixed-Use Alternative. With respect to the MRIC Project, the ARC Project, using the new trip generation methodology employed in this SEIR, would have a greater number of trips than the MRIC Project, and thus, a greater potential to impact the surrounding circulation system.

The ARC Project was also determined in this SEIR to have a significant impact related to vehicle miles travelled (VMT). Again, if the VMT generated by the Mixed-Use Alternative was recalculated using the methodology employed for the ARC Project, the VMT would be equivalent. The VMT has not been recalculated for the MRIC Project using updated ITE rates and the new City of Davis Travel Demand Model. However, elimination of proposed ARC residential uses could have detrimental VMT effects at the local and regional levels. This is because the provision of residential uses within the City of Davis increases opportunities for local and regional employees to live closer to where they work, thus reducing their average commute trip distances and related VMT (e.g., a Davis or UC Davis employee who would otherwise live in Sacramento would have an opportunity to live in Davis).

Utilities and Service Systems

The SEIR identified that the ARC Project could have a significant wastewater impact. The ARC Project would have a greater wastewater impact as compared to the No Project (No Build) Alternative, the Reduced Project Alternative, and due to the inclusion of housing units as well as 2.65 million sf on non-residential uses, ARC would have a greater wastewater impact than the MRIC Project, Off-Site Alternative A, and Off-Site Alternative B. The ARC Project would have a similar wastewater impact compared to the Mixed-Use Alternative.

2.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126(e)(2) of the CEQA Guidelines states, “If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” Although the No Project (No Build) Alternative would result in the fewest impacts in all resources areas compared to the ARC 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 Reduced Site Size Alternative would result in less impact overall as compared to the ARC Project simply because the site size, and thus total disturbance area, would be reduced. While the ARC Project’s significant impacts related to site disturbance/extent of development footprint would be lessened under this alternative, the impacts would not be fully avoided (e.g., substantially degrade visual character or quality of site, agricultural land conversion). 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 most environmentally superior alternative is the Reduced Project Alternative. This alternative would result in less impact as compared to the ARC Project given its substantially reduced scale; 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.

2.7 STATUTORILY REQUIRED SECTIONS

The analysis of statutorily topics required in Section 15126.2 of the CEQA Guidelines was included in Chapter 6 of the Certified Final EIR. The topics include growth-inducement, significant irreversible environmental changes, and significant and unavoidable impacts. The growth-inducement discussion for the MRIC Project remains generally applicable to the ARC Project in that the ARC Project would not eliminate obstacles to growth (see 6.2.2 of Certified Final EIR), affect service levels, facility capacity, or infrastructure demand (see 6.2.3 of Certified Final EIR), with the exception of cumulative fire service impacts, nor encourage or facilitate other activities that could significantly affect the environment (see 6.2.4 of Certified Final EIR). The difference between the MRIC Project and the ARC Project is that, unlike the MRIC Project, as discussed in Section 6.2.1, the ARC Project would be expected to meet its fair share of the employee-generated housing demand created by the project.

The Significant Irreversible Environmental Changes addressed in Section 6.3 of the Certified Final EIR remain applicable to the ARC Project with respect to use of nonrenewable resources and irretrievable commitments of nonrenewable resources.

With respect to significant and unavoidable impacts result from the ARC Project, Table 2-1 below identifies the following significant and unavoidable impacts:

- 3-2 Substantially degrade the existing visual character or quality of the project site and its surroundings.
- 3-5 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.
- 3-7 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use.
- 3-11 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.

- 3-37 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- 3-38 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.
- 3-70 Conflict with a program, plan ordinance, or policy addressing the circulation system under Existing Plus Project conditions.
- 3-71 Impacts to Local Neighborhood Street Traffic.
- 3-72 Increase in Vehicle Miles Traveled.
- 3-75 Impacts to Pedestrian and Bicycle Facilities.
- 3-76 Impacts to Transit Services.
- 3-85 Cumulative impacts related to long-term changes in visual character of the region.
- 3-87 Impacts related to cumulative loss of agricultural land.
- 3-88 A cumulatively considerable net increase of any criteria pollutant.
- 3-93 Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.
- 3-102 Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.
- 3-104 Conflict with a program, plan, ordinance or policy addressing the circulation system under Cumulative Plus Project conditions.
- 3-105 Cumulative Increase in Vehicle Miles Traveled.
- 3-106 Cumulative impacts to pedestrian, bicycle, and transit facilities.

2.8 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

The CEQA Guidelines, Section 15123(b), require that this EIR consider areas of controversy known to the lead agency, including issues raised by agencies and the public. The discussion below goes beyond identification of impacts expected to result from implementation of the project, and identifies issues to be resolved known from workshops and other public discussion of the project. At this time, these known areas include the following (in no order):

- Agricultural land conversion – The project would convert land being used primarily for agriculture and agriculturally-related uses to urban uses.
- Project-level and cumulative effects to burrowing owl.

- Bicycle and pedestrian connections – The project would add vehicle trips onto CR 32A which has existing safety concerns for bicyclists in the area, particularly those traveling CR 32A to commute to Sacramento.
- Effects of traffic apps such as WAZE.
- Increase in background traffic since preparation of the original traffic analysis and certification of the EIR.
- City-owned 25 acres – The project annexation area includes a 25-acre parcel owned by the City, a portion of which is being proposed to serve as the City-required agricultural buffer along the project’s northern boundary.
- Sustainability – The project includes various sustainability features most notably generation of 50 percent of needed energy on-site.
- Inclusion of affordable housing.
- Reduction in park acreage compared to MRIC Project.

**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
Aesthetics and Visual Resources (reference Section 4.1 of the Certified Final EIR)			
3-1 Substantial adverse effect on a scenic vista (reference Impact 4.1-1).	LS	<i>None required.</i>	N/A
3-2 Substantially degrade the existing visual character or quality of the project site and its surroundings (reference Impact 4.1-2).	S	<i>None feasible.</i>	SU
3-3 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area (reference Impact 4.1-3).	S	<p><i>ARC Project and Mace Triangle</i></p> <p>3-3 <i>In conjunction with submittal of improvement plans for the Mace Triangle and each phase of development for the ARC Site, the applicant shall submit a lighting plan to the Department of Community Development and Sustainability for review and approval. The lighting plan shall be designed to limit light trespass and glare onto off-site properties to a reasonable level through the use of shielding, directional lighting methods (including, but not limited to, fixture location and height), and application of a low-emissivity coating on exterior glass surfaces of proposed structures. If low-emissivity coating is used, the low-emissivity coating shall reduce the reflection of visible light that strikes the exterior glass and prevent interior light from being emitted brightly through the glass. The Plan shall comply with Chapter 6 of the Davis Municipal Code - Article 8:</i></p>	LS

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<i>Outdoor Lighting Control.</i>	
3-4 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 (reference Impact 4.1-4).	S	<p><i>ARC Project and Mace Triangle</i></p> <p>3-4 <i>At or prior to final planned development, or tentative map submittal, whichever occurs first, the applicant shall submit landscape and architectural details to the Department of Community Development and Sustainability showing the following:</i></p> <p><i>Landscaping</i></p> <ul style="list-style-type: none"> • <i>Research/office/R&D and manufacturing areas shall have access connections at regular intervals along the perimeter of the project area to adjacent bike and pedestrian pathways and easily-accessible, landscaped pedestrian and bicycle access between various areas.</i> • <i>Arterial and collector streets shall have planted medians, but with widths sized to accommodate tree and shrub plantings. Medians on collector streets shall be limited to locations where the median contributes to a specific purpose or solves a specific problem, such as enhancing an entry, calming traffic, or providing a needed pedestrian refuge at intersections. Removal of street trees to accommodate an increase in vehicular traffic shall occur only as a last</i> 	LS

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>resort, after review by appropriate boards and commissions.</i></p> <ul style="list-style-type: none"> • <i>Trees that are planted in the future shall have wide canopies, sufficient to eventually provide, at maturity, at least 50 percent shade coverage of the pavement area of local streets and 30 percent shade coverage of the pavement area of collector and arterial streets.</i> <p><i>Architecture</i></p> <ul style="list-style-type: none"> • <i>A scale transition between intensified land uses and adjoining lower intensity land uses shall be provided, as applicable.</i> • <i>Taller buildings shall be stepped back at upper levels in areas with a relatively smaller-scale character.</i> • <i>Buildings shall be varied in size, density and design.</i> • <i>Stored materials, goods, parts or equipment shall be screened from adjacent public streets or highways.</i> • <i>Loading facilities shall be designed as an integral part of the building(s) which they serve and shall be located in an inconspicuous manner.</i> • <i>Roof mounted equipment shall be screened from</i> 	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>view of any ground level area accessible to the general public.</i></p> <ul style="list-style-type: none"> <i>Trash enclosures, noise generating equipment, and other nuisances shall be adequately screened or located away from any adjacent residential use.</i> 	
Agricultural and Forest Resources (reference Section 4.2 of the Certified Final EIR)			
<p>3-5 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 (reference Impact 4.2-1).</p>	S	<p><i>ARC Project</i></p> <p><i>3-5(a) Prior to initiation of grading activities for each phase of development at the ARC Site, the project applicant for the ARC Site shall set aside in perpetuity, at a minimum ratio of 2:1 of active agricultural acreage, an amount equal to the current phase. The applicant may choose to set aside in perpetuity an amount equal to the remainder of the ARC Site instead of at each phase. The agricultural land shall be elsewhere in unincorporated Yolo County, through the purchase of development rights and execution of an irreversible conservation or agricultural easement, consistent with Section 40A.03.025 of the Davis Municipal Code. The location and amount of active agricultural acreage for the proposed project is subject to the review and approval by the City Council. The amount of agricultural acreage set aside shall account for farmland lost due to the conversion of the ARC Site, as well as any off-site</i></p>	SU

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>improvements, including but not necessarily limited to the off-site sewer pipe. The amount of agricultural acreage that needs to be set aside for off-site improvements shall be verified for each phase of the ARC Project during improvement plan review. Pursuant to Davis Code Section 40A.03.040, the agricultural mitigation land shall be comparable in soil quality with the agricultural land whose use is being changed to nonagricultural use. The easement land must conform with the policies and requirements of LAFCo including a LESA score no more than 10 percent below that of the project site. The easement instrument used to satisfy this measure shall conform to the conservation easement template of the Yolo Habitat Conservancy.</i></p> <p>3-5(b) <i>The ARC Master Owners' Association (MOA) shall encourage, and exercise control over, interim agricultural operations on-site through specific terms of agricultural leases. Terms shall specify duration of leases and require each new leasee to coordinate with the Yolo County Agricultural Commissioner to determine appropriate types of agricultural crops and uses for urban/ag interface areas. The MOA shall work cooperatively with the farmer(s) to minimize incompatibilities between ongoing agricultural operations on-site and ARC businesses, such that the ARC Site can continue to be farmed successfully until the ARC Project is fully built out. Minimization</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>measures should include the appropriate timing of on-site agricultural operations (i.e., use of equipment) to avoid early morning or nighttime noise generation; prohibiting disking operations during periods of high winds; minimization of pesticide applications; etc.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
3-6 Impacts related to conflicting with existing zoning for agricultural use (reference Impact 4.2-2).	LS	<i>None required.</i>	N/A
3-7 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use (reference Impact 4.2-3).	S	<p><i>ARC Project</i></p> <p><i>3-7(a) Implement Mitigation Measures 3-5(a) and (b).</i></p> <p><i>Mace Triangle</i></p> <p><i>3-7(b) Prior to initiation of grading activities for APN 033-630-012 or APN 033-630-011 within the Mace Triangle Site, the future project applicant(s) shall set aside in perpetuity, at a minimum ratio of 2:1 of active agricultural acreage, the following approximate acreages of protected farmland for agricultural purposes:</i></p>	SU

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> • APN 033-630-011 (Ikeda's): Mitigate conversion of approximately 2.5 acres at a 2:1 ratio = 5 acres • APN 033-630-012 (Easternmost Parcel): Mitigate conversion of approximately 8.4 acres at a 2:1 ratio = 16.8 acres <p>The agricultural land shall be elsewhere in unincorporated Yolo County, through the purchase of development rights and execution of an irreversible conservation or agricultural easement, consistent with Section 40A.03.025 of the Davis Municipal Code. The location and amount of active agricultural acreage for the proposed project is subject to the review and approval by the City Council. The amount of agricultural acreage set aside shall account for farmland lost due to the conversion of the Mace Triangle Site as well as any off-site improvements. Pursuant to Davis Code Section 40A.03.040, the agricultural mitigation land shall be comparable in soil quality with the agricultural land whose use is being changed to nonagricultural use. The easement land must conform with the policies and requirements of LAFCo including a LESA score no more than 10 percent below that of the Mace Triangle Site. The easement instrument used to satisfy this measure shall conform to the conservation easement template of the Yolo Habitat Conservancy.</p>	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
<p>3-8 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 (reference Impact 4.2-4).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p>3-8(a) <i>Prior to the construction of residential uses within 300 feet of neighboring orchards, the ARC Project applicant shall mitigate for potential pesticide drift through the implementation of barrier plantings. The applicant shall utilize the Natural Resources Conservation Services’⁵ best practices for establishing an appropriate windscreen between residential structures and adjacent agricultural operations to the satisfaction of the Yolo County Agricultural Commissioner. Written confirmation of compliance shall be provided to the Community Development and Sustainability Director prior to issuance of residential building permit within 300 feet of neighboring agriculture.</i></p> <p>3-8(b) <i>Prior to the public use of the recreational bicycle and pedestrian trails located within the agricultural transition area, the ARC Project applicant shall mitigate for potential pesticide drift. Mitigation shall be achieved pursuant to utilization of a windscreen in a manner consistent with MM 3-8(a). Alternatively, applicant shall enter into an agreement with the neighboring property owner pursuant to which the agricultural operator</i></p>	<p>LS</p>

⁵ See Natural Resources Conservation Service, *Windbreak/Shelterbelt Establishment, Conservation Practice Job Sheet 380*. April 2013. As noted, when used as a living screen, windbreaks control views, reduce noise, and intercept airborne particulate matter, chemicals and odors.

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>provides notice to the ARC Project applicant or the MOA of the days on which pesticide application will occur and the applicant shall close the recreational trails during the period in which pesticides are applied within 300 feet of the trail. Notice of closure shall be provided by the MOA to disseminate to employees and residences, and closure notice shall be posted at all points of access onto the impacted portion of trail during the period of pesticide application.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-9 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 (reference Impact 4.2-5).</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>
<p>Air Quality (reference Section 4.3 of the Certified Final EIR)</p>			
<p>3-10 Violate any air quality standard or contribute substantially to an existing or projected air quality violation</p>	<p>S</p>	<p><i>ARC Project and Mace Triangle</i></p> <p><i>3-10 Prior to approval of any grading or demolition plans, the project applicant shall show on the plans via</i></p>	<p>LS</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
<p>during construction (reference Impact 4.3-1).</p>		<p><i>notation that the contractor shall ensure that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet average 20 percent NO_x reduction compared to the year 2023 California Air Resources Board (CARB) fleet average. A fleet average reduction of less than 20 percent may only be acceptable when the project applicant has demonstrated, to the satisfaction of the City's Department of Community Development and Sustainability, that the achieved reductions would be sufficient to ensure that project-related emissions would remain below YSAQMD's thresholds.</i></p> <p><i>In addition, all off-road equipment operating at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to 5 minutes or less in accordance with the Off-Road Diesel Fueled Fleet Regulation as required by CARB. Clear Signage regarding idling restrictions should be placed at the entrances to the construction site.</i></p> <p><i>Portable equipment over 50 horsepower must have either a valid District Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
<p>3-11 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 (reference Impact 4.3-2).</p>	<p>S</p>	<p><i>ARC Project and Mace Triangle</i></p> <p><i>3-11</i> Prior to issuance of any entitlement or permit, the project applicant shall work with the City of Davis, the YSAQMD, and/or other air districts within the region (as appropriate) to develop and implement a strategy to mitigate ROG and NOx, and PM₁₀. The strategy must reduce emissions from project operation to levels at or below the applicable YSAQMD thresholds of significance to the maximum extent feasible. Feasible on-site actions to reduce emissions shall receive highest priority for implementation. Emissions that cannot be reduced through on-site actions shall be mitigated through off-site action. The strategy and all actions shall be subject to review and approval by the City in consultation with the YSAQMD, and, if applicable, the air quality management district or air pollution control district within which the off-site mitigation project is located. On-site actions may include, but shall not be limited to the following:</p> <ul style="list-style-type: none"> • Reducing the total amount of paved area within the ARC Site in order to reduce off-gassing, emissions from restriping and painting, and the urban heat island effect; • Using concrete or other non-emitting materials for parking lots instead of asphalt; • Reducing vehicle trips through implementation 	<p>SU</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>of a Traffic Demand Management program, such as that required in Mitigation Measure 3-72(a);</i></p> <ul style="list-style-type: none"> • <i>Using passive heating and cooling systems for buildings;</i> • <i>Using natural lighting in buildings to the extent practical;</i> • <i>Installing mechanical air conditioners and refrigeration units that use non-ozone depleting chemicals;</i> • <i>Providing electric outlets outside of buildings, sufficient to allow for use of electric landscaping equipment;</i> • <i>Hiring landscaping companies that use primarily electric landscaping equipment;</i> • <i>Using zero-VOC paints, finishes, adhesives, and cleaning supplies on all buildings on the project site;</i> • <i>Employing vehicle fleets that use only cleaner-burning fuels;</i> • <i>Prohibiting the installation of natural gas fueled space and water heating equipment, and/or other large appliances such as ranges and stoves, within portions of the project; and</i> • <i>Providing electrical vehicle charging stations in excess of local and/or State standards in each phase of the project.</i> 	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Off-site actions may include, but shall not be limited to, the following:</i></p> <ul style="list-style-type: none"> • <i>Retrofitting stationary sources such as back-up generators or boilers with new technologies that reduce emissions;</i> • <i>Replacing diesel agriculture water pumps with alternative fuels;</i> • <i>Funding projects within an adopted bicycle/pedestrian plan;</i> • <i>Replacing non-USEPA wood-burning devices with natural gas or USEPA-approved fireplaces;</i> • <i>Providing energy efficiency upgrades at government buildings;</i> • <i>Installing alternative energy supply on buildings;</i> • <i>Replacing older landscape maintenance equipment with newer, lower-emission equipment;</i> • <i>Payment of mitigation fees into an established air district emissions offset program.</i> <p><i>The Reduction Strategy shall include requirements to ensure that the Reduction Strategy document is enforceable and measurable. A mechanism for</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>oversight, monitoring and reporting through the project Master Owners Association (MOA) to the City shall be included as a part of the strategy. Because ROG, NO_x, and PM₁₀ are pollutants of regional concern, the emissions reductions for these pollutants may occur anywhere within the lower Sacramento Valley Air Basin (e.g., within YSAQMD, the Sacramento Metropolitan Air Quality Management District, or the Placer County Air Pollution Control District).</i></p> <p><i>In General, emissions reduction measures implemented for development within the ARC Site shall use the following prioritization:</i></p> <ul style="list-style-type: none"> • <i>First Priority – building specific actions;</i> • <i>Second priority – onsite (within ARC Site) actions;</i> • <i>Third priority – community based (within Davis) actions;</i> • <i>Fourth priority – within YSAQMD jurisdiction;</i> • <i>Fifth priority – within the Sacramento Federal Nonattainment Area; and</i> • <i>Sixth priority – within California.</i> 	
<p>3-12 Expose sensitive receptors to substantial pollutant concentrations (reference Impact 4.3-3).</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
3-13 Create objectionable odors affecting a substantial number of people (reference Impact 4.3-4).	LS	<i>None required.</i>	N/A
3-14 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to air quality (reference Impact 4.3-5).	LS	<i>None required.</i>	N/A
Biological Resources (reference Section 4.4 of the Certified Final EIR)			
3-15 Impacts related to special-status plant species (reference Impact 4.4-1).	S	<p><i>ARC Project and Mace Triangle</i></p> <p>3-15 <i>To ensure avoidance and minimization of potential impacts to special-status plant species, the following measures shall be implemented:</i></p> <ul style="list-style-type: none"> • <i>Prior to initiation of any ground disturbance activities occurring after August 7, 2022, for the Mace Triangle and for each phase of the ARC Project, the applicant shall retain a qualified botanist to conduct a botanical survey during spring (April to May) and fall (July to September), during the evident and identifiable periods for special-status plants with potential</i> 	LS

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>to occur on the site. The botanical survey must also cover all potential utility line alignments and any other off-site work required for any phase of development. The survey shall be submitted to the City of Davis Department of Community Development and Sustainability for review. If special-status plants are not identified within the areas proposed for disturbance, further mitigation is not required for that phase.</i></p> <ul style="list-style-type: none"> • <i>Any special-status plants that are within the limits of grading for on- or off-site improvements shall be propagated to suitable habitat in designated open space areas, or for the Mace Triangle, another pre-approved location. The propagation shall be overseen by a qualified botanist, approved by the City of Davis Department of Community Development and Sustainability and CDFW. The botanist shall identify the location to receive the plants, identify the methods of propagation, and oversee the work.</i> 	
<p>3-16 Impacts to valley elderberry longhorn beetle (reference Impact 4.4-2).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p>3-16 <i>To ensure avoidance and minimization of impacts to VELB, the project applicant for the ARC Site shall obtain coverage under the Yolo HCP/NCCP for on-site, and as may be determined necessary by Yolo Habitat Conservancy, for off-site infrastructure work, for each</i></p>	<p>LS</p>

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>phase of development. In addition to payment of any applicable HCP/NCCP fees, the applicant shall implement Yolo HCP/NCCP Avoidance and Minimization Measure AMM-12 (Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle) to the satisfaction of the City and the YHC. AMM-12 provides:</i></p> <ul style="list-style-type: none"> • <i>The project proponent will retain a qualified biologist who is familiar with valley elderberry longhorn beetle and evidence of its presence (i.e., exit holes in elderberry shrubs) to map all elderberry shrubs in and within 100 feet of the project footprint with stems that are greater than one inch in diameter at ground level. To avoid take of valley elderberry longhorn beetle fully, the project proponent will maintain a buffer of at least 100 feet from any elderberry shrubs with stems greater than one inch in diameter at ground level. A lesser buffer may be applied in some circumstances, as described in AMM-1 (Establish Buffers) of the Yolo HCP/NCCP.</i> • <i>For elderberry shrubs that cannot be avoided with a designated buffer distance as described above, the qualified biologist will quantify the number of stems one inch or greater in diameter to be affected, and the presence or absence of</i> 	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>exit holes. The Conservancy will use this information to determine the number of plants or cuttings to plant on a riparian restoration site to help offset the loss, consistent with Section 6.4.2.4.1, Valley Elderberry Longhorn Beetle. Additionally, prior to construction, the project proponent will transplant elderberry shrubs identified within the project footprint that cannot be avoided.</i></p> <ul style="list-style-type: none"> <i>Transplantation will only occur if a shrub cannot be avoided and, if indirectly affected, the indirect effects would otherwise result in the death of stems or the entire shrub. If the project proponent chooses, in coordination with a qualified biologist, not to transplant the shrub because the activity would not likely result in death of stems of the shrub, then the qualified biologist will monitor the shrub annually for a five-year monitoring period. The monitoring period may be reduced with concurrence from the wildlife agencies if the latest research and best available information at the time indicates that a shorter monitoring period is warranted. If death of stems at least one inch in diameter occurs within the monitoring period, and the qualified biologist determines that the shrub is sufficiently healthy to transplant, the project proponent will transplant the shrub as described</i> 	

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		<p><i>in the following paragraph, in coordination with the qualified biologist. If the shrub dies during the monitoring period, or the qualified biologist determines that the shrub is no longer healthy enough to survive transplanting, then the Conservancy will offset the shrub loss consistent with the preceding paragraph.</i></p> <ul style="list-style-type: none"> • <i>The project proponent will transplant the shrubs into a location in the HCP/NCCP reserve system that has been approved by the Conservancy. Elderberry shrubs outside the project footprint but within the 100-foot buffer will not be transplanted.</i> • <i>Transplanting will follow the following measures:</i> <ol style="list-style-type: none"> 1. <i>Monitor: A qualified biologist will be on-site for the duration of the transplanting of the elderberry shrubs to ensure the effects on elderberry shrubs are minimized.</i> 2. <i>Timing: The project proponent will transplant elderberry plants when the plants are dormant, approximately November through the first two weeks of February, after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the plant and increase transplantation</i> 	

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		<p><i>success.</i></p> <p>3. <i>Transplantation procedure:</i></p> <p>a. <i>Cut the plant back three to six feet from the ground or to 50 percent of its height (whichever is taller) by removing branches and stems above this height. Replant the trunk and stems measuring one inch or greater in diameter. Remove leaves that remain on the plants.</i></p> <p>b. <i>Relocate plant to approved location in the reserve system, and replant as described in Section 6.4.2.4.1, Valley Elderberry Longhorn Beetle.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-17 Impacts to giant garter snake (reference Impact 4.4-3).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p>3-17 <i>To ensure avoidance and minimization of impacts to GGS, the project applicant for the ARC Project shall obtain coverage under the Yolo HCP/NCCP for on-site, and as may be determined necessary by Yolo Habitat Conservancy, for off-site infrastructure work, for each phase of development. In addition to payment of any</i></p>	<p>LS</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>applicable HCP/NCCP fees, the applicant shall implement Yolo HCP/NCCP Avoidance and Minimization Measure AMM-15 (Minimize Take and Adverse Effects on Habitat of Giant Garter Snake) to the satisfaction of the City and the YHC. AMM-15 provides:</i></p> <p><i>The project proponent will avoid effects on areas where planning-level surveys indicate the presence of suitable habitat for giant garter snake. To avoid effects on giant garter snake aquatic habitat, the project proponent will conduct no in-water/in-channel activity and maintain a permanent 200-foot non-disturbance buffer from the outer edge of potentially occupied aquatic habitat (see Figure 3-12).</i></p> <p><i>If the project proponent cannot avoid effects of construction activities, the project proponent will implement the measures below to minimize effects of construction projects (measures for maintenance activities are described after the following bulleted list).</i></p> <ul style="list-style-type: none"> <i>Conduct preconstruction clearance surveys using USFWS-approved methods within 24 hours prior to construction activities within identified giant garter snake aquatic and adjacent upland habitat. If construction activities stop for a period of two weeks or more, conduct another preconstruction</i> 	

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 N/A = Not Applicable

**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>clearance survey within 24 hours prior to resuming construction activity.</i></p> <ul style="list-style-type: none"> • <i>Restrict all construction activity involving disturbance of giant garter snake habitat to the snake's active season, May 1 through October 1. During this period, the potential for direct mortality is reduced because snakes are expected to move and avoid danger.</i> • <i>In areas where construction is to take place, encourage giant garter snakes to leave the site on their own by dewatering all irrigation ditches, canals, or other aquatic habitat (i.e., removing giant garter snake aquatic habitat) between April 15 and September 30. Dewatered habitat must remain dry, with no water puddles remaining, for at least 15 consecutive days prior to excavating or filling of the habitat. If a site cannot be completely dewatered, netting and salvage of giant garter snake prey items may be necessary to discourage use by snakes.</i> • <i>Provide environmental awareness training for construction personnel, as approved by the Conservancy. Training may consist of showing a video prepared by a qualified biologist, or an in-person presentation by a qualified biologist. In addition to the video or in-person presentation, training may be supplemented</i> 	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>with the distribution of approved brochures and other materials that describe resources protected under the Yolo HCP/NCCP and methods for avoiding effects.</i></p> <ul style="list-style-type: none"> • <i>A qualified biologist will prepare a giant garter snake relocation plan which must be approved by the Conservancy prior to work in giant garter snake habitat. The qualified biologist will base the relocation plan on criteria provided by CDFW or USFWS, through the Conservancy.</i> • <i>If a live giant garter snake is encountered during construction activities, immediately notify the project's biological monitor and USFWS and CDFW. The monitor will stop construction in the vicinity of the snake, monitor the snake, and allow the snake to leave on its own. The monitor will remain in the area for the remainder of the work day to ensure the snake is not harmed or, if it leaves the site, does not return. If the giant garter snake does not leave on its own, the qualified biologist will relocate the snake consistent with the relocation plan described above.</i> • <i>Employ the following management practices to minimize disturbances to habitat:</i> <ul style="list-style-type: none"> ▪ <i>Install temporary fencing to identify and protect adjacent marshes, wetlands, and</i> 	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>ditches from encroachment from construction equipment and personnel.</i></p> <ul style="list-style-type: none"> ▪ <i>Maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetative buffer strips, or other accepted practices. No plastic, monofilament, jute, or similar erosion-control matting that could entangle snakes or other wildlife will be permitted.</i> <p><i>Ongoing maintenance covered activities by local water and flood control agencies typically involve removal of vegetation, debris, and sediment from water conveyance canals as well as resloping, rocking, and stabilizing the canals that serve agricultural water users. Maintenance of these conveyance facilities can typically occur only from mid-January through April when conveyance canals and ditches are not in service by the agency, although some drainages are used for storm conveyance during the winter and are wet all year. This timing is during the giant garter snake's inactive period. This is when snakes may be using underground burrows and are most vulnerable to take because they are unable to move out of harm's way. Maintenance activities, therefore, will be limited to the giant garter snake's active season (May 1 to October 1) when possible. All</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>personnel involved in maintenance activities within giant garter snake habitat will first participate in environmental awareness training for giant garter snake, as described above for construction related activities. To minimize the take of giant garter snake, the local water or flood control agency will limit maintenance of conveyance structures located within modeled giant garter snake habitat (Appendix A, Covered Species Accounts) to clearing one side along at least 80 percent of the linear distance of canals and ditches during each maintenance year (e.g., the left bank of a canal is maintained in the first year and the right bank in the second year). To avoid collapses when re-sloping canal and ditch banks composed of heavy clay soils, clearing will be limited to one side of the channel during each maintenance year.</i></p> <p><i>For channel maintenance activities conducted within modeled habitat for giant garter snake, the project proponent will place removed material in existing dredged sites along channels where prior maintenance dredge disposal has occurred. For portions of channels that do not have previously used spoil disposal sites and where surveys have been conducted to confirm that giant garter snakes are not present, removed materials may be placed along channels in areas that are not occupied by giant garter snake and where materials will not re-enter the canal because of stormwater runoff.</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Modifications to this AMM may be made with the approval of the Conservancy, USFWS, and CDFW. This includes any modifications needed to ensure compliance with the City's existing agreement with CDFW regarding maintenance of the Mace Drainage Channel.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-18 Impacts to burrowing owl (reference Impact 4.4-4).</p>	<p>S</p>	<p><i>ARC Project and Mace Triangle</i></p> <p>3-18 <i>To ensure avoidance and minimization of impacts to Western Burrowing Owl, the project applicant for the ARC shall obtain coverage under the Yolo HCP/NCCP for on-site, and as may be determined necessary by Yolo Habitat Conservancy, for off-site infrastructure work, for each phase of development. In addition to payment of any applicable HCP/NCCP fees, the applicant shall implement Yolo HCP/NCCP Avoidance and Minimization Measure AMM-18 (Minimize Take and Adverse Effects on Western Burrowing Owl) to the satisfaction of the City and the YHC. AMM-18⁶ provides:</i></p>	<p>LS</p>

⁶ Per Table 5-2(b) of the HCP/NCCP, no injury or mortality of individuals would occur with application of avoidance and minimization measures (Final HCP/NCCP, pp. 5-21 to 5-25).

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>The project proponent will retain a qualified biologist to conduct planning-level surveys and identify western burrowing owl habitat (as defined in Appendix A of the Yolo HCP/NCCP, Covered Species Accounts) within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines (Yolo HCP/NCCP, Appendix L).</i></p> <p><i>If burrowing owls are identified during the planning-level survey, the project proponent will minimize activities that will affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint does not impinge on a non-disturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this non-disturbance buffer could range from 150 to 1,500 feet (Table 3-17, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012).</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation																				
		<p>Table 3-17 Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls Time of Year Level of Disturbance (feet) from Occupied Burrows</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th colspan="3" style="text-align: center;">Level of Disturbance (feet) from Occupied Burrows</th> </tr> <tr> <th style="text-align: center;">Time of Year</th> <th style="text-align: center;">Low</th> <th style="text-align: center;">Medium</th> <th style="text-align: center;">High</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">April 1 – August 15</td> <td style="text-align: center;">600</td> <td style="text-align: center;">1,500</td> <td style="text-align: center;">1,500</td> </tr> <tr> <td style="text-align: center;">August 16 – October 15</td> <td style="text-align: center;">600</td> <td style="text-align: center;">600</td> <td style="text-align: center;">1,500</td> </tr> <tr> <td style="text-align: center;">October 16-March 31</td> <td style="text-align: center;">150</td> <td style="text-align: center;">300</td> <td style="text-align: center;">1,500</td> </tr> </tbody> </table> <p>The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.</p> <ul style="list-style-type: none"> • <u>Low</u>: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would 		Level of Disturbance (feet) from Occupied Burrows			Time of Year	Low	Medium	High	April 1 – August 15	600	1,500	1,500	August 16 – October 15	600	600	1,500	October 16-March 31	150	300	1,500	
	Level of Disturbance (feet) from Occupied Burrows																						
Time of Year	Low	Medium	High																				
April 1 – August 15	600	1,500	1,500																				
August 16 – October 15	600	600	1,500																				
October 16-March 31	150	300	1,500																				

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>also constitute a low level of disturbance, regardless of the noise levels.</i></p> <ul style="list-style-type: none"> • <i><u>Moderate</u>: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.</i> • <i><u>High</u>: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression (“jake”) brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities</i> 	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>may result in this level of disturbance.</i></p> <p><i>The project proponent may qualify for a reduced buffer size, based on existing vegetation, human development, and land use, if agreed upon by CDFW and USFWS (California Department of Fish and Game 2012).</i></p> <p><i>If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), the project proponent will retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines (Yolo HCP/NCCP, Appendix L, Take Avoidance Surveys). The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.</i></p> <p><i>If the biologist finds the site to be occupied by western burrowing owls during the breeding season (February 1</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>to August 31), the project proponent will avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the project proponent develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:</i></p> <ul style="list-style-type: none"> <i>• The Conservancy, CDFW, and USFWS approves the AMM plan provided by the project proponent.</i> <i>• A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).</i> <i>• The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.</i> <i>• If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist</i> 	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>will have the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.</i></p> <ul style="list-style-type: none"> <i>If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the project proponent may remove the non-disturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.</i> <p><i>If evidence of western burrowing owl is detected outside the breeding season (December 1 to January 31), the project proponent will establish a non-disturbance buffer around occupied burrows, consistent with Table</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>3-17, as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:</i></p> <ul style="list-style-type: none"> • <i>A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).</i> • <i>The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.</i> • <i>If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.</i> • <i>If the owls are gone for at least one week, the project proponent may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are</i> 	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>excavated, the buffer will be removed and construction may continue.</i></p> <p><i>Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active.</i></p> <p><i>A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced and owls are not disturbed. Passive relocation (i.e., exclusion) of owls has been used in the past in the Plan Area to remove and exclude owls from active burrows during the nonbreeding season (Trulio 1995). Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. If the Conservancy determines that passive relocation is necessary, the project proponent will develop a burrowing owl exclusion plan in consultation with CDFW biologists. The methods will be designed as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow to prevent</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.</i></p>	
<p>3-19 Impacts to Swainson’s hawk (reference Impact 4.4-5).</p>	<p>S</p>	<p>ARC Project and Mace Triangle</p> <p>3-19 <i>To ensure avoidance and minimization of impacts to Swainson’s hawk and their habitat, the project applicant for the ARC, or the Mace Triangle as applicable, shall obtain coverage under the Yolo HCP/NCCP for on-site, and as may be determined necessary by Yolo Habitat Conservancy, for off-site infrastructure work, for each phase of development. In addition to payment of any applicable HCP/NCCP fees, the applicant shall implement Yolo HCP/NCCP Avoidance and Minimization Measure AMM-16 (Minimize Take and</i></p>	<p>LS</p>

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Adverse Effects on Habitat of Swainson’s Hawk and White-Tailed Kite) to the satisfaction of the City and the YHC. AMM-16⁷ provides:</i></p> <p><i>The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.</i></p> <p><i>If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson’s Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during</i></p>	

⁷ Per Table 5-2(b) of the HCP/NCCP, no injury or mortality of individuals would occur with application of avoidance and minimization measures (Final HCP/NCCP, pp. 5-21 to 5-25).]

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.</i></p> <p><i>For covered activities that involve pruning or</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>removal of a potential Swainson’s hawk nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson’s Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.</i></p>	
<p>3-20 Impacts to raptors, nesting birds, or other birds protected under the MBTA (reference Impact 4.4-6).</p>	<p>S</p>	<p>ARC Project</p> <p>3-20(a) <i>White-tailed kite.</i> To ensure avoidance and minimization of impacts to White-Tailed Kite, the project applicant for the ARC Project shall obtain coverage under the Yolo HCP/NCCP for on-site, and as may be determined necessary by Yolo Habitat Conservancy, for off-site infrastructure work, for each phase of development. In addition to payment of any applicable HCP/NCCP fees, the applicant shall implement Yolo HCP/NCCP Avoidance and Minimization Measure AMM-16 (Minimize Take and Adverse Effects on Habitat of</p>	<p>LS</p>

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Swainson's Hawk and White-Tailed Kite) to the satisfaction of the City and the YHC. AMM-16⁸ provides:</i></p> <p><i>The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.</i></p> <p><i>If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during</i></p>	

⁸ Per Table 5-2(b) of the HCP/NCCP, no injury or mortality of individuals would occur with application of avoidance and minimization measures (Final HCP/NCCP, pp. 5-21 to 5-25).]

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior.</i></p> <p><i>For covered activities that involve pruning or removal of a potential white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.</i></p> <p>3-20(b) <i>Tricolored blackbird.</i> To ensure avoidance and minimization of impacts to Tricolored Blackbird, the project applicant for the ARC Project shall obtain coverage under the Yolo HCP/NCCP for on-site, and as may be determined necessary by Yolo Habitat Conservancy, for off-site infrastructure work, for each phase of development. In addition to payment of any applicable HCP/NCCP fees, the applicant shall implement Yolo HCP/NCCP Avoidance and Minimization Measure AMM-21 (Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird) to the satisfaction of the City and the YHC. AMM-21⁹ provides:</p> <p><i>The project proponent will retain a qualified biologist to identify and quantify (in acres)</i></p>	

⁹ Per Table 5-2(b) of the HCP/NCCP, no injury or mortality of individuals would occur with application of avoidance and minimization measures (Final HCP/NCCP, pp. 5-21 to 5-25).]

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>tricolored blackbird nesting and foraging habitat (as defined in Appendix A of the Yolo HCP/NCCP, Covered Species Accounts) within 1,300 feet of the footprint of the covered activity. If a 1,300-foot buffer from nesting habitat cannot be maintained, the qualified biologist will check records maintained by the Conservancy (which will include CNDDDB data, and data from the tricolored blackbird portal) to determine if tricolored blackbird nesting colonies have been active in or within 1,300 feet of the project footprint during the previous five years. If there are no records of nesting tricolored blackbirds on the site, the qualified biologist will conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30, consistent with protocol described by Kelsey (2008).</i></p> <p><i>Operations and maintenance activities or other temporary activities that do not remove nesting habitat and occur outside the nesting season (March 1 to July 30) do not need to conduct planning or construction surveys or implement any additional avoidance measures.</i></p> <p><i>If an active tricolored blackbird colony is present or has been present within the last five</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>years within the planning-level survey area, the project proponent will design the project to avoid adverse effects within 1,300 feet of the colony site(s), unless a shorter distance is approved by the Conservancy, USFWS, and CDFW. If a shorter distance is approved, the project proponent will still maintain a 1,300-foot buffer around active nesting colonies during the nesting season but may apply the approved lesser distance outside the nesting season. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.</i></p> <p><i>ARC Project and Mace Triangle</i></p> <p><i>3-20(c) <u>Northern harrier, mountain plover, Modesto song sparrow and other migratory birds.</u> The project applicant shall implement the following measures to avoid or minimize impacts to migratory birds and other protected bird species during on- and off-site construction:</i></p> <ul style="list-style-type: none"> <i>• If any site disturbance or construction activity for any phase of development begins outside the February 1 to August 31 breeding season, a preconstruction survey for active nests shall not</i> 	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>be needed.</i></p> <ul style="list-style-type: none"> • <i>If any site disturbance or construction activity for any phase of development is scheduled to begin between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey for active nests from publicly accessible areas within 14 days prior site disturbance or construction activity for any phase of development. The survey area shall cover the construction site and the area surrounding the construction site, including a 100-foot radius for MBTA birds, and a 250-foot radius for birds of prey. If an active nest of a bird of prey, MBTA bird, or other CDFW-protected bird is not found, then no further mitigation measures are necessary. The preconstruction survey shall be submitted to the City of Davis Department of Community Development and Sustainability for review.</i> • <i>If an active nest of a bird of prey, MBTA bird, or other CDFW-protected bird is discovered that may be adversely affected by any site disturbance or construction or an injured or killed bird is found, the project applicant shall immediately:</i> <ul style="list-style-type: none"> ○ <i>Stop all work within a 100-foot radius of the discovery.</i> ○ <i>Notify the City of Davis Department of</i> 	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Community Development and Sustainability.</i></p> <ul style="list-style-type: none"> ○ <i>Do not resume work within the 100-foot radius until authorized by the biologist.</i> ○ <i>The biologist shall establish a minimum 250-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey. The ESA may be reduced if the biologist determines that a smaller ESA would still adequately protect the active nest. No work may occur within the ESA until the biologist determines that the nest is no longer active.</i> 	
<p>3-21 Impacts to riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS (reference Impact 4.4-7).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p>3-21 <i>The project applicant for the ARC Site shall implement the following measure to avoid or minimize impacts to the Mace Drainage Channel:</i></p> <ul style="list-style-type: none"> • <i>Prior to conducting non-maintenance work within the bed and banks in the Mace Drainage Channel for any phase of development, as applicable, the project applicant for the ARC Site shall notify CDFW pursuant to Section 1602 of the Fish and Wildlife Code. If CDFW</i> 	<p>LS</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>determines that a Streambed Alteration Agreement (SAA) is necessary, the applicant shall obtain a SAA and comply with all conditions of that Agreement, including the payment of any applicable Yolo HCP/NCCP fees. Compliance with the SAA shall be ensured by the City of Davis Department of Community Development and Sustainability. This does not apply to City maintenance work within the Mace Drainage Channel, for which the City already has an agreement with CDFW.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-22 Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (reference Impact 4.4-8).</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>
<p>3-23 Interfere substantially with the movement of native, resident, or migratory fish or wildlife species or established native</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
resident or migratory wildlife corridors (reference Impact 4.4-9).			
3-24 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (reference Impact 4.4-10).	LS	<i>None required.</i>	N/A
3-25 Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan (reference Impact 4.4-11).	LS	<i>None required.</i>	N/A
3-26 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 (reference Impact 4.4-12).	S	<p><i>ARC Project</i></p> <p>3-26 <i>At or prior to final planned development, or tentative map submittal, whichever occurs first, the applicant shall submit a design plan for the proposed on-site buffer/drainage features to the Department of Community Development and Sustainability for review and approval. The design plan shall demonstrate how the buffer/drainage features will be wildlife friendly natural spaces, with respect to details such as plant types, detention slopes, etc. In addition, should staff determine that in order to meet the City's stated objectives for urban agricultural transition areas (UATA), as well as drainage and safety, the proposed</i></p>	LS

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>buffer design shall be modified to concentrate the proposed buffer and drainage areas to the northern and eastern boundaries of the project site, in order to establish wider UATA segments.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
Cultural Resources (reference Section 4.5 of the Certified Final EIR)			
<p>3-27 Cause a substantial adverse change in the significance of a historical resource (reference Impact 4.5-1).</p>	S	<p><i>ARC Project</i></p> <p>3-27 <i>If the northerly off-site sewer alignment is selected for the ARC Project, then prior to approval of design-level improvement plans for the off-site sewer pipe, the applicant shall retain a qualified archaeologist to design and implement a cultural study, the intent of which shall be to identify and investigate any subsurface historic remains within the northerly portion of the sewer pipe construction limits. Because of the potential for fragile prehistoric remains within this area, the evaluation shall include only metal detection and hand excavation. Metal detection should include a complete sweep of the APE adjacent to the farm structures, to test for subsurface features. Hand excavation should include testing of the metal detection finds. If no subsurface features are uncovered, no additional cultural investigations will necessary. If, on the other hand, structural remains are</i></p>	LS

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>found, the investigation shall continue as formal evaluation to determine their eligibility for the California Register of Historical Resources. This shall include, at a minimum, additional exposure of the feature(s), and photo-documentation and recordation. If the evaluation determines that the features do not have sufficient data potential to be eligible for the California Register, no additional work should be required. However, if data potential exists – e.g., there is an intact feature – it will be necessary to mitigate any project impacts. The evaluation shall be submitted to the Davis Department of Community Development and Sustainability for review.</i></p> <p><i>If it is determined that standing structures associated with the William Seward Wright house and farm are within, or immediately adjacent to, the off-site sewer APE, a qualified architectural historian shall conduct an evaluation of those structures for their potential eligibility for the California Register of Historical Resources. The evaluation should include a full assessment of the structures, archival research to confirm the age, occupants, and historic uses of the structures, and the dates and extent of any renovations that might impact the structures’ historic integrity. Should the structures be determined to be eligible for the California Register, pursuant to Public Resources Code Section 5024.1, Title 14 CCR, Section 4852, any mitigation measures provided in the architectural historian’s report</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>shall be followed. Should the structures be determined ineligible for the California Register, no further consideration shall be required. The evaluation shall be submitted to the Davis Department of Community Development and Sustainability for review.</i></p> <p><i>Mitigation of impacts might include avoidance of further disturbance to the resources through project redesign. If avoidance is determined to be infeasible, additional data recovery excavations shall be conducted for the resources, to collect enough information to exhaust the data potential of those resources. Impacts to the standing structures shall be mitigated through recordation to the standards of the National Park Service’s Historic American Buildings Survey (HABS), as determined by the qualified architectural historian.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-28 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 (reference Impact 4.5-2).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p>3-28(a) <i>Prior to approval of any on- and/or off-site improvement plans for development within the areas designated as having “high” sensitivity for buried sites per Figure 7 of the “Archaeological Survey Report for the Proposed Davis Innovation Center: Mace Ranch Location”, prepared by Far Western Anthropological Research</i></p>	<p>LS</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Group, the applicant shall retain a qualified archaeologist to design and implement an archeological study, the intent of which shall be to identify and investigate any subsurface archaeological remains within the northwestern portion of the ARC Site. The subsurface sampling methodology outlined in the study shall be sufficient to enable the qualified archaeologist to define the physical extent and nature of any artifact-bearing deposits should they be discovered. Because of the potential for fragile prehistoric remains, the evaluation should include only hand excavation. Hand excavation should include placement of a series of small shovel probes across the site to look for prehistoric artifacts and features. If artifact-bearing deposits are not uncovered, additional cultural investigations are not required. If artifact-bearing features are found, the investigation shall continue as formal evaluation to determine their eligibility for the California Register of Historical Resources. This shall include, at a minimum, hand excavation of larger control units and analysis of the artifact assemblage(s). If the evaluation determines that the artifacts do not have sufficient data potential to be eligible for the California Register, additional work shall not be required. However, if data potential exists – e.g., there is an intact feature with a large and varied artifact assemblage – necessary mitigation measures shall be implemented to alleviate any project impacts. The evaluation shall be submitted to the Davis Department of</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Community Development and Sustainability for review.</i></p> <p><i>Mitigation of impacts might include avoidance of further disturbance to the resources through project redesign. If redesign is not feasible, additional data recovery excavations shall be conducted for the archaeological resources, to collect enough information to exhaust the data potential of those resources.</i></p> <p>3-28(b) <i>If the northerly off-site sewer alignment is selected for the ARC Project, then prior to approval of design-level improvement plans for the off-site sewer pipe, the applicant shall retain a qualified archaeologist to design and implement an archeological study, the intent of which shall be to identify and investigate any subsurface archaeological remains within the northerly portion of the sewer pipe construction limits. The subsurface sampling methodology outlined in the study shall be sufficient to enable the qualified archaeologist to define the physical extent and nature of any artifact-bearing deposits should they be discovered. Because of the potential for fragile prehistoric remains, the evaluation should include only hand excavation. Hand excavation should include placement of a series of small shovel probes across the site to look for prehistoric artifacts and features. If artifact-bearing deposits are not uncovered, additional archaeological investigations are not required. If artifact-bearing features are found, the</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>investigation shall continue as formal evaluation to determine their eligibility for the California Register of Historical Resources. This shall include, at a minimum, hand excavation of larger control units and analysis of the artifact assemblage(s). If the evaluation determines that the artifacts do not have sufficient data potential to be eligible for the California Register, additional work shall not be required. However, if data potential exists – e.g., there is an intact feature with a large and varied artifact assemblage – necessary mitigation measures shall be implemented to alleviate any project impacts. The evaluation shall be submitted to the Davis Department of Community Development and Sustainability for review.</i></p> <p><i>Mitigation of impacts might include avoidance of further disturbance to the resources through project redesign. If redesign is not feasible, additional data recovery excavations shall be conducted for the archaeological resources, to collect enough information to exhaust the data potential of those resources.</i></p> <p><i>ARC Project and Mace Triangle</i></p> <p><i>3-28(c) If any prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities, all work within the vicinity of the find shall cease and the applicant shall</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>retain an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, to evaluate the finds. If the resource is determined to be eligible for inclusion in the California Register of Historical Resources and project impacts cannot be avoided, data recovery shall be undertaken. Data recovery efforts can range from rapid photographic documentation to extensive excavation depending upon the physical nature of the resource. The degree of effort shall be determined at the discretion of a qualified archaeologist and should be sufficient to recover data considered important to the area's history and/or prehistory. This language of this mitigation measure shall be included on any future grading plans, utility plans, and subdivision improvement drawings approved by the City for the ARC Site and/or 16.49-acre Mace Triangle Site.</i></p>	
<p>3-29 Directly or indirectly destroy a unique paleontological resource or unique geologic feature on the project site (reference Impact 4.5-3).</p>	<p>S</p>	<p>ARC Project and Mace Triangle</p> <p>3-29 <i>If any vertebrate bones or teeth are found by the construction crew, the contractor shall cease all work in the immediate vicinity of the discovery until an on-site archaeological monitor, if present, inspects the discovery; if none is present, or if recommended by the monitor, a professional paleontologist shall evaluate the find. If deemed significant with respect to authenticity, completeness, preservation, and identification, the</i></p>	<p>LS</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<i>resource(s) shall then be salvaged and deposited in an accredited and permanent scientific institution (e.g., UCMP), where it will be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any future grading plans, utility plans, and subdivision improvement drawings approved by the City for the ARC Site and/or 16.49-acre Mace Triangle Site, where excavation work will be required.</i>	
3-30 Disturb any human remains, including those interred outside of formal cemeteries (reference Impact 4.5-4).	S	<p><i>ARC Project and Mace Triangle</i></p> <p>3-30 <i>During construction, if bone is uncovered that may be human, the California Native American Heritage Commission, located in Sacramento, and the Yolo County Coroner shall be notified. Should human remains be found, all work shall be halted until final disposition by the Coroner. Should the remains be determined to be of Native American descent, the Native American Heritage Commission shall be consulted to determine the appropriate disposition of such remains.</i></p>	LS
3-31 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 (reference Impact 4.5-5).	LS	<i>None required.</i>	N/A

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
Geology, Soils, and Mineral Resources (reference Section 4.6 of the Certified Final EIR)			
3-32 Risks to people and structures associated with seismic activity, including ground shaking and ground failure (reference Impact 4.6-1).	LS	<i>None required.</i>	N/A
3-33 Result in substantial soil erosion or loss of topsoil (reference Impact 4.6-2).	S	<p><i>ARC Project and Mace Triangle</i></p> <p>3-33 <i>Prior to initiation of any grading activities for each phase of development at the ARC Site, or Mace Triangle Site, the project proponent shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Davis and the RWQCB. The SWPPP will be kept on site during</i></p>	LS

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<i>construction activity and will be made available upon request to representatives of the RWQCB.</i>	
3-34 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 (reference Impact 4.6-3).	S	<p><i>ARC Project</i></p> <p><i>3-34(a) Prior to final design approval and issuance of building permits for each phase of the project, the project applicant for the ARC Site shall submit to the City of Davis Building Inspection Division, for review and approval, a design-level geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer. The report shall include the recommendations in the report entitled Preliminary Geotechnical Engineering Report, Mace Ranch Innovation Center, dated January 20, 2015 unless it is determined in the design-level report that one or more recommendations need to be revised. The design-level report shall address, at a minimum, the following:</i></p> <ul style="list-style-type: none"> <i>• Compaction specifications and subgrade preparation for on-site soils;</i> <i>• Structural foundations, including retaining wall design (if applicable);</i> <i>• Grading practices; and</i> <i>• Expansive/unstable soils, including fill.</i> <p><i>Design-level recommendations shall be included in the foundation and improvement plans and approved by the</i></p>	LS

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Davis Public Works Department prior to issuance of any building permits.</i></p> <p><i>Mace Triangle</i></p> <p><i>3-34(b) Prior to final design approval and issuance of building permits for future on-site development, the future project applicant for the Mace Triangle Site shall submit a site-specific, design-level geotechnical report produced by a California Registered Geotechnical Engineer to the City of Davis Building Inspection Division for review and approval. The geotechnical report shall include, but would not be limited to, an analysis of the on-site geologic and seismic conditions, including soil sampling and testing. Recommendations shall be included regarding project design measures to avoid risks to people and structures, including compliance with the latest CBC regulations, structural foundations, and grading practices.</i></p>	
<p>3-35 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 (reference Impact 4.6-4).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p><i>3-35(a) Implement Mitigation Measure 3-34(a).</i></p> <p><i>Mace Triangle</i></p> <p><i>3-35(b) Implement Mitigation Measure 3-34(b).</i></p>	<p>LS</p>
<p>3-36 Conflict, or create an inconsistency, with any</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
<p>applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology, soils, and mineral resources (reference Impact 4.6-5).</p>			
<p>Greenhouse Gas Emissions and Energy (reference Section 4.7 of the Certified Final EIR)</p>			
<p>3-37 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment (reference Impact 4.7-1).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p><i>3-37(a) Implement Mitigation Measures 3-11, 3-72(a), and 3-72(b).</i></p> <p><i>Mace Triangle</i></p> <p><i>3-37(b) Implement Mitigation Measure 3-11.</i></p>	<p>SU</p>
<p>3-38 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (reference Impact 4.7-2).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p><i>3-38(a) Prior to issuance of building permits, each individual development of the ARC Project shall demonstrate consistency with the City's Climate Action and Adaptation Plan by demonstrating a fair-share reduction of GHG emissions towards an ARC Project-wide reduction goal of 37,684.19 MTCO₂e/yr, which would achieve carbon neutrality. Individual projects may choose one of the following methods for complying with this goal:</i></p>	<p>SU</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ol style="list-style-type: none"> 1. Individual future developments undergoing Design Review, may prepare a Carbon Neutrality Plan for review and approval by the City's Department of Community Development and Sustainability. The Carbon Neutrality Plan must demonstrate the individual development's compliance with the City's net carbon neutrality goal for the year 2040. Compliance with the City's net carbon neutrality goal shall be demonstrated through the use of CalEEMod, or another method or model accepted for this purpose by the City, to demonstrate that emissions from the individual development, to the extent feasible, would reach a level of carbon neutrality by the year 2040. 2. If a project applicant chooses not to prepare a Carbon Neutrality Plan, the applicant must demonstrate that the individual development provides a fair-share contribution towards the ARC Project-wide emissions reductions need of 37,684.19 MTCO₂e/yr, to the extent feasible. A fair-share contribution is to be made based on the total acreage proposed for development in any given project subject to Design Review, as compared to the entire area of development proposed within the ARC Site as a whole. For the purposes of this mitigation measure, areas 	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>not anticipated for development, such as parks, open spaces, and agricultural buffer areas, are not included in the total development acreage. Therefore, the total development area, is considered to be 156.4 acres. Considering the total development area, a hypothetical ten-acre project would represent 6.4 percent of the total development area and would be required to show a GHG emissions reduction, savings, or off-set, of 2,409.5 MTCO₂e/yr from the emissions modeled herein, which would represent 6.4 percent of the total 37,684.19 MTCO₂e/yr reduction required for the project area as a whole. Proof of the fair-share GHG emissions reductions shall be submitted to the City's Department of Community Development and Sustainability.</i></p> <p><i>Examples of measures that may be used by future development projects in either of the above options include, but are not limited to, the following:</i></p> <ul style="list-style-type: none"> • <i>Trip and/or VMT reductions due participation in a Transportation Demand Management program or similar program;</i> • <i>Electrifying loading docks to reduce emissions from engine idling of Transport Refrigeration Units;</i> 	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> • <i>Inclusion of on-site renewable energy beyond the level anticipated in this analysis;</i> • <i>Institution of a composting and recycling program in excess of local standards;</i> • <i>Implementation of an Urban Forestry Management Plan or tree planting programs;</i> • <i>Use of energy efficient street lighting fixtures;</i> • <i>Limit the installation of natural gas infrastructure and appliances;</i> • <i>Implement relevant measures from Mitigation Measure 3-11; and</i> • <i>Purchase of off-site mitigation credits.¹⁰</i> <p><i>In general, GHG reduction measures implemented for development within the ARC Site shall use the following prioritization:</i></p> <ul style="list-style-type: none"> • <i>First priority – building specific actions;</i> • <i>Second priority – onsite (within ARC Site) actions;</i> • <i>Third priority – community based (within Davis) actions;</i> • <i>Fourth priority – pay GHG reduction fees</i> 	

¹⁰ Purchase of off-site mitigation credits shall be negotiated with the City and YSAQMD at the time that credits are sought by future construction within the project areas.

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>(carbon offsets) into a qualified existing local program, if one is in place; and</p> <ul style="list-style-type: none"> • Fifth priority – other demonstrated method of reducing emissions. <p>Thus, as development progresses within the project area, each individual development would be required to show GHG emissions reductions in keeping with the project-wide reduction requirement. Emissions reductions shall be demonstrated prior to issuance of building permits for each development within the ARC Site.</p> <p><i>Mace Triangle</i></p> <p>3-38(b) Prior to issuance of building permits, each individual development at the Mace Triangle Site shall demonstrate consistency with the City’s Climate Action and Adaptation Plan by demonstrating a fair-share reduction of total GHG emissions generated at buildout of the Mace Triangle Site. This SEIR preliminarily estimates that full buildout of the Mace Triangle Site, not including construction emissions, would generate 1,115.89 MTCO₂e/yr. Full operational and construction emissions shall be calculated for each individual development, at such time project level details are available, as required below:</p>	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> • <i>Individual future developments undergoing Design Review, may prepare a Carbon Neutrality Plan for review and approval by the City’s Department of Community Development and Sustainability. The Carbon Neutrality Plan must demonstrate the individual development’s compliance with the City’s net carbon neutrality goal for the year 2040. Compliance with the City’s net carbon neutrality goal shall be demonstrated through the use of CalEEMod, or another method or model accepted for this purpose by the City, to demonstrate that emissions from the individual development, to the extent feasible, would reach a level of carbon neutrality by the year 2040.</i> <p><i>Examples of measures that may be used by future development projects include, but are not limited to, the following:</i></p> <ul style="list-style-type: none"> • <i>Trip and/or VMT reductions due participation in a Transportation Demand Management program or similar program;</i> • <i>Electrifying loading docks to reduce emissions from engine idling of Transport Refrigeration Units;</i> • <i>Inclusion of on-site renewable energy beyond</i> 	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>the level anticipated in this analysis;</i></p> <ul style="list-style-type: none"> • <i>Institution of a composting and recycling program in excess of local standards;</i> • <i>Implementation of an Urban Forestry Management Plan or tree planting programs;</i> • <i>Use of energy efficient street lighting fixtures;</i> • <i>Limit the installation of natural gas infrastructure and appliances;</i> • <i>Implement relevant measures from Mitigation Measure 3-11; and</i> • <i>Purchase of off-site mitigation credits.¹¹</i> <p><i>In general, GHG reduction measures implemented for development within the ARC Site shall use the following prioritization:</i></p> <ul style="list-style-type: none"> • <i>First priority – building specific actions;</i> • <i>Second priority – onsite (within ARC Site) actions;</i> • <i>Third priority – community based (within Davis) actions;</i> • <i>Fourth priority – pay GHG reduction fees (carbon offsets) into a qualified existing local</i> 	

¹¹ Purchase of off-site mitigation credits shall be negotiated with the City and YSAQMD at the time that credits are sought by future construction within the project areas.

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		<p><i>program, if one is in place; and</i></p> <ul style="list-style-type: none"> • <i>Fifth priority – other demonstrated method of reducing emissions.</i> <p><i>Thus, as development progresses within the Mace Triangle Site, each individual development would be required to show GHG emissions reductions in keeping with the project wide reduction requirement. Emissions reductions shall be demonstrated at the time of submittal for building permits for each development within the Mace Triangle Site.</i></p>	
<p>3-39 Impacts related to energy associated with construction (reference Impact 4.7-3).</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>
<p>3-40 Impacts related to energy associated with operations (reference Impact 4.7-4).</p>	<p>S</p>	<p><i>ARC Project and Mace Triangle</i></p> <p>3-40</p> <p><i>Prior to issuance of building permits for non-residential buildings that include data centers, the applicant shall submit an Energy Management Plan to the City of Davis Department of Community Development and Sustainability demonstrating compliance with principles for energy management for data centers, which could include, but not be limited to the following:</i></p> <ul style="list-style-type: none"> • <i>IT Systems;</i> • <i>Air Management;</i> • <i>Centralized Air Handling;</i> 	<p>LS</p>

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		<ul style="list-style-type: none"> • <i>Cooling Plant Optimization;</i> • <i>On-Site Generation;</i> • <i>Uninterruptible Power Supply Systems.</i> <p><i>Other energy efficient technologies and best practices that are available at the time construction drawings are submitted could be included in the Energy Management Plan as well, such as any measures described by US Department of Energy Center of Expertise for Energy Efficiency in Data Centers.</i></p>	
3-41 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 (reference Impact 4.7-5).	LS	None required.	N/A
Hazards and Hazardous Materials (reference Section 4.8 of the Certified Final EIR)			
3-42 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (reference Impact	LS	None required.	N/A

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<p>4.8-1).</p> <p>3-43 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 potential on-site tanks, well, or soil contamination (reference Impact 4.8-2).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p>3-43(a) <i>Prior to any ground disturbance activities within 50 feet of a well on the ARC Site, the applicant shall hire a licensed well contractor to obtain a well abandonment permit for any wells not anticipated to be used from the Yolo County Environmental Health Services Department, and properly abandon the on-site wells, pursuant to review and approval by the City Engineer and the Yolo County Environmental Health Services Department.</i></p> <p>3-43(b) <i>If any debris is encountered within the former canal on APN 033-630-009 during construction activities, as shown on the construction plans for the ARC Site, the contractor shall contact the project applicant, who shall retain the services of a qualified environmental hazard firm, to evaluate the debris to determine whether it poses any environmental contamination risks. A written evaluation shall be submitted to the City of Davis Department of Community Development and Sustainability. If the debris is trash or other non-hazardous material, then the contractor shall dispose of the debris and no further mitigation shall be required. If the debris is associated with signs of soil staining or odors indicative of hazardous materials, the environmental hazard firm shall conduct additional</i></p>	<p>LS</p>

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>evaluation, including but not necessarily limited to soil sampling. If soil samples detect concentrations of hazardous materials above applicable Regional Screening Levels (RSL), then the soils shall be remediated and disposed of at a landfill licensed to accept hazardous waste. If constituent concentrations are below RSLs, then no further mitigation shall be necessary.</i></p> <p><i>Mace Triangle</i></p> <p><i>3-43(c) In conjunction with submittal of a final planned development and/or tentative map for any parcel in the Mace Triangle property, the applicant shall submit a Phase I Environmental Site Assessment for that parcel, which shall evaluate on-site conditions, including but not limited to the presence of any wells, evidence of soil staining, or odors indicative of hazardous substances.</i></p> <p><i>In addition, due to the past agricultural operations on the easternmost parcel, a soil sampling program shall be implemented to assess potential agrichemical impacts to surface soil within the easternmost parcel, as follows:</i></p> <p><i>A soil sampling and analysis workplan shall be submitted for approval to Yolo County Environmental Health Department. The sampling and analysis plan will meet the requirements of the Department of Toxic</i></p>	

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		<p><i>Substances Control Interim Guidance for Sampling Agricultural Properties (2008).</i></p> <p><i>If the sampling results indicate the presence of agrichemicals that exceed commercial screening levels, a removal action workplan shall be prepared in coordination with Yolo County Environmental Health Department. The removal action workplan shall include a detailed engineering plan for conducting the removal action, a description of the onsite contamination, the goals to be achieved by the removal action, and any alternative removal options that were considered and rejected and the basis for that rejection. A no further action letter will be issued by County Health for the proposed commercial development upon completion of the removal action. The removal action shall be deemed complete when the confirmation samples exhibit concentrations below the commercial screening levels, which will be established by the agencies.</i></p> <p><i>If any stained soil or odor-impacted areas are encountered during the Phase I ESA, then soil sampling of these areas shall be included in the above soil sampling workplan, and depending upon the sampling results, included in the removal action workplan as well.</i></p>	
3-44 Impair implementation of or physically interfere with an adopted emergency response	LS	None required.	N/A

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plan or emergency evacuation plan (reference Impact 4.8-3).			
3-45 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 (reference Impact 4.8-4).	LS	<i>None required.</i>	N/A
3-46 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 (reference Impact 4.8-5).	LS	<i>None required.</i>	N/A
Hydrology and Water Quality (reference Section 4.9 of the Certified Final EIR)			
3-47 Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing	S	ARC Project 3-47(a) <i>In conjunction with submittal of the first final planned development for the ARC Site, a design-level drainage report shall be submitted to the City of Davis Public</i>	LS

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<p>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 (reference Impact 4.9-1).</p>		<p><i>Works Department for review and approval. The drainage report shall identify specific storm drainage design features to control the 100-year, 24-day increased runoff from the project site to ensure that the rate of runoff leaving the developed ARC Site does not exceed the original Mace Drainage Channel (MDC) design capacity of 260 cfs. This may be achieved through: on-site conveyance and detention facilities, off-site detention or retention facilities, channel modification, or equally effective measures to control the rate and volume of runoff.</i></p> <p><i>The design-level drainage report shall include off-site drainage facilities sufficient to detain and control the increased runoff volume when the flow from the MDC into the Yolo Bypass is blocked by high water levels in the Bypass. Preliminary estimates of increased runoff volumes are 78 acre-feet. The final amount of runoff volume to be detained would be determined with the design-level drainage report. This could result in detaining run-off volume for an extended time period. During this time period, additional large storms could occur; thus, the proposed detention storage facilities shall also be able to manage (detain with a controlled release) the 100-year, 24-hour storm event.</i></p> <p><i>The design-level drainage report shall also include design for detaining and controlling the increased run-</i></p>	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>off volume from the Mace Triangle Site. Preliminary estimates of increased runoff volumes are as much as 7 acre-feet. The final amount of runoff volume to be detained would be determined with the design-level drainage report prepare for the ARC Site.</i></p> <p><i>Design-level recommendations provided in the drainage report shall be included in the improvements plans prior to their approval by the Davis Public Works Department.</i></p> <p><i>3-47(b) Prior to approval of the Phase 1 improvement plans for the ARC Site, the Public Works Department shall ensure that the plans include the development of the Phase 2 MDC improvements. The Phase 2 improvements shall consist of removal of the two 24-inch corrugated metal pipes in order to provide a continuous channel between the Phase 1 and Phase 2 improvements.</i></p> <p><i>Mace Triangle</i></p> <p><i>3-47(c) In conjunction with submittal of each final planned development for the Mace Triangle Site, a design-level drainage report for the development shall be completed and submitted to the City of Davis Public Works Department for review and approval. The drainage report shall identify specific storm drainage design features to control the 100-year, 24-hour increased</i></p>	

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		<p><i>runoff from the project site. This may be achieved through: onsite conveyance and detention facilities, offsite detention or retention facilities, channel modification, or equally effective measures to control the rate and volume of runoff.</i></p> <p><i>The design-level drainage report shall include off-site drainage facilities sufficient to detain and control the increased run-off volume when the flow from the Mace Drainage Channel into the Yolo Bypass is blocked by high water levels in the Bypass. Preliminary estimates of increased runoff volumes for the Mace Triangle Site are as much as 7 acre-feet. The final amount of runoff volume to be detained for each proposed development would be determined with the design-level drainage report. This could result in detaining run-off volume for an extended time period. During this time period, additional large storms could occur; thus, the proposed detention storage facilities shall also be able to manage (detain with a controlled release) the 100-year, 24-hour storm event.</i></p> <p><i>Design-level recommendations provided in the drainage report shall be included in the improvement plans prior to their approval by the Davis Public Works Department.</i></p>	
3-48 Violate any water quality standards or waste discharge	S	ARC Project and Mace Triangle	LS

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<p>requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality through erosion during construction (reference Impact 4.9-2).</p>		<p>3-48 <i>Prior to initiation of any ground disturbing activities, the project applicant(s) for each discretionary development application shall prepare a Stormwater Pollution Prevention Plan (SWPPP), and implement Best Management Practices (BMPs) that comply with the General Construction Stormwater Permit from the Central Valley RWQCB, to reduce water quality effects during construction. Such BMPs may include: temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation. The SWPPP shall be kept on-site and implemented during construction activities and shall be made available upon request to representatives of the City of Davis and/or RWQCB.</i></p>	
<p>3-49 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations (reference Impact 4.9-3).</p>	LS	None required.	N/A
<p>3-50 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such</p>	LS	None required.	N/A

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<p>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) (reference Impact 4.9-4).</p>			
<p>3-51 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 (reference Impact 4.9-5).</p>	LS	<i>None required.</i>	N/A
<p>3-52 Impacts related to conflicts, or</p>	LS	<i>None required.</i>	N/A

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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 (reference Impact 4.9-6).			
Land Use and Urban Decay (reference Section 4.10 of the Certified Final EIR)			
3-53 Physical division of an established community (reference Impact 4.10-1).	LS	<i>None required.</i>	N/A
3-54 Economic and social change and/or effect that result in urban decay (reference Impact 4.10-2).	S	<i>ARC Project</i> <i>3-54(a) In conjunction with submittal of any final planned development for the ARC Project that includes ancillary retail uses, an analysis shall be submitted to the City of Davis Department of Community Development and Sustainability, which shall demonstrate that the proposed ancillary retail development will not exceed the anticipated demand increase from new employees. The demonstration to the City may be premised upon the number of employees (and/or residents) on-site, the commercial (and/or residential) square footage developed, or other factors relevant to the generation of on-site demand. If the analysis cannot demonstrate that</i>	LS

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		<p><i>the proposed amount of ancillary retail space will not outpace employee-generated demand, then the ancillary retail uses shall be removed from the final planned development, or scaled back to be commensurate with the projected employee-generated demand.</i></p> <p>3-54(b) <i>Prior to building permit issuance for the proposed hotel, the applicant shall demonstrate to the City's satisfaction that there is sufficient unmet demand from a combination of hotel demand from ARC Project employees and businesses and/or hotel demand from elsewhere within the Davis marketplace to support the hotel space for which the building permit is requested. The objective of this requirement is to ensure that the hotel developed within the ARC Project will not re-allocate demand from existing Davis hotels, but will instead help the City to provide new hotel offerings that will satisfy currently unmet demand.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-55 Conflict, or create an inconsistency, with any applicable land use and urban decay plan, policy, or regulation adopted for the purpose of avoiding or</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>

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mitigating an environmental effect (reference Impact 4.10-3).			
Noise and Vibration (reference Section 4.11 of the Certified Final EIR)			
3-56 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project (reference Impact 4.11-1).	LS	<i>None required.</i>	N/A
3-57 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels (reference Impact 4.11-2).	LS	<i>None required.</i>	N/A
3-58 Transportation noise impacts to existing sensitive receptors in the project vicinity (reference Impact 4.11-3).	LS	<i>None required.</i>	N/A
3-59 Transportation noise impacts to new sensitive receptors in the project vicinity (reference Impact 4.11-4).	N/A	<i>None required.</i>	N/A
3-60 Operational noise (reference Impact 4.11-5).	LS	<i>None required.</i>	N/A
3-61 Conflict, or create an	LS	<i>None required.</i>	N/A

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inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise (reference Impact 4.11-6).			
Population and Housing (reference Section 4.12 of the Certified Final EIR)			
3-62 Induce substantial population growth (reference Impact 4.12-1).	LS	<i>None required.</i>	N/A
3-63 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 (reference Impact 4.12-2).	LS	<i>None required.</i>	N/A
Public Services and Recreation (reference Section 4.13 of the Certified Final EIR)			

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3-64 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 (reference Impact 4.13-1).	LS	<i>None required.</i>	N/A
3-65 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,	LS	<i>None required.</i>	N/A

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

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or other performance objectives for police protection facilities (reference Impact 4.13-2).			
3-66 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 (reference Impact 4.13-3).	LS	None required.	N/A
3-67 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	LS	None required.	N/A

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
order to maintain acceptable service ratios, response times, or other performance objectives for park facilities (reference Impact 4.13-4).			
3-68 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 (reference Impact 4.13-5).	LS	<i>None required.</i>	N/A
3-69 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	LS	<i>None required.</i>	N/A

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
services and recreation (reference Impact 4.13-6).			
Transportation and Circulation (reference Section 4.14 of the Certified Final EIR)			
3-70 Conflict with a program, plan ordinance, or policy addressing the circulation system under Existing Plus Project conditions (reference Impacts 4.14-1 and 4.14-2).	S	<p><i>ARC Project and Mace Triangle</i></p> <p><i>3-70(a) In conjunction with submittal of a final planned development, or tentative map, whichever occurs first, for each phase of development, the Master Owners' Association (MOA) for the Project, or applicant (i.e., Mace Triangle project), shall submit a focused traffic impact study to determine if any of the below-listed intersection and roadway improvements are required based on the additional traffic generated by the development phase. The focused traffic study shall address the impact of adding the individual phase of development to existing plus other approved/pending development projects. The traffic study shall use the current version of the City travel demand forecasting model available at the time of the study, and the traffic operations analysis methods utilized in this SEIR. If operations are found to have declined to unacceptable levels based on the relevant criteria under Standards of Significance, the project applicant shall construct physical improvements or pay its fair share as described prior to the issuance of the first certificate of occupancy for the first building in that phase.</i></p>	SU

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		<p><u>Intersection improvements</u> If any of the identified improvements require Caltrans or Yolo County approval, the applicant shall make a good faith effort to work with Caltrans and/or Yolo County and the City for the purpose of identifying and implementing physical improvements to the network which have a nexus to the project's impact.</p> <ol style="list-style-type: none"> 1. <u>Southbound Mace Boulevard:</u> Extend the second eastbound/southbound lane from Harper Junior High School to Alhambra Drive. Add a third southbound lane from 2nd Street to connect with the dedicated right-turn lane onto the I-80 WB on-ramps. 2. <u>Northbound Mace Boulevard:</u> Extend the third northbound lane from the I-80 WB off-ramps to connect with a new northbound "trap" right-turn lane at the Mace Boulevard/2nd Street/CR 32A intersection. Add a second northbound/westbound lane from 2nd to the Harper Junior High School signalized intersection. 3. <u>Mace Boulevard/Chiles Road and Chiles Road/I-80 EB Off-Ramp Intersections:</u> This pair of tightly spaced intersections (situated 450 feet apart) requires signal coordination/timing adjustments and a lane reassignment on the eastbound Chiles Road approach to Mace 	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Boulevard due to the heavy project-related off-ramp volume during the AM. peak hour. Modifying the eastbound through lane to a shared left/through lane would require the east and west approaches to operate with split phasing. Signal coordination (particularly critical during the AM peak hour) would synchronize the green interval for the I-80 off-ramp movement with the eastbound approach on Chiles Road at Mace Boulevard to facilitate the flow of motorists off of I-80. The signal would be modified to operate the southbound left-turn and westbound right-turn during a shared overlap phase. This modification would also require the prohibition of southbound U-turns.</i></p> <p>4. <u><i>I-80 Eastbound Loop On-Ramp:</i></u> <i>This on-ramp consists of a single entry lane from southbound Mace Boulevard, which widens to a metered general purpose lane and an unmetered HOV bypass lane. During the PM peak hour, the addition of project trips would cause queue spillback from the ramp meter onto the overpass, thereby causing queue spillback to extend further upstream. The recommended modification from an unmetered HOV bypass lane to a metered general purpose lane was found to provide more ramp metering storage,</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>and reduced effects on the surface street. Similar modifications have been considered by Caltrans elsewhere in the Sacramento region.</i></p> <p>5. <u>Mace Boulevard/2nd Street/CR 32A Intersection:</u> <i>Modify the northbound approach to add a “trap” right-turn lane. Modify the westbound approach to two left-turn lanes and a shared through-right lane. Modify westbound CR 32A between this intersection and the adjacent CR 32A/Mace Park-and-Ride/West ARC Driveway intersection to two through lanes.</i></p> <p>6. <u>Mace Boulevard/Alhambra Drive/South ARC Driveway Intersection:</u> <i>Modify the westbound approach to two left-turn lanes and a shared through-right lane. Provide a southbound left-turn lane, two through lanes, and a right-turn lane.</i></p> <p>7. <u>Mace Boulevard/CR 30B/North ARC Driveway Intersection:</u> <i>Install a traffic signal. Provide a southbound left-turn lane and two through lanes. Provide a northbound through lane and shared through-right lane.</i></p> <p>8. <u>CR 32A/Mace Park-and-Ride/West ARC Driveway Intersection:</u> <i>Install a traffic signal. Provide a southbound left-turn lane and a shared through-right lane. Provide an eastbound left-turn lane.</i></p> <p>9. <u>UPRR at-grade rail crossing improvements:</u> <i>The</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>UPRR track/CR 32A crossing could be converted from an at-grade crossing to a grade-separated crossing. A near-term improvement prior to provision of the grade separation could consist of relocating the CR32A/CR 105 intersection about 200 feet to the north and installing double gates on the south approach to the grade crossing in order to improve safety and traffic functionality at the grade crossing.</i></p> <p><i>10. I-80/CR 32A interchange improvements: Construct capacity improvements at the CR 32 interchange and along CR 32A to allow this interchange to serve more project traffic.</i></p> <p><i>3-70(b) At the time of the issuance of the first certificate of occupancy and as a component of the ARC TDM program (refer to Mitigation Measure 3-72(a)), the Master Owners' Association (MOA) for the Project shall establish the baseline peak hour I-80 mainline vehicle trips by which to determine the project's change to peak hour I-80 vehicle trips. Baseline AM and PM peak hour vehicle trips on I-80 shall be calculated on the following segments:</i></p> <ol style="list-style-type: none"> <i>1. Between Pedrick Road and Kidwell Road</i> <i>2. Between Richards Boulevard and Mace Boulevard</i> <i>3. East of Chiles Road (i.e., the Yolo Causeway)</i> 	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>During the annual TDM reporting, the MOA shall determine the number of AM and PM peak hour project vehicle trips that utilize I-80 on the segments listed above. In instances where these figures exceed baseline levels by five percent or more, the MOA shall institute TDM strategies to reduce project-related peak hour vehicle trips on I-80. The implementation of TDM strategies shall reduce peak hour project vehicle trips on I-80 to an amount less than five percent of baseline levels, to the extent feasible.</i></p> <p><i>TDM strategies that would reduce peak hour vehicle trips on I-80 include strategies to reduce commute and business vehicle trips to and from ARC using I-80. If these TDM strategies are not sufficient to reduce peak hour trips to baseline levels, additional TDM measures or adjustments to existing measures shall be implemented, as needed to reduce peak hour trips to an amount less than five percent of baseline levels.</i></p> <p>3-70(c) <i>The applicant shall contribute a proportional share to the local contribution portion of freeway improvement projects to construct carpool lanes on I-80 between Richards Boulevard and West Sacramento. Responsibility for implementation of this mitigation measure shall be assigned to the ARC and Mace Triangle on a fair share basis.</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
3-71 Impacts to Local Neighborhood Street Traffic (reference Impact 4.14-5).	S	<p><i>ARC Project</i></p> <p><i>3-71 Prior to final map approval, the project applicant shall fund the development of a neighborhood traffic calming plan, the City shall consider adoption of the plan, and the applicant shall fund implementation of the plan. The traffic calming plan will address the potential for the ARC Project to increase peak hour traffic volumes on local streets, including Monarch Lane, Temple Drive, Tulip Lane, Baywood Lane, Whittier Drive, Manzanita Lane, Alegre Way, and Arroyo Avenue. The traffic calming plan will also address the potential for the ARC Project to increase vehicle speeds on collector and minor arterial streets, including Alhambra Drive, Loyola Drive, 2nd Street, 5th Street, East 8th Street, Chiles Road, and Cowell Boulevard. The purpose of the plan will be to minimize, to the extent feasible, the potential for the ARC Project to increase peak hour traffic volumes on local streets and 85th percentile speeds on collector and minor arterial streets, through the use of measures proven in other neighborhoods and jurisdictions to achieve these goals, such as narrow points, neighborhood traffic circles, speed humps, stop signs (where warranted), narrow lane striping, and others. Implementation of a comprehensive traffic calming plan will incentivize traffic to use major routes such as I-80, East Covell Boulevard, Mace Boulevard, and 2nd Street, and avoiding using residential streets as</i></p>	SU

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>cut-through routes.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-72 Increase in Vehicle Miles Traveled (reference Impact 4.14-6).</p>	<p>S</p>	<p><i>ARC Project</i></p> <p>3-72(a) <i>Prior to issuance of the first building permit in the first phase of development, the applicant shall develop a TDM program for the entire ARC Project, including any anticipated phasing, and shall submit the TDM program to the City Department of Public Works for review and approval. The TDM program must be designed to achieve the following.</i></p> <ol style="list-style-type: none"> <i>1. Reduce trips to achieve one and five-tenths (1.5) Average Vehicle Ridership (AVR) in accordance with Davis Municipal Code Section 22.15.060; and</i> <i>2. Reduce project-generated VMT such that the project achieves all three VMT significance criteria.</i> <p><i>The Master Owner’s Association (MOA) shall be responsible for implementing the TDM Program.</i></p> <p>(a) <i>The MOA shall be responsible for funding and overseeing the delivery of trip reduction/TDM</i></p>	<p>SU</p>

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>proposed programs and strategies to achieve the project-generated VMT and AVR objectives, which may include, but are not limited to, the following:</i></p> <ol style="list-style-type: none"> <i>(1) Establishment of carpool, buspool, or vanpool programs;</i> <i>(2) Vanpool purchase incentives;</i> <i>(3) Cash allowances, passes or other public transit subsidies and purchase incentives;</i> <i>(4) Low emission vehicle purchase incentives/subsidies;</i> <i>(5) Parking management strategies including limiting parking supply, as may be determined appropriate through subsequent traffic studies for each phase; charging parking fees; unbundling parking costs; and providing parking cash-out programs;</i> <i>(6) Full or partial parking subsidies for ridesharing vehicles;</i> <i>(7) Preferential parking locations for ridesharing vehicles;</i> <i>(8) Computerized commuter rideshare matching service;</i> <i>(9) Guaranteed ride-home program for ridesharing;</i> <i>(10) Alternative workweek and flex-time</i> 	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>schedules;</i></p> <p>(11) <i>Telecommuting or work-at-home programs;</i></p> <p>(12) <i>On-site lunch rooms/cafeterias;</i></p> <p>(13) <i>On-site commercial services such as banks, restaurants, groceries, and small retail;</i></p> <p>(14) <i>On-site day care facilities;</i></p> <p>(15) <i>Bicycle programs including bike purchase incentives, storage, maintenance programs, and on-site education program;</i></p> <p>(16) <i>Car share and bike share services;</i></p> <p>(17) <i>Enhancements to Unitrans, Yolobus, or other regional bus service;</i></p> <p>(18) <i>Enhancements to Capitol Corridor or other regional rail service;</i></p> <p>(19) <i>Enhancements to the citywide bicycle network;</i></p> <p>(20) <i>Dedicated employee housing located either on-site or elsewhere in the City of Davis;</i></p> <p>(21) <i>Designation of an on-site transportation coordinator for the project;</i></p> <p>(22) <i>Implement a fair value commuting program where fees charged to single-occupancy vehicle (SOV) commuters (e.g., through parking pricing) are tied</i></p>	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>to project vehicle trip reduction targets and fee revenue is rebated to non-SOV commuters, or other pricing of vehicle travel and parking;</i></p> <p>(23) <i>Support management strategies (e.g., pricing, vehicle occupancy requirements) on roadways or roadway lanes, particularly I-80 over the causeway;</i></p> <p>(24) <i>Contribute to a VMT mitigation bank or exchange to support VMT reductions elsewhere in the City or region; and</i></p> <p>(25) <i>Change the project to increase project trip internalization (e.g., decrease employment uses and/or increase residential uses).</i></p> <p>(b) <i>Single-phase development projects shall achieve project-generated VMT and AVR targets within five (5) years of issuance of any certificate of occupancy. Multi-phased projects shall achieve the project-generated VMT and AVR targets for each phase within three (3) years of the issuance of any certificate of occupancy.</i></p> <p>(c) <i>In conjunction with final map approval, recorded codes, covenants and restrictions</i></p>	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>(CC&Rs) shall include provisions to guarantee adherence to the TDM objectives and perpetual operation of the TDM program regardless of property ownership, inform all subsequent property owners of the requirements imposed herein, and identify potential consequences of nonperformance.</i></p> <p><i>Each space use agreement (i.e., lease document) shall also include TDM provisions for the site as a means to inform and commit tenants to, and participate in, helping specific applicable developments meet TDM performance requirements.</i></p> <p><i>(d) Ongoing reporting:</i></p> <p><i>(1) Annual TDM Report. The MOA for the Project shall submit an annual status report on the TDM program to the City Department of Public Works beginning a year after the issuance of any certificate of occupancy and continuing until full project buildout. Data shall be collected in October of each year and the Annual Report submitted by December 31st of each year. The report</i></p>	

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		<p><i>shall be prepared in the form and format designated by the City, which must either approve or disapprove the program.</i></p> <p><i>i. The TDM performance reports shall focus on the trip reduction incentives offered by the project, their effectiveness, the estimated greenhouse gas (GHG) emissions generated by the project, and the methods by which a continued trajectory towards carbon neutrality in 2040 can be achieved consistent with Mitigation Measure 3-38(a). The report shall:</i></p> <ul style="list-style-type: none"> <i>• Report the project-generated VMT levels attained;</i> <i>• Report the AVR levels attained;</i> <i>• Verify the TDM plan incentives that have been offered;</i> <i>• Describe the use of those incentives offered by employers;</i> <i>• Evaluate why the plan did or did not work to achieve the AVR targets and explain why the revised plan is more likely to achieve the AVR target levels;</i> 	

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		<ul style="list-style-type: none"> • List additional incentives which can be reasonably expected to correct deficiencies; • Evaluate the feasibility and effectiveness of trip reduction/TDM program and strategies, as implemented; • Estimate the GHG emissions generated by project transportation operations; and • Identify off-setting GHG credits to be secured by the project to achieve carbon neutrality. <p>ii. The MOA shall develop and implement an annual monitoring program to determine if project-generated VMT and AVR targets are being met. The monitoring program could include employee travel surveys, traffic counts at project site ingress/egress points, and other relevant information.</p> <p>iii. If the project-generated VMT and/or AVR targets are not met for any two consecutive years, the applicant or current owner(s) of the site will contribute funding to be</p>	

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		<p><i>determined in a separate study toward the provision of additional or more intensive travel demand management programs, such as enhanced regional transit service to the site, employee shuttles, and other potential measures.</i></p> <p>iv. <i>In the event that other TDM objectives are not met as documented in the Annual Monitoring Report submitted by December 31st of each year, the MOA shall:</i></p> <ul style="list-style-type: none"> • <i>Submit to the City within thirty (30) days of submittal of the annual report, a list of TDM measures that will be implemented to meet the TDM objectives within one hundred eighty (180) days of submittal of annual report. At the end of the one-hundred-eighty-day period, the MOA shall submit a revised performance report to determine compliance with TDM objectives. No further measures will be necessary if the TDM objectives are met.</i> 	

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		<p><i>Should the TDM objectives not be satisfied by the end of the one-hundred-eighty-day period, the MOA shall pay a TDM penalty fee to the City in an amount determined by resolution of the City Council. Said penalty fee may be used to provide new transit service and/or subsidize existing transit service, construct bicycle facilities, and/or improve street capacity through construction of physical improvements to be selected by the City of Davis from the list of area-wide improvements identified in the City's CIP.</i></p> <p><i>Mace Triangle</i></p> <p><i>3-72(b) Prior to issuance of a building permit for development within the Mace Triangle Site, each applicant shall develop a TDM program coordinated with, and compliant with, the requirements of the ARC TDM program and any pre-existing TDM programs on the Mace Triangle Site. The program shall be submitted to the City Department of Public Works for review and approval. This includes achievement of the same trip reduction requirements, GHG-reducing transportation</i></p>	

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		<i>strategies, and monitoring and reporting requirements as the ARC, as set forth in Mitigation Measure 3-72(a). This may be satisfied by joining the ARC TDM program as a participating member.</i>	
3-73 Impacts to Emergency Vehicle Access (reference Impact 4.14-7).	LS	<i>None required.</i>	N/A
3-74 Impacts associated with Construction Vehicle Traffic (reference Impact 4.14-8).	S	<p><i>ARC Project and Mace Triangle</i></p> <p><i>3-74 Prior to any construction activities for the ARC and Mace Triangle Sites, the project applicant shall prepare a detailed Construction Traffic Control Plan and submit it for review and approval by the City Department of Public Works. The applicant and the City shall consult with Yolo County, Caltrans, Unitrans, Yolobus, and local emergency service providers for their input prior to approving the Plan. The Plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained during construction. At a minimum, the Plan shall include:</i></p> <ul style="list-style-type: none"> <i>• The number of truck trips, time, and day of street closures;</i> <i>• Time of day of arrival and departure of trucks;</i> <i>• Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting;</i> 	LS

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		<ul style="list-style-type: none"> • <i>Provision of a truck circulation pattern that minimizes impacts to existing vehicle traffic during peak traffic flows and maintains safe bicycle circulation;</i> • <i>Minimize use of CR 32A by construction truck traffic;</i> • <i>Prior to certificate of occupancy or acceptance of any public improvement by the city, the developer shall resurface and/or repair any damage to roadways that occurs as a result of construction traffic;</i> • <i>Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas);</i> • <i>Maintain safe and efficient access routes for emergency vehicles;</i> • <i>Manual traffic control when necessary;</i> • <i>Proper advance warning and posted signage concerning street closures; and</i> • <i>Provisions for bicycle, pedestrian, and transit access and safety.</i> <p><i>A copy of the Construction Traffic Control Plan shall be submitted to local emergency response agencies and these agencies shall be notified at least 14 days before</i></p>	

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		<i>the commencement of construction that would partially or fully obstruct roadways.</i>	
3-75 Impacts to Pedestrian and Bicycle Facilities (reference Impact 4.14-9).	S	<p><i>ARC Project and Mace Triangle</i></p> <p><i>3-75(a) Prior to issuance of the first certificate of occupancy of the ARC Project, the applicant shall construct the following proposed off-site bicycle and pedestrian facilities to the satisfaction of the Public Works Department, as described in the ARC Project description and shown on the ARC Site plan:</i></p> <ol style="list-style-type: none"> <i>1) Grade-separated bicycle and pedestrian crossing of Mace Boulevard north of Alhambra Drive</i> <i>2) Class I shared-use path on the west side of Mace Boulevard between proposed grade-separated crossing and Harper Junior High School</i> <i>3) Pedestrian and landscaping improvements on the access road between the Mace Park-and-Ride and CR 32A</i> <p><i>Responsibility for implementation of this mitigation measure shall be assigned to the ARC Project and Mace Triangle on a fair share basis.</i></p> <p><i>3-75(b) Prior to issuance of the first certificate of occupancy of the ARC Project, the applicant shall contribute fair</i></p>	SU

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		<p><i>share funding to cover their proportionate cost of the following improvements:</i></p> <ol style="list-style-type: none"> <i>1) Widen CR 32A between CR 105 and the Causeway Bicycle Path Access to meet Yolo County standards for a two-lane arterial (14-foot travel lanes and 6-foot shoulder/on-street bike lanes).</i> <i>2) Westbound bicycle crossing improvements at the existing at-grade railroad crossing at CR 32A and CR 105. Potential improvements include a marked bicycle crossing for westbound bicyclists with advanced warning devices for vehicle traffic. These improvements would facilitate westbound bicyclists continuing west onto the shared-use path located between the UPRR mainline and I-80 (e.g., to the west of CR 105). As noted earlier, Yolo County, together with Union Pacific and the City of Davis, are currently evaluating potential modifications to this at-grade crossing to reduce the potential for conflicts with rail operations. Therefore, the ultimate improvements constructed at this crossing should be consistent with the preferred modifications identified in this County-led study.</i> <i>3) Eastbound bicycle crossing improvements for bicyclists turning left from CR 32A onto the causeway shared-use path. Potential</i> 	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>improvements include the installation of a marked crossing on the east leg of the CR 32A/I-80 WB off-ramp intersection and construction of a two-way path on the north side of CR 32A between the CR 32A/I-80 WB off-ramp intersection and the entrance to the causeway path.</i></p> <p><i>Implementation of these improvements, or a set of improvements of equal effectiveness, would improve bicycle facilities on CR 32A by reducing the potential for bicycle-vehicle conflicts.</i></p> <p>3-75(c) <i>The project applicant shall identify and construct complete streets improvements on the Mace Boulevard corridor, including the following actions:</i></p> <p><i>1) Prior to approval of the first tentative subdivision map for the ARC Project, the applicant shall fund and complete (in conjunction with City staff) a corridor plan for the Mace Boulevard corridor between Harper Junior High School and Cowell Boulevard.¹² At</i></p>	

¹² Policy TRANS 2.8 of the *City of Davis General Plan* calls for the preparation of corridor plans for selected corridors throughout the City. The segment of Mace Boulevard referenced in this mitigation measure includes all of corridor #15 (Mace Boulevard – Harper Junior High School to Interstate 80) and portions of corridors #2 (Chiles Road – Drummond Avenue to East City Limit) and #16 (Mace Boulevard – Interstate 80 to South City Limit) as shown in

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>a minimum, the corridor plan shall identify complete streets improvements that achieve the following goals:</i></p> <ul style="list-style-type: none"> <i>a. Provide safe and comfortable access for pedestrian and bicyclists</i> <i>b. Minimize the potential for bicycle-vehicle and pedestrian-vehicle conflicts</i> <i>c. Provide fast and efficient transit operations</i> <i>d. Minimize cut-through traffic on residential roadways</i> <i>e. Avoid operating conditions that degrade roadway safety (e.g., off-ramp queue spillback to freeway mainline)</i> <p><i>The corridor plan shall be prepared to the satisfaction of the City of Davis Public Works Department and be approved by the City of Davis City Council. The corridor plan should include a thorough public engagement process to understand the transportation priorities of the surrounding community. This should include an initial hearing before the Planning Commission</i></p>	

Map 5 of the *General Plan* Circulation Element. Corridors #2 and #15 do not currently have corridor plans. Corridor #16 south of Cowell Boulevard was recently modified based on prior corridor planning efforts. The segment of Corridor #16 between Cowell Boulevard and Interstate 80 was excluded from those efforts and does not currently have a corridor plan.

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>and the Bicycling, Transportation, and Street Safety Commission (BTSSC) to solicit initial input and a second hearing for review of the draft plan.</i></p> <p>2) <i>In conjunction with submittal of a final planned development or tentative map, whichever occurs first, for each ARC Project phase, the MOA for the ARC Project shall submit a focused transportation impact study for the phase under review. This could be the same study as required under Mitigation Measure 3-70(a), but must also include the information set forth in this measure. The study shall document current conditions at the time and identify the anticipated transportation system effects associated with the development proposed for the phase under review and the necessary transportation system improvements to ameliorate these effects in accordance with the methods and significance thresholds used in this transportation impact analysis. Improvements should be consistent with the complete streets goals and improvements identified in the Mace Boulevard Corridor Plan to be funded and completed by the applicant as described above. The study shall also address the degree to which improvements would address any significant</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>impacts caused by the ARC Project at buildout as identified in the Transportation Impact Analysis prepared for the ARC Project by Fehr & Peers (2020). Potential improvements include, but are not limited to, the following:</i></p> <ul style="list-style-type: none"> <i>a. Improvements to on- and off-street bicycle facilities on Mace Boulevard and connecting roadways, including Covell Boulevard, Alhambra Drive, 2nd Street, CR 32A, and Chiles Road.</i> <i>b. Improvements to bicycle and pedestrian crossings at the following intersections:</i> <ul style="list-style-type: none"> <i>i. Mace Boulevard/Alhambra Drive;</i> <i>ii. Mace Boulevard/2nd Street/CR 32A;</i> <i>iii. Mace Boulevard/I-80 WB Ramps;</i> <i>iv. Mace Boulevard/I-80 EB Ramps;</i> <i>and</i> <i>v. Mace Boulevard/Chiles Road.</i> <p><i>Crossing improvements shall reduce the potential for bicycle-vehicle and pedestrian-vehicle conflicts and provide for safe and comfortable access for pedestrians and bicyclists. Potential crossing improvements include, but are not limited to bike lane conflict markings, intersection crossing markings, reductions to crossing distances, and physically separating bicyclists from</i></p>	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>vehicles (e.g., conversion to a protected intersection). Additionally, crossing improvements shall include the modification of existing channelized right-turn lanes to either a) remove and replace the lanes with standard right-turn lanes, or b) retrofit the lanes to reduce vehicles speeds and increase yield compliance rates.</i></p> <p><i>Improvements identified in the focused transportation impact study should achieve the following performance measures:</i></p> <ul style="list-style-type: none"> <i>a. Reduce the number and/or severity of bicycle-vehicle and pedestrian-vehicle conflict points at intersections and intersection approaches.</i> <i>b. Eliminate otherwise anticipated increases in transit travel times and/or adverse changes to transit on-time performance that would be caused by the ARC Project in accordance with standards established by Unitrans, YoloBus, and other potential future transit operators.</i> <i>c. Eliminate otherwise anticipated adverse effects to emergency vehicle response times that would be caused by the ARC Project in accordance with standards established by the City of Davis Fire and Police Departments.</i> <i>d. Eliminate otherwise anticipated increases in cut-through traffic on residential roadways that would be caused by the ARC Project.</i> 	

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>e. Eliminate otherwise anticipated vehicle queuing that would be caused by the ARC Project that would adversely affect roadway safety, including off-ramp queue spillbacks to the freeway mainline, queue spillbacks that block bicycle and/or pedestrian facilities, and queue spillbacks that exceed available turn pocket storage and block adjacent through travel lanes.</i></p> <p><i>The focused transportation impact study should also identify the funding and implementing responsibilities for each improvement, including whether the improvement should be constructed by the applicant or if the applicant should contribute fair share funding to cover their proportionate cost for the improvements. The applicant shall construct the improvement and/or contribute fair share funding prior to the issuance of the first certificate of occupancy for each project phase under review.</i></p>	
<p>3-76 Impacts to Transit Services (reference Impact 4.14-10).</p>	<p>S</p>	<p><i>ARC Project and Mace Triangle</i></p> <p><i>3-76(a) Prior to the issuance of the first certificate of occupancy of the first ARC Project phase, the project applicant shall fund and construct new bus stops with turnouts on both sides of Mace Boulevard at the new primary project access point at Alhambra Drive. The project applicant shall prepare design plans, to be reviewed and approved by the City Public Works Department, and</i></p>	<p>SU</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>construct bus stops with shelters, paved pedestrian waiting areas, lighting, real time transit information signage, and pedestrian connections between the new bus stops and all buildings on the ARC Site. Responsibility for implementation of this mitigation measure shall be assigned to the ARC Project and Mace Triangle on a fair share basis. Upon completion of the ARC Project transit plaza, in consultation with Unitrans and Yolobus, the bus stops shall be moved to the ARC transit plaza at the expense of the ARC Project applicant.</i></p> <p><i>3-76(b) Implement Mitigation Measure 3-75(c).</i></p>	
<p>3-77 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 (reference Impact 4.14-9).</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>
<p>Utilities (reference Section 4.15 of the Certified Final EIR)</p>			
<p>3-78 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
Control Board (reference Impact 4.15-1).			
3-79 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed (reference Impact 4.15-2).	LS	<i>None required.</i>	N/A
3-80 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 (reference Impact 4.15-3).	S	<p><i>ARC Project</i></p> <p><i>3-80(a) Prior to approval of improvement plans for Phase 2 of development, and all subsequent phases, the applicant shall provide funding for the City to perform a WWTP analysis to identify the then-current City of Davis WWTP BOD loading capacity. If the WWTP analysis determines that adequate BOD loading capacity exists at the WWTP to serve the ARC Project phase under review, further action is not required for the phase under review. If the analysis finds that the WWTP BOD loading capacity is not sufficient to serve the particular development phase under review, that phase of development shall not be approved until a plan for financing and constructing additional BOD loading capacity improvements has been prepared and approved, the additional BOD loading capacity improvements have been constructed, and the City Engineer has verified that sufficient capacity exists to serve said phase.</i></p>	LS

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 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>3-80(b) <i>The applicant shall provide for annual wet-weather monitoring of the existing off-site 42-inch or 21-inch sanitary sewer line, depending upon which off-site sewer alignment is chosen for the project, over the course of project buildout to confirm that there is capacity within the line to serve the ARC Project, in combination with existing and future projected General Plan buildout. If the wet weather monitoring fails to confirm capacity within the chosen existing sanitary sewer line, the applicant shall either upsize the existing sewer line, subject to reimbursement, or install a parallel line, subject to review and approval by the City Engineer.</i></p> <p>3-80(c) <i>If the applicant pursues a connection to the existing 8-inch sewer line in Mace Boulevard to serve Phase 1 of the ARC Project, then prior to approval of Improvement Plans for Phase 1, the applicant shall prepare and submit to the Davis Public Works Department, a sewer study, which shall determine the available capacity in the 8-inch sewer pipe in Mace Boulevard. If the 8-inch line has adequate capacity for Phase 1 of the ARC Project, then no further mitigation is needed. If the sewer study determines that the 8-inch line does not have adequate capacity to serve Phase 1, then the applicant shall upsize the sewer pipe within Mace Boulevard, or pursue construction of the northerly or easterly off-site sewer pipe connection alternative. The design of the sewer pipe</i></p>	

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**TABLE 2-2
 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>improvements shall be reviewed and approved by the City Engineer prior to approval of Phase 1 Improvement Plans.</i></p> <p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-81 Would the project be served by a landfill with sufficient 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 (reference Impact 4.15-4).</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>
<p>3-82 Gas and electric facilities (reference Impact 4.15-5).</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>
<p>3-83 Adequate telecommunication facilities (reference Impact 4.15-6).</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>
<p>3-84 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>N/A</p>

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
mitigation environmental effects related to utilities (reference Impact 4.15-7).			
Cumulative Impacts (reference Chapter 5)			
3-85 Cumulative impacts related to long-term changes in visual character of the region (reference Impact 5-1).	CC	<i>None available.</i>	SU
3-86 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 (reference Impact 5-2).	CC	ARC Project and Mace Triangle 3-86 Implement Mitigation Measure 3-3.	LCC
3-87 Impacts related to cumulative loss of agricultural land (reference Impact 5-3).	CC	ARC Project and Mace Triangle 3-87 Implement Mitigation Measures 3-5(a) and (b), and 3-7(b).	SU
3-88 A cumulatively considerable net increase of any criteria pollutant (reference Impact 5-4).	CC	ARC Project and Mace Triangle 3-88 Implement Mitigation Measure 3-11.	SU
3-89 Cumulative loss of habitat in the City of Davis area for special-status species	CC	ARC Project and Mace Triangle 3-89 Implement Mitigation Measures 3-16, 3-17, 3-18, 3-19,	LCC

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
(reference Impact 5-5).		3-20(a-c), and 3-21.	
3-90 Cumulative impacts to movement corridors in the City of Davis area (reference Impact 5-6).	LCC	None required.	N/A
3-91 Cumulative loss of cultural resources (reference Impact 5-7).	CC	ARC Project 3-91(a) Implement Mitigation Measures 3-28(a) and (b). ARC Project and Mace Triangle 3-91(b) Implement Mitigation Measure 3-28(c).	LCC
3-92 Cumulative increase in the potential for geological related impacts and hazards (reference Impact 5-8).	LCC	None required.	N/A
3-93 Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change (reference Impact 5-9).	CC	ARC Project 3-93(a) Implement Mitigation Measure 3-11, 3-38(a), and 3-72(a) and (b). Mace Triangle 3-93(b) Implement Mitigation Measure 3-38(b).	SU
3-94 Cumulative impacts related to energy (reference Impact 5-10).	LCC	None required.	N/A

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
3-95 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 (reference Impact 5-11).	LCC	<i>None required.</i>	N/A
3-96 Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area (reference Impact 5-12).	CC	ARC Project and Mace Triangle 3-96 Implement Mitigation Measures 3-47(a) through 3-47(c).	LCC
3-97 Cumulative impacts to water quality within the City of Davis (reference Impact 5-13).	LCC	<i>None required.</i>	N/A
3-98 Cumulative land use incompatibilities (reference Impact 5-14).	LCC	<i>None required.</i>	N/A
3-99 Cumulative urban decay (reference Impact 5-15).	CC	ARC Project 3-99 Implement Mitigation Measures 3-54(a) and 3-54(b).	LCC

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Mace Triangle</i></p> <p><i>None required.</i></p>	
<p>3-100 Cumulative impacts on noise-sensitive receptors (reference Impact 5-16).</p>	LCC	<p><i>None required.</i></p>	N/A
<p>3-101 Cumulative population and housing impacts (reference Impact 5-18).</p>	LCC	<p><i>None required.</i></p>	N/A
<p>3-102 Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis (reference Impact 5-19).</p>	CC	<p><i>ARC Project and Mace Triangle</i></p> <p><i>3-102</i></p> <p><i>Prior to issuance of building permits for each phase of development, the project applicant shall contribute the project’s fair share funding towards one of the following mitigation options, as determined by the City of Davis Department of Community Development and Sustainability and Davis Fire Department:</i></p> <ol style="list-style-type: none"> <i>1. Construct a fourth fire station within the City of Davis.</i> <i>2. Modify existing Davis fire facilities, which may include renovation of existing fire stations.</i> <p><i>Once the mitigation option is selected, the identified improvement project(s) shall be included in the City’s Capital Improvement Program and the City’s Fire Impact Fee updated accordingly. In addition, each improvement project shall be subject to its own</i></p>	SU

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<i>environmental review process, unless the improvement can be determined by the City to be exempt from CEQA.</i>	
3-103 Cumulative impacts to public services and recreation from the proposed project in combination with existing and future developments in the City of Davis (reference Impact 5-20).	LCC	<i>None required.</i>	N/A
3-104 Conflict with a program, plan, ordinance or policy addressing the circulation system under Cumulative Plus Project conditions (reference Impacts 5-21 and 5-22).	CC	<i>ARC Project and Mace Triangle</i> 3-104(a) <i>Implement Mitigation Measure 3-70(a).</i> 3-104(b) <i>Implement Mitigation Measure 3-70(b).</i> 3-104(c) <i>Implement Mitigation Measure 3-70(c).</i>	SU
3-105 Cumulative Increase in Vehicle Miles Traveled (reference Impact 4.14-6).	CC	<i>ARC Project</i> 3-105(a) <i>Implement Mitigation Measure 3-72(a).</i> <i>Mace Triangle</i> 3-105(b) <i>Implement Mitigation Measure 3-72(b).</i>	SU
3-106 Cumulative impacts to pedestrian, bicycle, and transit facilities.	CC	3-106 <i>Implement Mitigation Measures 3-75(a) thru (c) and 3-76(a) and (b).</i>	SU

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
3-107 Cumulative water system impacts (reference Impact 5-27).	LCC	<i>None required.</i>	N/A
3-108 Cumulative wastewater treatment and collection system impact (reference Impact 5-28).	CC	<i>ARC Project</i> 3-108 <i>Implement Mitigation Measures 3-80(a) through (c).</i> <i>Mace Triangle</i> <i>None Required.</i>	LCC
3-109 The project may contribute to cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications (reference Impact 5-29).	LCC	<i>None required.</i>	N/A

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3. AGGIE RESEARCH CAMPUS ANALYSIS

4. AUTHORS

4

AUTHORS

RANEY PLANNING & MANAGEMENT, INC.

C. Timothy Raney, AICP	President
Cindy Gnos, AICP	Senior Vice President
Nick Pappani	Vice President
Rod Stinson	Division Manager / Air Quality Specialist
Angela DaRosa	Assistant Division Manager / Air Quality Specialist
Jacob Byrne	Senior Associate / Air Quality Technician
Zac Smith	Associate

CITY OF DAVIS

Ashley Feeney	Assistant City Manager/Community Development Director
Sherri Metzker	Principal Planner

FEHR & PEERS

John Gard, P.E.	Principal
Greg Behrens, AICP	Associate

SAXELBY ACOUSTICS

Luke Saxelby	Principal Consultant
--------------	----------------------

SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.

Jeffrey Little	Vice President
Mike Bower, M.S.	Botanist/Biologist

WATERMARK ENGINEERING, INC.

Patrick Stiehr, P.E.	President
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5. REFERENCES

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REFERENCES

- ALH Urban & Regional Economics. *Mace Ranch Innovation Center Urban Decay Analysis*. March 2015.
- BAE Urban Economics. *2019 Apartment Vacancy and Rental Rate Survey*. 2019.
- CAL FIRE. Yolo County FHSZ Map, Local Responsibility Area (LRA). Adopted June 2008.
- CAL FIRE. Yolo County FHSZ Map, State Responsibility Area (SRA). Adopted November 2007.
- California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
- California Energy Commission. *2018 Power Content Label: Pacific Gas and Electric*. July 2019.
- California Energy Commission. *2018 Power Content Label: Valley Clean Energy*. July 2019.
- California Public Utilities Commission. *Zero Net Energy*. Available at: <https://www.cpuc.ca.gov/ZNE/>. Accessed February 2020.
- California Supreme Court. *Sierra Club V. County of Fresno* (2018) 6 Cal. 5th 502.
- CalRecycle. *FacIT Conversion Table 1 – Material Type Equivalency Factors*. Available at: <https://www.recyclesmart.org/filebrowser/download/16477>. Accessed February 2020.
- CalRecycle. *Solid Waste Facility Permit; Facility Number: 57-AA-001*. May 31, 2018.
- CalRecycle. *SWIS Facility Detail, Yolo County Central Landfill (57-AA-0001)*. Available at: <https://www2.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/>. Accessed February 2020.
- Central Valley Regional Water Quality Control Board. *Order R5-2018-0086, NPDES No. CA0079049, Waste Discharge Requirements for the City of Davis Wastewater Treatment Plant, Yolo County*. Adopted December 2018.
- City of Davis. *Davis City Council Hearing Minutes*. January 29, 2013.
- City of Davis. *Davis Electric Vehicle Charging Plan*. January 2017.
- City of Davis. *Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School*. January 2000.
- City of Davis. *State of The City Report*. 2017.

- City of Davis City Council Staff Report. *Undeveloped Property in the City of Davis*. January 8, 2019.
- City of Los Angeles. *L.A. CEQA Thresholds Guide*. 2006.
- Daily Democrat. *West Sacramento welcomes new businesses*. Available at: <https://www.dailydemocrat.com/2020/02/07/west-sacramento-welcomes-new-businesses/>. Accessed February 15, 2020.
- Davis Municipal Code, Chapter 8, Buildings, Article 8.17, Outdoor Lighting Control. Accessible at: <http://qcode.us/codes/davis/>.
- Fehr & Peers. *Aggie Research Campus, Volume I & 2 - Transportation Impact Study*. February 2020.
- First District Court of Appeal. *City of Hayward v. Board of Trustees of the California State University*. (November 30, 2015) 242 Cal.App.4th 833.
- Natural Resources Conservation Service, *Windbreak/Shelterbelt Establishment, Conservation Practice Job Sheet 380*. April 2013.
- Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*. February 2015.
- Pacific Gas and Electric. *Energy Efficiency Baselines for Data Centers*. October 1, 2009.
- Personal communication with Assistant Chief Darren Pytel, City of Davis Police Department. January 20, 2015.
- Personal communication with Chief Nathan J. Trauernicht, City of Davis Fire Department. February 5, 2015.
- Personal communication with Chief Nathan J. Trauernicht, City of Davis Fire Department. February 5, 2015.
- Personal email communication between Nick Pappani, Vice President, Raney Planning & Management, Inc. and Seth Perez, Land Agent, PG&E. March 23, 2015.
- 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.
- Personal email communication with Nick Pappani, Vice President of Raney Planning & Management, Inc. and Stan Gryczko, Public Works – Utilities and Operations Director. February 25, 2020.

- Ramboll. *Instructions for Sac Metro Air District Minor Project and Strategic Area Project Health Effects Screening Tools*. January 28, 2020.
- Sacramento Metropolitan Air Quality Management District. *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District*. January 31, 2020.
- Sacramento Metropolitan Air Quality Management District. *PM_{2.5} Implementation/Maintenance Plan and Re-designation Request for Sacramento PM_{2.5} Nonattainment Area*. October 24, 2013 with Errata incorporated February 5, 2014.
- Sacramento Metropolitan Air Quality Management District. *Strategic Area Project Health Effects Tool*. January 28, 2020.
- Saxelby Acoustics. *Traffic noise review for the Aggie Research Campus project– City of Davis, California*. February 12, 2020.
- Stephen L. Kostka and Michael H. Zischke. *Practice Under the California Environmental Quality Act, Second Edition*. March 2019 Update, Section 12.8.
- Sycamore Environmental Consultants, Inc. *2019 Biological Survey Update for the Aggie Research Campus, Yolo County, CA*. November 25, 2019.
- Sycamore Environmental Consultants, Inc. *Aggie Research Campus: Impacts of Agricultural Buffer on Western Burrowing Owl Habitat*. February 19, 2020.
- Sycamore Environmental Consultants, Inc. *Biological Resources Evaluation for the Aggie Research Campus Project*. February 4, 2020.
- Sycamore Environmental Consultants, Inc. *February 2020 Burrowing Owl Survey Update for the Aggie Research Campus Project, Yolo County, CA*. February 19, 2020.
- Sycamore Environmental Consultants, Inc. *March 2020 Burrowing Owl Survey Update for the Aggie Research Campus Project, Yolo, County, CA*. March 10, 2020.
- Sycamore Environmental Consultants, Inc. *Response to Comments regarding Impacts to Special-status Wildlife Species for the Aggie Research Center Project*. February 12, 2020.
- Tully & Young. *West Davis Active Adult Community Project. SB 610 Water Supply Assessment*. August 2017, p. 2-10.
- U.S. Environmental Protection Agency. *User's Guide for the AMS/EPA Regulatory Model (AERMOD)*. December 2016.
- Unitrans Planning. *ASUCD Unitrans Customer Survey Summary*. July 2019.
- Unitrans. *Unitrans General Manager's Report, Fiscal Year 2018-19*. 2019.
- Valley Clean Energy. *VCEA Vision Statement*. November 6, 2017.

- Watermark Engineering, Inc. *Applicability of MRIC Drainage Study (2015) for Aggie Research Campus Development Project*. February 3, 2020.
- Watermark Engineering, Inc. *Applicability of MRIC Drainage Study (2015) for Aggie Research Campus Development Project – Supplemental Professional Opinion Letter*. February 10, 2020.
- Watermark Engineering, Inc. *Drainage Study for Mace Ranch Innovation Center Mixed Use Alternative*. June 30, 2015.
- Watermark Engineering, Inc. *Drainage Study for Mace Ranch Innovation Center*. January 7, 2015.
- West Yost Associates. *Impacts of Innovation Center/Nishi Property Development on Wastewater Treatment Plant Capacity*. Technical Memorandum (Final). April 2, 2015.
- West Yost Associates. *Impacts of the Mace Ranch Innovation Center Proposed Mixed-Use Alternative on Wastewater Treatment Plant and Sewer Capacity*. July 15, 2015.
- Woodland-Davis Clean Water Agency. *Project Overview*. Available at: <https://www.wdcwa.com/project-overview/>. Accessed January 2018.
- Yolo County Habitat/Natural Community Conservation Plan Joint Powers Agency. *Potential Modeled Habitat Impact – MRIC*, March 9, 2015.
- Yolo County, Yolo County Agricultural Commissioner. *Conditions Covering the Use of Restricted Materials*. January 1, 2014.
- Yolo Habitat Conservancy. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan*. April 2018.
- Yolo Habitat Conservancy. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan Final Environmental Impact Statement/Environmental Impact Report*. Available at: <https://www.yolohabitatconservancy.org/documents>. April 2018.
- Yolo-Solano Air Quality Management District. *2019 Triennial Assessment and Plan Update*. May 8, 2019.
- Yolo-Solano Air Quality Management District. *AB2588 Summary Report*. September 9, 2017.