## 4.2

## AGRICULTURE AND FORESTRY RESOURCES

#### 4.2.1 Introduction

The Agriculture and Forestry Resources section of the EIR summarizes the physical characteristics of the existing agricultural resources within the boundaries of the proposed project, including identification of any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project boundaries. The analysis will address the conversion of farmland to urban uses, as well as any conflicts with existing zoning for agricultural use. Furthermore, the section addresses the project's consistency with the policies and standards of the City of Davis and Yolo County Local Agency Formation Commission (LAFCo) regarding agricultural resources. Primary sources of documentation for this section include the *Davis General Plan*, Chapter 40A of the City of Davis Municipal Code, the *County of Yolo 2030 General Plan*, the Yolo County LAFCo *Agricultural Conservation Policy*, the National Resource Conservation Service Web Soil Survey, the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Yolo County, and the *Soil Survey of Yolo County, California*.

#### 4.2.2 EXISTING ENVIRONMENTAL SETTING

According to Section 40A.03.020, Definitions, of the Davis Zoning Code, among the definitions of "agricultural land" is "those lands in agricultural use," where "agricultural use" is defined as, "Use of land for the purpose of producing food, fiber, or livestock for commercial purposes." Section 40A.03.025 states that, "The city shall require agricultural mitigation as a condition of approval for any development project that would change the general plan designation or zoning from agricultural land to nonagricultural land and for discretionary land use approvals that would change an agricultural use to a nonagricultural use."

The Existing Environmental Setting section describes the current farmland and soil productivity classification systems, the regional and local setting, as well as the extent and quality of any agricultural resources present on the project site. The following section begins with the definitions for determining soil agricultural productivity as well as the agricultural land use mapping categories used by the State of California.

<sup>&</sup>lt;sup>1</sup> City of Davis. *Davis General Plan*. Adopted May 2001. Amended through January 2007.

<sup>&</sup>lt;sup>2</sup> City of Davis. Davis Municipal Code, Chapter 40A, Right to Farm and Farmland Preservation. April 2014.

<sup>&</sup>lt;sup>3</sup> Yolo County. County of Yolo 2030 Countywide General Plan. November 10, 2009.

<sup>&</sup>lt;sup>4</sup> Yolo County Local Agency Formation Commission. *Agricultural Conservation Policy*. June 25, 2007.

United States Department of Agriculture, National Resources Conservation Service. *Web Soil Survey*. 2007. Available at: http://websoilsurvey.nrcs.usda.gov/app/. Accessed March 2015.

<sup>&</sup>lt;sup>6</sup> California Department of Conservation, Farmland Mapping and Monitoring Program: Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Yolo County, 2014.

U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Yolo County, California, 1972.

#### **Farmland Classifications**

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) uses two systems to determine a soil's agricultural productivity: the Land Capability Classification System and the Storie Index Rating System. The "prime" soil classification of both systems indicates the presence of few to no soil limitations, which, if present, would require the application of management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production. The Farmland Mapping and Monitoring Program (FMMP), part of the Division of Land Resource Protection, California Department of Conservation (DOC), uses the information from the NRCS to create maps illustrating the types of farmland in the area.

#### Land Capability Classification System

The Land Capability Classification System takes into consideration soil limitations, the risk of damage when soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable for agriculture. Generally, as the rating of the capability classification system increases, yields and profits are more difficult to obtain. A general description of soil classification, as defined by the NRCS, is provided in Table 4.2-1.

## Storie Index Rating System

The Storie Index Rating system ranks soil characteristics according to their suitability for agriculture from Grade 1 soils (80 to 100 rating), which have few or no limitations for agricultural production, to Grade 6 soils (less than 10 rating), which are not suitable for agriculture. Under the Storie Index Rating system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. Unlike the Land Capability Classification outlined above, the Storie Index Rating System does not distinguish between irrigated and non-irrigated soils. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided below in Table 4.2-2.

#### Farmland Mapping and Monitoring Program

The FMMP was established in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the USDA. The intent of the USDA was to produce agriculture maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland maps are derived from the USDA soil survey maps using the LIM criteria.

<b>Table 4.2-1</b>				
Land Capability Classification				
Class	Definition			
I	Soils have slight limitations that restrict their use.			
II	Soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.			
III	Soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.			
IV	Soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.			
V	Soils are not likely to erode but have other limitations; impractical to remove that limit their use largely to pasture or range, woodland, or wildlife habitat.			
VI	Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture or range, woodland, or wildlife habitat.			
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat.			
VIII	Soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife habitat, or water supply or to aesthetic purposes.			

Note: Capability subclasses are soil groups within one class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, IIe. The letter e shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

Source: USDA Soil Conservation Service, Soil Survey of Yolo County, California, 1972.

<b>Table 4.2-2</b>			
Storie Index Rating System			
Grade	Index Rating	Definition	
1 – Excellent	80 through 100	Few limitations that restrict their use for crops	
2 – Good	60 through 79	Suitable for most crops, but have minor limitations that narrow the choice of crops and have a few special management needs	
3 – Fair	40 through 59	Suited to a few crops or to special crops and require special management	
4 – Poor	20 through 39	If used for crops, are severely limited and require special management	
5 – Very Poor	10 through 19	Not suited for cultivated crops, but can be used for pasture and range	
6 – Non-Agriculture	Less and 10	Soil and land types generally not suited to farming	
Source: USDA Soil Conservation Service, Soil Survey of Yolo County, California, 1972.			

Since 1980, the State of California has assisted the USDA with completing the mapping in the State. The FMMP was created within the California DOC to carry on the mapping activity on a continuing basis, and with a greater level of detail. The California DOC applied a greater level of detail by modifying the LIM criteria for use in California. The LIM criteria in California utilize the Land Capability Classification and Storie Index Rating systems, but also consider physical conditions such as dependable water supply for agricultural production, soil temperature range, depth of the groundwater table, flooding potential, rock fragment content, and rooting depth.

The California DOC classifies lands into seven agriculture-related categories: Prime Farmland, Farmland of Statewide Importance (Statewide Farmland), Unique Farmland, Farmland of Local Importance (Local Farmland), Grazing Land, Urban and Built-up Land (Urban Land), and Other Land. According to Public Resources Code Section 21060.1, the first four types listed above are collectively designated by the State as Important Farmlands. Important Farmland maps for California are compiled using the modified LIM criteria and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into surrounding classifications.

Each of the seven land types are summarized below, based on California DOC's A Guide to the Farmland Mapping and Monitoring Program.<sup>8</sup>

Prime Farmland:

Prime Farmland is land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. The land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles (a cycle is equivalent to two years) prior to the mapping date.

Statewide Farmland: Farmland of Statewide Importance is land similar to Prime Farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at sometime during the two update cycles prior to the mapping date.

*Unique Farmland:* 

Unique Farmland is land of lesser quality soils used for the production of the State's leading agricultural crops. The land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date.

California Department of Conservation, Division of Land Resource Protection, FMMP: A Guide to the Farmland Mapping and Monitoring Program. 2004. Available at: http://www.consrv.ca.gov/dlrp/fmmp/mccu/Pages/map\_categories.aspx. Accessed March 2015.

Local Farmland:

Farmland of Local Importance is land of importance to the local agricultural economy, as determined by each county's Board of Supervisors and a local advisory committee. Yolo County local farmland includes lands which do qualify as Prime or Statewide Farmland, except that the land is not presently irrigated and other non-irrigated farmland. It should be noted that Yolo County also includes a Farmland of Local Potential designation, which applies to Prime or Statewide soils which are presently not irrigated or cultivated.<sup>9</sup>

Grazing Land:

Grazing Land is land on which the existing vegetation, whether grown naturally or through management, is suited to the grazing of livestock. The minimum mapping unit for this category is 40 acres.

Urban Land:

Urban and Built-up Land is occupied with structures with a building density of at least one unit to one-half acre. Uses may include but are not limited to, residential, industrial, commercial, construction, institutional, public administration purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as part of this unit, if they are part of a surrounding urban area.

Other Land:

Other Land is land that is not included in any other mapping categories. The following uses are generally included: rural development, brush timber, government land, strip mines, borrow pits, and a variety of other rural land uses.

## **Regional Setting**

Agriculture and open spaces have been the defining characteristics of Yolo County since the County was founded in 1850. Though agriculture is a business, the fields, orchards, and rangeland that comprise most of the agricultural land base in Yolo County are generally open and pastoral, and create valued views and vistas. According to the Yolo County General Plan, over 85 percent of County land is used for agriculture. In addition, 67 percent of the unincorporated area of the County is protected under Williamson Act contracts to provide further long-term protection of the agricultural lands.

Much of the area surrounding the City of Davis is used for agriculture, and agriculture is the most significant industry in the region. The Davis area has a temperate climate with sunny skies,

<sup>&</sup>lt;sup>9</sup> California Department of Conservation, Division of Land Resource Protection, FMMP: Farmland of Local Importance. Available at: http://www.consrv.ca.gov/dlrp/fmmp/Documents/local%20defs%200810.pdf. Accessed February 3, 2015.

cooling summer winds, and light rainfall during moderate winters, which is ideal for agriculture. In addition, the City has historically received adequate rainfall for crop growth during seven months of the year; irrigation is required for continued growth during the rest of the year. Approximately 275 days of the year have a minimum temperature above 32 degrees, which constitutes the growing season.

### **Local Setting**

As shown in Figure 4.2-1, the approximately 229-acre proposed project annexation area is located on an agricultural property, adjacent to the existing city limit line along Mace Boulevard, in east Davis. The annexation area is surrounded to the north and east by the Mace 391 permanent agricultural easement. This 391-acre agricultural easement property is regularly farmed; the owners are in the process of planting almond trees. According to the current Mace 391 property farmer, ground rigs are routinely used for applying pesticides on the property unless circumstances dictate the use of aerial application. The farmer considers aerial application as a last resort that may be utilized after heavy rain events when on-site muddy conditions prevent ground rigs from being able to travel throughout the property. For the Mace 391 farmer, ground spraying is a less expensive method of applying pesticides compared to aerial application.

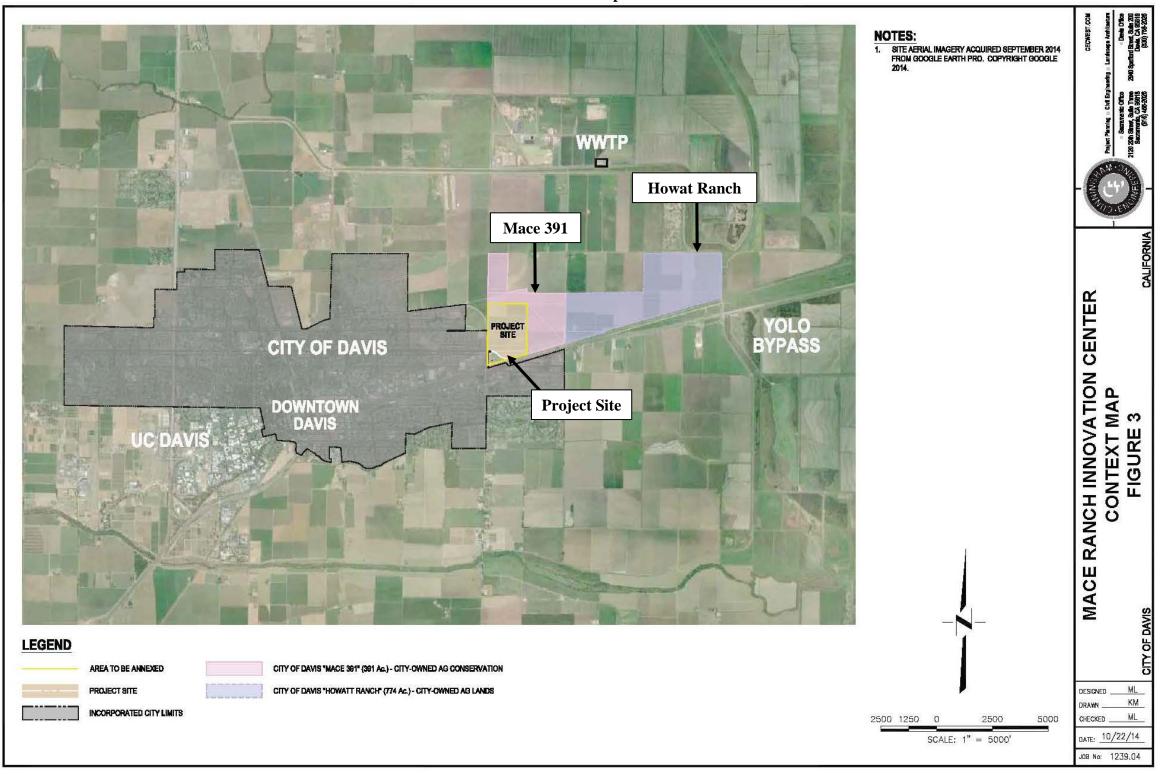
East of the Mace 391 property is the 774-acre, City-owned Howat Ranch property. The Howat Ranch site is also under agricultural production. Immediately west of the proposed project site, on the opposite side of Mace Boulevard, are an Arco gas station and the University Covenant Church. The Union Pacific Railroad and Interstate 80 are located to the south of the site.

## **Project Site Characteristics**

The proposed project site consists of approximately 229 acres of relatively flat land. The 212-acre MRIC site, which is the subject location for the applicant's innovation center project, is currently used for agricultural operations. The remaining approximately 17 acres of the proposed annexation area are referred to in this EIR as the Mace Triangle. This portion of the annexation area is being included solely for the purposes of avoiding the creation of a County island property once the 212-acre MRIC site is brought into the City. The City of Davis has included the Mace Triangle within the overall project boundaries to allow the continuation of existing uses, while recognizing, and evaluating in the EIR, the potential for additional urban development on the Ikedas parcel and adjacent agricultural parcel. The Mace Triangle is primarily developed, with the exception of the easternmost parcel, which has been farmed in the past.

Personal phone communication with Nick Pappani, Vice President of Raney Planning & Management, Inc., and Ranjit Dhillon, March 9, 2015.

Figure 4.2-1 Context Map



With respect to the MRIC site, tomatoes have been grown recently on 185 acres of the 212-acre site, with a drip irrigation system. The tomatoes are grown on a one-year growing cycle and are typically harvested in August. The project site has been part of a larger area of farmed land since at least 1937. Aerial photography indicates that all adjacent parcels were farmed from at least 1937 through 1993, with the exception of the easterly and adjacent rural residence facility, which predates 1937. Currently, sunflowers are being grown on the property.

#### Soil Classifications

The MRIC site and the Mace Triangle site contain various soil types. The soil types found on each site, as well as a description of the soils, are included below. According to the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, a portion of the on-site soils meet the criteria for Prime Farmland or Farmland of Statewide Importance.

#### MRIC Site

According to the NRCS Web Soil Survey, the MRIC site is made up of the following soils: 12

- Capay silty clay (map symbol Ca);
- Sycamore silt loam, drained (Sp);
- Sycamore complex, drained (Sv);
- Tyndall very fine sandy loam, drained (Tc);
- Willows clay (Wb); and
- Willows clay, alkali, drained (Wd).

The soils are described below in Table 4.2-3 and shown in Figure 4.2-2. As shown in Table 4.2-3, the on-site soils range from Grade 2 to Grade 5. If used for crops, Grade 5 soils are severely limited and require special management. Grade 2 soils are suitable for most crops, but have minor limitations that narrow the choice of crops and have a few special management needs.

#### Mace Triangle Site

According to the NRCS Web Soil Survey, the Mace Triangle site is entirely made up of Sycamore complex, drained (Sv). Sycamore complex, drained, is a Grade 2 soil, meaning that the soil is suitable for most crops, but has minor limitations that narrow the choice of crops and have a few special management needs.

Ramcon Engineering & Environmental Contracting, Inc. *Phase I Environmental Site Assessment, Mace 100 Property.* October 22, 2003.

<sup>&</sup>lt;sup>12</sup> U.S. Department of Agriculture, National Resources Conservation Service. *Web Soil Survey*. 2007. Available at: http://websoilsurvey.nrcs.usda.gov/app/. Accessed March 2015.

Table 4.2-3						
On-Site Land Capability Classification and Storie Index Rating						
	Land Capability					
	Classification				Acres in	% of
		Non-	Storie		Project	Project
Soil Name and Map Symbol	Irrigated	Irrigated	Index	Grade	Site	Site
MRIC Site						
Capay silty clay (Ca)	II	IVs	44.9	3	65.2	30.5
Sycamore silt loam, drained (Sp)	I	IVc	68.8	2	1.3	0.6
Sycamore complex, drained (Sv)	I	IVc	68.8	2	106.0	49.5
Tyndall very fine sandy loam, drained (Tc)	I	IVc	68.4	2	0.3	0.1
Willows clay (Wb)	IIw	IVw	20.9	4	23.9	11.2
Willows clay, alkali, drained (Wd)	IVw	IVw	12.3	5	17.3	8.1
Mace Triangle Site						
Sycamore complex, drained (Sv)	I	IVc	68.8	2	16.58	100

Notes:

Source: University of California, Davis - California Soil Resource Lab, SoilWeb App. 2015. 13

### Soil Descriptions

<u>Capay silty clay (Ca)</u> is located on basin rims. Permeability of this Capay silty clay is slow. Surface runoff is very slow, and the erosion hazard is none. The available water holding capacity is 6.5 to eight inches. The effective rooting depth is more than 60 inches. The soil is used principally for irrigated sugar beets, tomatoes, rice, dry-farmed barley, and dry-farmed safflower. Other uses include irrigated pasture, wildlife habitat, and recreation. The land capability unit is II irrigated and IVs non-irrigated.

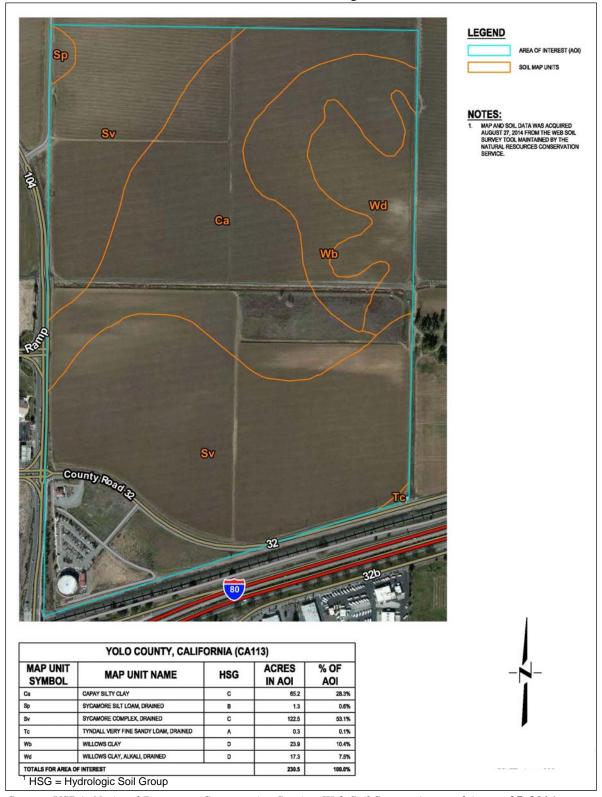
Sycamore silt loam, drained (Sp), is located on alluvial fans. Permeability of this Sycamore silt loam is moderate. Surface runoff is moderately slow, and the erosion hazard is none to slight. The available water holding capacity is ten to twelve inches. The effective rooting depth is more than 60 inches. The soil is used principally for irrigated sugar beets, tomatoes, alfalfa, asparagus, almonds, and walnuts. Other uses include dryfarmed barley, wildlife habitat, and recreation. The land capability unit is I irrigated and IVc non-irrigated.

<sup>&</sup>lt;sup>1</sup> Capability subclasses are soil groups within one class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, IIe. The letter 'e' shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; 'w' shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); 's' shows that the soil is limited mainly because it is shallow, droughty, or stony; and 'c', used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

<sup>&</sup>lt;sup>2</sup> Soils are placed in grades according to their suitability for agricultural use as shown by their Storie Index Ratings. As shown in Table 4.2-2, soils of grade 1 have few or no limitations that restrict their use for crops. Alternatively, grade 6 consists of soils and land types that generally are not suited to farming.

<sup>&</sup>lt;sup>13</sup> University of California, Davis - California Soil Resource Lab. *SoilWeb App.* 2015. Accessed February 9, 2015.

Figure 4.2-2 On-Site Soil Map



Source: USDA, National Resources Conservation Service, Web Soil Survey, Accessed August 27, 2014.

Sycamore complex, drained (Sv), is located on alluvial fans. Permeability of the clay substratum is low. Surface runoff is moderately slow, and the erosion hazard is none to slight. The available water holding capacity is eight to ten inches. The effective rooting depth is 40 to 60 inches. The soil is used principally for sugar beets, tomatoes, and alfalfa. Other uses include dry-farmed safflower, dry-farmed barley, wildlife habitat, and recreation. The land capability unit is I irrigated and IVc non-irrigated.

Tyndall very fine sandy loam, drained (Tc), is located on alluvial fans. Permeability of this Tyndall very fine sandy loam is moderately rapid. Surface runoff is very slow, and the erosion hazard is none to slight. The available water holding capacity is eight to ten inches. The effective rooting depth is 36 to 60 inches. The soil is used principally for pears, sugar beets, tomatoes, alfalfa, and asparagus. Other uses include irrigated pasture, dry-farmed barley, wildlife habitat, and recreation. The land capability unit is I irrigated and IVc non-irrigated.

<u>Willows clay (Wb)</u> is located on basins where slopes are less than one percent. Permeability of this Willows clay is slow. Surface runoff is very slow, and the erosion hazard is none to slight. The available water holding capacity is seven to nine inches. The effective rooting depth is from 36 to more than 60 inches. The soil is used principally for rice and sugar beets. Other uses include dry-farmed safflower, irrigated pasture, wildlife habitat, and recreation. The land capability unit is IIw irrigated and IVw non-irrigated.

Willows clay, alkali, drained (Wd), is located on basins where slopes are less than one percent. Permeability of this Willows clay is slow. Surface runoff is very slow, and the erosion hazard is none to slight. The available water holding capacity is six to eight inches. Soil drainage has lowered the water table to a depth of more than 60 inches. The soil is used principally for rice and sugar beets. Other uses include irrigated pasture, wildlife habitat, and recreation. The land capability unit is IVw, irrigated and non-irrigated.

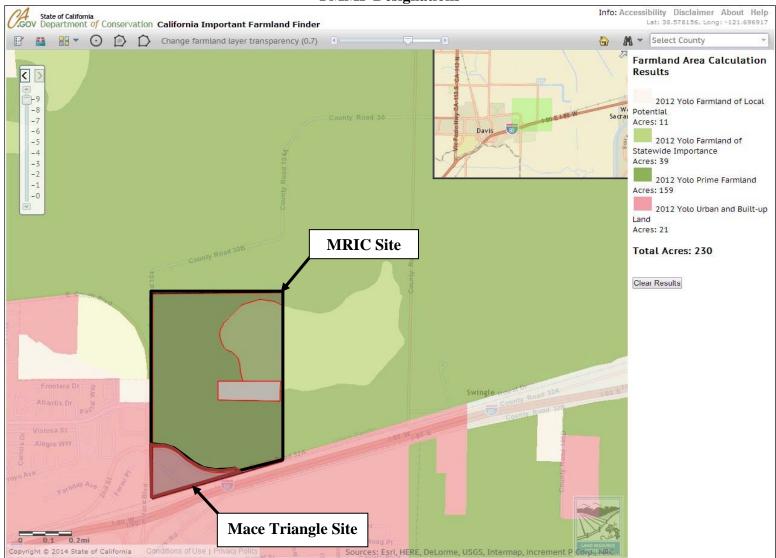
## Important Farmland Designation

#### MRIC Site

The California DOC has defined areas of the MRIC site as Prime Farmland, Statewide Farmland, and Potential Local Farmland (see Figure 4.2-3). As shown in the figure, the MRIC site contains approximately 159 acres (or 76.1 percent of the MRIC site) of Prime Farmland, approximately 39 acres (or 18.7 percent of the MRIC site) of Farmland of Statewide Importance, and approximately 11 acres (or 5.3 percent of the MRIC site) of Farmland of Local Importance.

California Department of Conservation, Division of Land Resources Protection, Farmland Mapping and Monitoring Program. Map: "Yolo County Important Farmland 2010." Published December 2011.

Figure 4.2-3 FMMP Designations



Source: California Department of Conservation. California Important Farmland Finder. Accessed February 2, 2015.

#### Mace Triangle Site

The California DOC has defined the Mace Triangle site as Urban and Built-up Land (see Figure 4.2-3).

#### **Agricultural Zoning**

The MRIC site is currently zoned by Yolo County as Agricultural-Intensive (A-N), while the Mace Triangle site is zoned as Agricultural-Commercial (A-C) and A-N. The Yolo County General Plan designates the MRIC site as Agriculture (AG) and the Mace Triangle site is designated as AG and Public and Quasi-Public (PQP). In addition, the project site is located in an Urban Agricultural Transition Area. The intent of the transition areas is to provide a buffer to minimize conflicts between urban and agricultural areas, to provide public open space, and to define the planned urbanized edge of the City.

The County's A-N zoning designation is applied to protect and preserve lands that are typically less dependent on high soil quality and available water for irrigation. Such lands require considerably larger parcel sizes to allow extensive agricultural activities such as livestock and ranching operations, and dry land farming. In addition, lands zoned A-N can be used for open space functions that are often connected with foothill and wetlands locations, such as grazing and pasture land, and wildlife habitat and recreational areas. Minimum lot size for newly created parcels designated as A-N is 160 acres for dry land farming and 320 acres for rangeland.

The County's A-C zoning designation is applied to existing and planned commercial uses in the agricultural areas. The A-C zone is to be applied only when the primary use of the property is for significant commercial agricultural activities. The commercial activities must be compatible with and enhance the primary agricultural use of the greater area. Maximum parcel size in the A-C zone shall be determined by the existing or proposed use, and shall have a minimum parcel size of one acre, and a maximum parcel size of 20 acres.

The County's PQP zoning designation is applied to lands that are occupied or used for public and governmental offices, places of worship, schools, libraries, and civic uses. Other typical uses include airports, water and wastewater treatment plants, drainage basins, and sanitary landfills. As with park facilities, smaller public/quasi-public uses involving less than 5,000 square feet of building space may be permitted in commercial and some industrial zones. The PQP zone implements the PQ land use designation in the Yolo County General Plan.

<sup>&</sup>lt;sup>15</sup> Yolo County. *Yolo County GIS*. 2014. Available at: http://www.yolocounty.org/community-services/planning-public-works/geographic-information-system-gis/use-gis. Accessed March 2015.

Yolo County. County of Yolo 2030 Countywide General Plan, General Plan Land Use Map. November 10, 2009.

City of Davis. Davis General Plan [Figure 11b: Land Use – City Area Enlargement]. Adopted May 2001. Amended through January 2007.

#### Williamson Act Lands

The California Land Conservation Act, better known as the Williamson Act, has been the State's premier agricultural land protection program since the act's enactment in 1965. The Act creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict land to agricultural and open space uses. The vehicle for these agreements is a rolling term 10-year contract (i.e., unless either party files a "notice of non-renewal," the contract is automatically renewed annually for an additional year). In return, restricted parcels are assessed for property tax purposes at a rate consistent with their annual use, rather than potential market value. According to the Yolo County Williamson Act map published by the California DOC, the entire project site is not under a Williamson Act contract.<sup>18</sup>

#### 4.2.3 REGULATORY CONTEXT

The following discussion contains a summary review of regulatory controls pertaining to agricultural resources, including State and local laws and ordinances.

#### **State Regulations**

The following are the State environmental laws and policies relevant to agricultural resources.

### California Land Conservation Act

Under the provisions of the Williamson Act (California Land Conservation Act 1965, Section 51200), landowners contract with the County to maintain agricultural or open space use of their lands in return for reduced property tax assessment. The contract is self-renewing and the landowner may notify the County at any time of intent to withdraw the land from its preserve status. Withdrawal involves a ten-year period of tax adjustment to full market value before protected open space can be converted to urban uses. Consequently, land under a Williamson Act Contract can be in either renewal status or non-renewal status. Lands with a non-renewal status indicate the farmer has withdrawn from the Williamson Act Contract and is waiting for a period of tax adjustment for the land to reach its full market value. As noted previously, the properties making up the proposed project site are not under a Williamson Act contract.

## Farmland Security Zones – "Super Williamson Act"

In August 1998, the Williamson Act's farmland security zone (FSZ) provisions were enacted with the passage of Senate Bill 1182 (California Government Code Section 51296–51297.4). The sub-program, dubbed the "Super Williamson Act," enables agricultural landowners to enter into contracts with the County for 20-year increments with an additional 35 percent tax benefit over and above the standard Williamson Act contract.

<sup>&</sup>lt;sup>18</sup> California Department of Conservation, Division of Land Resources Protection, Land Conservation (Williamson) Act. *Map: "Yolo County Williamson Act FY 2010/2011."* Published 2012.

Annexation of FSZs is generally not allowed. Section 56749 of the California Government Code requires Local Agency Formation Commissions to reject plans that would result in the annexation of FSZ territory into cities. However, FSZ annexation is permissible under certain circumstances including voter approval, necessary public improvements, and landowner consent.

#### Department of Pesticide Regulation

Certain pesticides can be especially dangerous to human health or the environment if not used correctly. Therefore, California law allows the Department of Pesticide Regulation (DPR) to put special controls on these pesticides, limiting their use to trained individuals and then only at times and places approved by the County Agricultural Commissioners. The pesticides are called "restricted materials." The commissioners evaluate the potential effects an application might have on people and the environment before the pesticide is used.

California is the only state with such a pesticide permitting system. In California and other states, users of restricted materials must have certain training. But only California requires users of certain pesticides to get a permit from a local regulatory official.

County Agricultural Commissioners are uniquely positioned to do this, with their extensive knowledge of both pesticides and local conditions. Requiring a permit allows Commissioners to make sure restricted pesticides users prevent harmful effects or use alternatives to the pesticide.

The purchase or use of most restricted materials in agriculture requires a permit from the County Agricultural Commissioner. Permits are also required to use these pesticides for commodity treatment in fumigation chambers at ports and elsewhere. The major exception to the permit requirement is structural pest control (for example, to get rid of a termite infestation).

## **Local Regulations**

The following are the local environmental laws and policies relevant to agricultural resources.

## Yolo County LAFCo

Yolo County LAFCo is a State-mandated boundary commission responsible for coordinating logical and timely changes in local government boundaries. In consideration of annexation proposals, the Commission observes four basic statutory purposes: 1) the discouragement of urban sprawl, 2) the preservation of open space and agricultural land resources, 3) the efficient provision of government services, and 4) the encouragement of orderly growth boundaries based upon local conditions and circumstances. LAFCo's powers, procedures, and functions are set forth in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, (Government Code Section 560000 et seq.).

California Government Code Section 56377 mandates that LAFCos consider the following factors in reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open-space lands to uses other than open-space uses:

- Development or use of land for other than open-space uses shall be guided away from
  existing prime agricultural lands in open-space use toward areas containing non-prime
  agricultural lands, unless that action would not promote the planned, orderly, efficient
  development of an area.
- Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the sphere of influence of a local agency should be encouraged before any proposal is approved which would allow for or lead to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency.

#### Yolo County LAFCo Agricultural Conservation Policy

The Yolo County LAFCo Agricultural Conservation Policy includes six considerations against which all proposals are reviewed. It emphasizes that, where feasible, non-prime land should be annexed before prime land and requires that a land's current zoning, pre-zoning, or land use designations are considered in determining whether mitigation will be required for the loss of agricultural land. This policy is a major protection for the County's agricultural lands and enforces preservation of agricultural lands for productive agricultural uses to the greatest extent feasible. Further, annexation for land uses in conflict with an existing agricultural preserve contract is prohibited unless specific criteria outlined in the policy are met.

Yolo County LAFCo has adopted specific standards to ensure that fair and consistent decisions are rendered in accordance with State law. The following list of the adopted Yolo County LAFCo policies and standards, from Yolo County LAFCo's *Agricultural Conservation Policy* document, is not exhaustive, and lists goals and policies that are relevant for the proposed project.

#### IV. Policy Standards and Implementation

- A. Detachment of prime agricultural lands and other open space lands shall be encouraged if consistent with the sphere of influence for that agency.
- B. Annexation of prime agricultural lands shall not be approved unless the following factors have been considered:
  - 1. There is insufficient marketable, viable, less prime land available in the subject jurisdiction for the proposed land use.
  - 2. The adoption and implementation of effective measures to mitigate the loss of agricultural lands, and to preserve adjoining lands for agricultural use to prevent their premature conversion to other uses. Such measures may include, but need not be limited to: the acquisition and dedication of farmland, development rights, open space and conservation easements to permanently protect adjacent and other agricultural lands within the county; participation in other development programs (such as transfer or purchase of development rights); payments to responsible, recognized government and non-profit organizations for such purposes; the establishment of open space and similar buffers to shield agricultural operations from the effects of development.

- C. Annexation for land uses in conflict with an existing agricultural preserve contract shall be prohibited, unless the Commission finds that it meets all the following criteria:
  - 1. The area is within the annexing agency's sphere of influence.
  - 2. The Commission makes findings required by Government Code Section 56856.5.
  - 3. The parcel is included in an approved city specific plan.
  - 4. The soil is not categorized as prime.
  - 5. Mitigation for the loss of agricultural land has been secured at least at a 1:1 ratio of agricultural easements for the land lost.
  - 6. There is a pending, or approved, rescission for the property that has been reviewed by the local jurisdictions and the Department of Conservation.
  - 7. The property has been non-renewed if still awaiting rescission approval.
- D. Less prime agricultural land generally should be annexed and developed before prime land is considered for boundary changes. The relative importance of different parcels of prime agricultural land shall be evaluated based upon the following (in a descending order of importance):
  - 1. Soil classification shall be given the utmost consideration, with Class I or II soil receiving the most significance, followed by the Storie Index Rating.
  - 2. Consideration shall also be given to the land's economic viability for continued agricultural use.
- E. LAFCO will approve a change of organization which will result in the conversion of prime agricultural land in open space use to other uses only if the LAFCO finds that the proposal will lead to planned, orderly, and efficient development. The following factors shall be considered:
  - 1. Contiguity of the subject land to developed urban areas.
  - 2. Receipt of all other discretionary approvals for changes of boundary, such as prezoning, environmental review, and service plans as required by the Executive Officer before action by LAFCO. If not feasible before LAFCO acts, the proposal can be made contingent upon receipt of such discretionary approvals within not more than one (1) year following LAFCO action.
  - 3. Consistency with existing planning documents of the affected local agencies, including a service plan of the annexing agency or affected agencies.
  - 4. Likelihood that all or a substantial portion of the subject land will develop within a reasonable period of time for the project's size and complexity.
  - 5. The availability of less prime land within the sphere of influence of the annexing agency that can be developed, and is planned and accessible, for the same or a substantially similar use.
  - 6. The proposal's effect on the physical and economic viability of other agricultural operations. In making this determination, LAFCO will consider the following factors:
    - a. The agricultural significance of the subject and adjacent areas relative to other agricultural lands in the region.
    - b. The existing use of the subject and adjacent areas.
    - c. Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of adjacent or nearby

- agricultural land, or will be extended through or adjacent to, any other agricultural lands which lie between the project site and existing facilities.
- d. Whether natural or man-made barriers serve to buffer adjacent or nearby agricultural land from the effects of the proposed development.
- e. Provisions of the General Plan's open space and land use elements, applicable growth management policies, or other statutory provisions designed to protect agriculture. Such provisions may include, but not be limited to, designating land for agriculture or other open space uses on that jurisdiction's general plan, adopted growth management plan, or applicable specific plan; adopting an agricultural element to its general plan; and acquiring conservation easements on prime agricultural land to permanently protect the agricultural uses of the property.
- f. The establishment of measures to ensure that the new property owners shall recognize the rights of adjacent property owners conducting agricultural operations and practices in compliance with the agricultural zone in accordance with the Right to Farm Ordinance adopted by the Yolo County Board of Supervisors.

#### F. Agricultural Mitigation

- 1. Except as expressly noted in subsection 8 and 9 below, annexation of prime agricultural lands shall not be approved unless one of the following mitigations has been instituted, at not less than a 1:1 replacement ratio:
  - a. The acquisition and dedication of farmland, development rights, and agricultural conservation easements to permanently protect adjacent and other agricultural lands within the County.
  - b. The payment of fees that are sufficient to fully fund the acquisition and maintenance of such farmland, development rights or easements. The per acre fees shall be specified by a Fee Schedule or Methodology, which may be periodically updated at the discretion of the Commission (Refer to the Yolo County LAFCO "Payment In Lieu Fee Methodology").
  - c. Any such measures must preserve prime agricultural property of reasonably equivalent quality and character that would otherwise be threatened, in the reasonably foreseeable future, by development and/or other urban uses.
- 2. The loss of fewer than twenty (20) acres of prime agricultural land generally shall be mitigated by the payment of in lieu fees as mitigation rather than the dedication of agricultural conservation easements. The loss of twenty (20) acres or more of prime agricultural land generally may be mitigated either with the payment of in lieu fees or the dedication of agricultural conservation easements. In all cases, the Commission reserves the right to review such mitigation on a case-by-case basis.
- 3. If an applicant provides agricultural easements to satisfy this requirement, the easements must conform to the following characteristics:

- a. The land used to mitigate the loss of prime agricultural land must also be prime agricultural land as defined in this Policy and the Cortese-Knox-Hertzberg Act (Government Code 56000 et. seq.).
- b. In addition, it must also be of reasonably equivalent quality and character as the mitigated land as measured using both of the following methodologies:
  - (i) Average Storie Index The USDA calculation methodology will be used to calculate the average Storie Index score. The mitigating land's average Storie Index score shall be no more than 10% less than the mitigated land's average Storie Index score.
  - (ii) Land Equivalency and Site Assessment ("LESA") Model

     The LESA calculation shall be in accordance with the
    methodology adopted by this Commission. The
    mitigating land's LESA score shall be no more than 10%
    below the mitigated land's LESA score.
- 4. As a general rule, the Commission will not accept, as mitigation required by this Policy, an agricultural conservation easement or property that is "stacked" or otherwise combined with easements or property acquired for habitat conservation purposes, nor for any other purposes that are incompatible with the maintenance and preservation of economically sound and viable agricultural activities and operations. The Commission retains the discretion to make exceptions on a case-by-case basis, based upon the following criteria:
  - a. Whether the applicant made a good-faith effort to mitigate separately for the loss of habitat in accordance with the Yolo County Habitat/Natural Community Conservation Plan process but such efforts were infeasible, and
  - b. Whether the proposed "stacked" mitigation for the loss of prime agricultural land and habitat involves one of the following, whichever results in the greatest acreage of preserved land:
    - (i) Mitigation at a ratio of no less than 2:1 for the loss of prime agricultural soils; or
    - (ii) Mitigation at a ratio of no less than 1:1 for the loss of all agricultural lands in the proposal area; or
    - (iii) The property subject to the agricultural conservation easement is larger than the proposal area, meets the conditions specified in this Policy, and encompasses a complete field, legal parcel, or farm line.
- 5. [Not applicable.]
- 6. LAFCO favors the use of a local non-profit agricultural conservation entity or the regional branch of a nationally recognized non-profit agricultural conservation entity as the easement holder. The Commission will use the following criteria when approving the non-profit agricultural conservation entity for these purposes:
  - a. Whether the entity is a non-profit organization that is either based locally or is a regional branch of a national non-profit organization whose principal purpose is holding and administering agricultural conservation easements for the purposes of conserving and maintaining lands in agricultural production;

- b. Whether the entity has a long-term proven and established record for holding and administering easements for the purposes of conserving and maintaining lands in agricultural production;
- c. Whether the entity has a history of holding and administering easements in Yolo County for the foregoing purposes;
- d. Whether the entity has adopted the Land Trust Alliance's "Standards and Practices" and is operating in compliance with those Standards; and
- e. Any other information that the Commission finds relevant under the circumstances. A local public agency may be an easement co-holder if that agency was the lead agency during the environmental review process.

#### V. Definitions

AGRICULTURAL LAND - Areas within which the primary zoning or general plan designation is AG, AP, or AE, or any other agricultural zone.

PRIME AGRICULTURAL LAND - Land, whether a single parcel or contiguous parcels, which has not been developed for a use other than an agricultural use and which meets any of the following qualifications:

- (a) Land that qualifies, if irrigated, for rating as Class I or Class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is currently irrigated, provided that irrigation is feasible.
- (b) Land that qualifies for rating 80 through 100 Storie Index Rating.
- (c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing Lands, July 1967, developed pursuant to Public Law 46, December 1935.
- (d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual bases from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.
- (e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre for three of the previous five calendar years.

URBAN DEVELOPMENT - A change of organization that contemplates or is likely to lead to the conversion of land from agricultural use to a primarily nonagricultural related use, generally resulting in the need for services such as sewer, water, fire protection, schools, drainage systems, and police protection.

#### Yolo County LAFCo LESA Model

The Yolo County LAFCo Land Equivalency and Site Assessment (LESA) Model has been designed as a potential planning tool to assist in making decisions concerning the relative significance of agricultural land resources. The model itself is rooted in concepts originally

devised at the federal level, but has been customized to address the unique agricultural resources issues of Yolo County.

The LESA model requires a series of straightforward measurements and calculations to score a given project. Listed below are the materials that are generally needed to make these determinations.

#### A. Land Evaluation calculations require:

- An accurate map of the project, such as a parcel map. Parcel map books are available for review at the Yolo County Planning Department.
- A Yolo County Important Farmland Map produced biennially by the California Department of Conservation (DOC). These maps are available upon request from DOC, and are also available for review at the Yolo County LAFCO and Farm Bureau offices.
- The Soil Survey of Yolo County, California (USDA Soil Conservation Service, 1971), available for review at the Natural Resources Conservation Service, UC Davis Shields Library, etc.
- A planimeter for making acreage determinations of irregularly shaped units.
- A Land Evaluation Worksheet (included in the Appendix).

## B. Site Assessment Calculations Require:

- A photocopy of the appropriate page from the Yolo County Addressing System.
- Access to current zoning maps. These are available in the Yolo County Planning Department.
- A planimeter, compass and engineer's scale.
- A Site Assessment Worksheet (included in the appendix).

Additionally, the Yolo County Planning Department has developed a County Geographic Information System (GIS) that includes considerable land resource information. The GIS has the capability to calculate many of the specific acreage figures that are needed to operate the Yolo County LESA Model, thereby simplifying the procedure for obtaining a LESA score for a given project.

LAFCo also favors that applicants transfer the easement rights or in lieu fees directly to the recognized non-profit agricultural conservation entity in accordance with that entity's procedures.

The Commission retains the discretion to determine whether the agricultural conservation entity identified by the applicant and the local lead agency has met the criteria delineated above.

#### Yolo County Government Code

Title 8, Land Development and Zoning, of the Yolo County Code contains the primary land development regulations of the County, including the Zoning Ordinance.<sup>19</sup>

<sup>&</sup>lt;sup>19</sup> Yolo County, Planning, Public Works and Community Services Department. *Zoning Code*. Adopted July 2014.

## Agricultural Conservation and Mitigation Program

Section 8-2.404, Agricultural Conservation and Mitigation Program, includes definitions, policies, and mitigation standards designed to permanently protect agricultural land located within the unincorporated areas of Yolo County. The following definitions and mitigation requirements apply to agricultural land. It should be noted that Yolo County is currently in the process of considering changes to its agricultural mitigation program.

Section 8-2.404.b Definitions

AGRICULTURAL LAND OR FARMLAND - Those land areas of unincorporated Yolo County, regardless of current zoning, that are either currently used for agricultural purposes or that are substantially undeveloped and capable of agricultural production.

AGRICULTURAL MITIGATION LAND - Agricultural land encumbered by a farmland deed restriction, a farmland conservation easement or such other farmland conservation mechanism acceptable to the County.

AGRICULTURAL USE - Those principal, accessory, and conditional uses and structures defined in Section 8-2.304 of this Title, excluding "covered habitat mitigation projects" as defined in Section 8-2.307 of this Title but including the restoration or conversion to habitat, so long as the restoration or conversion is incidental to or ancillary to the agricultural uses on the parcel, and excluding medium-sized, large, and very large solar energy systems, which are subject to Sections 8-2.1104 and 8-2.1105 of this Title.

FARMLAND CONSERVATION EASEMENT - The granting of an easement over agricultural land for the purpose of restricting its use to agricultural activities.

FAMRLAND DEED RESTRICTION - The creation of a deed restriction, covenant or condition which precludes the use of the agricultural land subject to the restriction for any nonagricultural purposes, use, operation or activity. The deed restriction shall provide that the land subject to the restriction will permanently remain agricultural land.

PREDOMINANTLY NON-AGRICULTURAL USE - Any use not defined or listed as a principal, accessory, and conditional use allowed in the agricultural zones, as defined and listed in Sections 8-2.303 and 8-2.304. Predominantly non-agricultural use specifically does not include the restoration or conversion to habitat, so long as the restoration or conversion is incidental to or ancillary to the agricultural uses on the parcel, but the definition does include "covered habitat mitigation projects" as defined in Section 8-2.307 of this Title.

QUALIFYING ENTITY - A nonprofit public benefit 501I(3) corporation operating in Yolo County for the purpose of conserving and protecting land in its natural, rural or agricultural condition. The County favors the use of a local non-profit agricultural conservation entity, a statewide non-profit agricultural conservation entity or entities, or the regional branch of a nationally recognized non-profit agricultural conservation entity as the easement holder. The County will consider the following criteria when considering the non-profit agricultural conservation entity for these purposes, and when monitoring the performance of qualifying entities over time:

- (1) Whether the entity is a non-profit organization that is either based locally, is statewide, or is a regional branch of a national non-profit organization whose principal purpose is holding and administering agricultural conservation easements for the purposes of conserving and maintaining lands in agricultural production;
- (2) Whether the entity has a long-term proven and established record for holding and administering easements for the purposes of conserving and maintaining lands in agricultural production;
- (3) Whether the entity has a history of holding and administering easements in Yolo County for the foregoing purposes;
- (4) Whether the entity has adopted the Land Trust Alliance's "Standards and Practices" and is operating in compliance with those Standards and Practices; and
- (5) Any other information that the County finds relevant under the circumstances.

A local public agency may be an easement coholder if that agency was the lead agency during the environmental review process. The County also favors that applicants transfer the easement rights or in lieu fees directly to the recognized non-profit agricultural conservation entity in accordance with that entity's procedures. The County retains the discretion to determine whether the agricultural conservation entity identified by the applicant and the local lead agency has met the criteria delineated above. Qualifying entities may be approved by the Board of Supervisors from time to time.

## Section 8-2.404.c Mitigation Requirements

- 1. Agricultural mitigation shall be required for conversion or change from agricultural use to an urban use prior to, or concurrent with, approval of a zone change from agricultural to urban zoning, permit, or other discretionary or ministerial approval by the County, or as allowed by subsection (3), below. A minimum of one (1) acre of agricultural land shall be preserved for each acre of agricultural land changed to an urban use or zoning classification (1:1 ratio). Application for a zone change, permit, or other discretionary or ministerial approval shall include provisions for agricultural mitigation land. The following uses shall be exempt from this requirement: affordable housing projects, where a majority of the units are affordable to very low or low income households, as defined in Title 8, Chapter 8 of the Yolo County Code (Inclusionary Housing Requirements); public uses such as parks, schools, and cultural institutions. Finally, also exempt are projects involving the conversion of land to urban use to the extent that agricultural mitigation was provided prior to the effective date of the ordinance that revised this subsection (a) to require mitigation for conversions to urban uses.
- 2. Agricultural mitigation requirements shall be satisfied as follows:
  - i. If the area to be converted is five (5) acres or more in size, subject to the exception in (ii), below, by granting, in perpetuity, a farmland conservation easement, a farmland deed restriction, or other farmland conservation mechanism to, or for the benefit of, the County and/or other qualifying entity approved by the County; and, the payment of fees sufficient to compensate for all administrative costs incurred by the County or easement holder inclusive of funds for the establishment of an endowment to provide for monitoring, enforcement, and all other

- services necessary to ensure that the conservation purposes of the easement or other restriction are maintained in perpetuity; or
- ii. If the area to be converted is a small project less than five (5) acres in size, by granting a farmland conservation easement as described in subsection (i), above, or payment of the in-lieu fee established by the County to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism consistent with the provisions of this section; and the payment of fees in an amount established by the County to compensate for all administrative costs incurred by the County inclusive of endowment funds for the purposes set forth in subsection (i), above. The in-lieu fee, paid to the County, shall be used for agricultural mitigation purposes only (i.e. purchases of conservation easements and related transaction and administrative costs). If Yolo County or a qualifying entity establishes a farmland mitigation bank, farmland mitigation may be satisfied by the purchase of credits from the mitigation bank equivalent to the amount of the required in-lieu fees. The farmland mitigation bank must be approved by the Board of Supervisors to satisfy farmland mitigation requirements.
- 3. Agricultural mitigation (payment of an in-lieu fee or purchase of a conservation easement) shall be completed as a condition of approval prior to the acceptance of a final parcel or subdivision map, or prior to the issuance of any building permit or other final approval for development projects that do not involve a map.

#### Section 8-2.404.d Eligible lands

Land shall meet all of the following criteria in sections (1) through (7), below, to qualify as agricultural mitigation:

- 1) Agricultural conservation easements resulting from this program shall be acquired from willing sellers only;
- 2) The property is of adequate size, configuration and location to be viable for continued agricultural use;
- 3) The equivalent class of soil, based on Storie index or NRCS soil survey maps, for the agricultural mitigation land shall be comparable to, or better than, the land which is converted to an urban land or use:
- 4) The land shall have an adequate water supply to maintain the purposes of the easement, i.e., to irrigate farmland if the converted farmland is irrigated or capable of irrigation. The water supply shall be sufficient to support ongoing agricultural uses;
- The mitigation land shall be located within the County of Yolo, within a two (2) mile radius of the land that is the subject of a conversion from agricultural to nonagricultural use or zoning classification. If the land within a two (2) mile radius is demonstrated to be unavailable to the reasonable satisfaction of the Director of the Planning, Public Works and Environmental Services Department or his or her designee, lands outside the two (2) mile radius area but within a four (4) mile radius, may be used for the purpose of the agricultural mitigation provided that the land is of equal or better conservation easement market value to the land inside the two (2) mile radius area (i.e., the total cost or market value of purchasing the required conservation easement within the four mile radius is

- equal or greater than the total cost or market value of purchasing the easement within the two mile radius);
- To the extent possible, mitigation lands shall promote open space connectivity and shall be in close proximity to existing growth boundaries for the communities and cities within the County;
- 7) It is the intent of this program to work in a coordinated fashion with the habitat conservation objectives of the Yolo County Joint Powers Authority (JPA) habitat management program. The mitigation land may not overlap with existing habitat conservation easement areas; the intent is to not allow "stacking" of easements, except for riparian corridors which may be subject to agricultural and habitat easements that do not generally exceed 5% of the total area on any particular easement of agricultural mitigation land.

As noted above, Yolo County is currently in the process of considering changes to the County's agricultural mitigation program. Like many jurisdictions, Yolo County has long required mitigation for farmland conversions at a 1:1 ratio (one acre permanently conserved for every acre converted to urban development or other non-agricultural uses). The Yolo County Board of Supervisors addressed the interest in increasing the mitigation ratio in the 2030 General Plan through an implementation action that supports "conducting a study to determine whether a higher mitigation ratio for loss of agricultural land is warranted" (Action AG-A31 of the 2030 General Plan).

The County of Yolo Agricultural Mitigation Program: Policy Options for Increased Mitigation Ratios includes background research, various mitigation methods, and an evaluation of the policy options available. The Public Review Draft of the report includes the study called for by Action AG-31. In addition to discussing the policy and legal background of agricultural mitigation in general, the report offers a detailed review of various strategies for implementing a mitigation ratio higher than 1:1. Altogether, the report includes six policy options for increasing the mitigation ratio, many of which can be combined to work in a coordinated manner. In addition, the report includes an analysis of related issues, such as ease of implementation and economic feasibility.

## Yolo County Right to Farm Ordinance

Chapter 6, Agriculture, of Title 10 of the Yolo County Code includes definitions, policies, and resolution guidance for any disputes designed to ensure the maintenance of agricultural activity when urban uses are located in the vicinity of agricultural production.

#### Davis General Plan

The Davis General Plan goals and policies relating to agriculture and forestry resources that are applicable to the proposed project are presented at the end of the section in Table 4.2-4.

Hausrath Economics Group with Urban Economics. *County of Yolo Agricultural Mitigation Program: Policy Options for Increased Mitigation Ratios.* December 19, 2014.

## City of Davis Municipal Code, Chapter 40A

The City of Davis regulates agricultural resources within the community in Chapter 40A, Right to Farm and Farmland Preservation, of the Municipal Code, the pertinent sections of which are addressed in Table 4.2-4 below.

#### 4.2.4 IMPACTS AND MITIGATION MEASURES

The section below describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to agricultural resources.

#### **Standards of Significance**

An agricultural impact may be considered to be significant if implementation of the proposed project would result in any of the following:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use;
- 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; or
- 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 and forest resources.

#### Issues Not Discussed Further

The project area is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). The proposed project site is not located near forest land, timberland, or timberland zoned Timberland Production. Therefore, the proposed project would have no impact with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning. Impacts related to forest land are not further discussed.

The entire project site is not under any Williamson Act contracts. Therefore, the project would have no impact related to conflicting with an existing Williamson Act contract. Impacts related to Williamson Act contracts are not further discussed.

#### **Method of Analysis**

Evaluation of potential impacts of the proposed project on agricultural resources were based on the following: the Davis General Plan; the USDA NRCS Web Soil Survey performed for the project site; the Soil Survey of Yolo County, the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Yolo County; and the Yolo County LAFCo Agricultural Conservation Policy. The standards of significance listed above are used to delineate the significance of any potential impacts.

### **Project Impacts and Mitigation Measures**

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above. The discussions and mitigation measures presented below apply to the proposed project, both the MRIC site and the Mace Triangle site, unless otherwise stated.

4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands) to non-agricultural use, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Based on the analysis below and the lack of feasible mitigation, the impact is *significant and unavoidable*.

#### **MRIC**

The 212-acre MRIC site is currently used for agricultural operations. As shown in Figure 4.2-3, the California DOC has defined the MRIC site as Prime Farmland (approximately 159 acres or 76.1 percent of the MRIC site), Statewide Farmland (approximately 39 acres or 18.7 percent of the MRIC site), and Potential Local Farmland (approximately 11 acres or 5.3 percent of the MRIC site). Due to the aforementioned California DOC designations and existing agricultural land uses, the proposed project would have an adverse impact related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

#### Mace Triangle

The California DOC Important Farmland Map designates the entire 17-acre Mace Triangle site as Urban and Built-up Land (see Figure 4.2-3). Therefore, development of the Mace Triangle site would result in a less-than-significant impact with respect to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmlands), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use

#### Conclusion

Development of the MRIC site would result in the permanent conversion of Prime Farmland and Farmland of Statewide Importance on the MRIC site, which is currently in agricultural use. This is considered a *significant* impact. Because the Mace Triangle site is designated by the DOC as Urban and Built Up Land, future development of the Triangle would result in a *less-than-significant* impact to Prime Farmland and Farmland of Statewide Importance.

#### Mitigation Measure(s)

The following mitigation measures would reduce the proposed MRIC's impact related to conversion of Prime Farmland and Farmland of Statewide Importance. Mitigation Measure 4.2-1 sets forth the agricultural land mitigation requirements in Davis Zoning Code, Chapter 40A.03, with which future development on the MRIC site shall be conditioned. While implementation of Mitigation Measure 4.2-1 would reduce the above-identified impact through preservation of agricultural land at a 2:1 ratio, the impact would not be reduced to a less-than-significant level due to the fact that active agricultural land would still be permanently converted to urban uses. Consistent with the Davis General Plan EIR, feasible mitigation measures do not exist to reduce the above impact to a less-than-significant level. Therefore, the impact would remain *significant and unavoidable*.

#### **MRIC**

4.2-1(a)

Prior to initiation of grading activities for each phase of development of the MRIC, the project applicant for the MRIC 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 project 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 project site, as well as any off-site improvements, including but not necessarily limited to the off-site sewer pipe, and 400-feet along the north and east property line unless a "no aerial spray" easement is purchased. The amount of agricultural acreage that needs to be set aside for off-site improvements shall be verified for each phase of the MRIC 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 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.

4.2-1(b) The MRIC 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 MRIC businesses, such that the project site can continue to be farmed successfully until the project is fully built out. Minimization 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.

*Mace Triangle – none* 

# 4.2-2 Impacts related to conflicting with existing zoning for agricultural use. Based on the analysis below, the impact is *less than significant*.

#### **MRIC**

The MRIC site is located within Yolo County and currently in agricultural use. Current County zoning for the MRIC site is A-N, but consistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act, prezoning shall be applied to annexation areas (see Gov. Code Section 56375). The MRIC site would be prezoned to the City's Planned Development (P-D) District, which would be consistent with the proposed Davis General Plan land use designation of Innovation Technology Center for the MRIC site.

#### Mace Triangle

The Mace Triangle portion of the project site currently contains developed uses, such as the Ikedas Market, a City-owned water tank, and the Park-and-Ride lot. Only the easternmost parcel has been in agricultural use. Current County zoning for the Mace Triangle site is A-N, A-C, and PQP, but consistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act, prezoning shall be applied to annexation areas (see Gov. Code Section 56375). The Mace Triangle site would be prezoned to a new PD, which would be consistent with the proposed Davis General Plan land use designations of Public/Semi-Public and General Commercial for the Mace Triangle Site.

## Conclusion

Approval of the project is a discretionary action of the City Council. Should the City Council deny the project, a conflict with existing zoning for agricultural use would not occur. Should the City Council approve the project, the requested prezoning to P-D would be approved concurrently and a conflict with existing zoning for agricultural use would not occur. Therefore, upon approval of the requested prezoning, the proposed project would result in a *less-than-significant* impact in regard to land that is currently zoned for agricultural use.

Mitigation Measure(s)

None required.

4.2-3 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural use. Based on the analysis below and the lack of feasible mitigation, the impact is *significant and unavoidable*.

#### **MRIC**

The City defines "agricultural land" as "those lands in agricultural use," where "agricultural use" is defined as, "Use of land for the purpose of producing food, fiber, or livestock for commercial purposes." Section 40A.03.025 states that, "The city shall require agricultural mitigation as a condition of approval for any development project that would change the general plan designation or zoning from agricultural land to nonagricultural land and for discretionary land use approvals that would change an agricultural use to a nonagricultural use." Because the 212-acre MRIC Site is in agricultural use, as defined by City Code, agricultural mitigation is required for the proposed development of the MRIC. It should be noted that the proposed redesignation of the MRIC site from the City's Agricultural land use designation to an urban land use designation also requires agricultural land mitigation pursuant to the City's Code.

The City's 2:1 agricultural mitigation requirement would result in the need for the MRIC applicant to set aside approximately 384 acres (212 acres less the required 20.12-acre agricultural buffer = 191.9 ac x 2:1). In addition, the applicant will be required to mitigate for a yet undetermined amount of off-site agricultural acreage that would be impacted during construction of the off-site sewer pipe. The off-site impact acreage cannot be definitively calculated at this time because the location of the pipe has not been engineered. It is anticipated, however, based upon preliminary calculations, that the off-site sewer line could impact a maximum of up to approximately 11 acres of agricultural land, depending upon the final alignment selected.

See Section 40A.03.020, Definitions, of the Davis Zoning Code.

<sup>&</sup>lt;sup>22</sup> Section 40A.03.035 of Davis' Zoning Code specifies that the land included within the agricultural buffer required by Section 40A.01.050(c) shall not be included in the calculation for the purposes of determining the amount of land that is required for mitigation.

Because the MRIC site is surrounded by lands within an agricultural conservation easement (see Figure 4.2-1), the MRIC Project agricultural mitigation requirements are exempt from the City's adjacent land mitigation requirement. As a result, the MRIC will be subject to the City's remainder mitigation land requirements. Section 40A.03.030, Lands eligible for remainder land mitigation, include provisions regarding the location of the agricultural mitigation land and factors which would be considered by City Council in order to accept or reject the proposed mitigation land.

It should be noted that the City of Davis' agricultural mitigation requirements would satisfy Yolo County's 1:1 (minimum) agricultural land mitigation ratio requirements, which pertain broadly to conversion or change from agricultural use to an urban use prior to, or concurrent with, approval of a zone change from agricultural to urban zoning, permit, or other discretionary or ministerial approval by the County.

Similarly, the City's agricultural mitigation requirements would satisfy Yolo County LAFCo's 1:1 (minimum) agricultural land mitigation ratio requirements, which pertain to Prime Agricultural Land, defined by Yolo County LAFCo as land which meets any of five different criteria, the two most pertinent of which are:

- i. Land that qualifies, if irrigated, for rating as Class I or Class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is currently irrigated, provided that irrigation is feasible.
- ii. Land that qualifies for rating 80-100 Storie Index rating.

Approximately 91.9 percent of the MRIC site is designated Class I or II soils, though none of the soils have a Storie Index rating of 80 to 100. Because the City of Davis' agricultural mitigation regulations requires the entirety of the MRIC Site to be mitigated at a 2:1 ratio, with comparable soil quality taken into consideration, compliance with the City's agricultural mitigation requirements would satisfy Yolo County's and Yolo County LAFCo's requirements.

## Mace Triangle

Although the Mace Triangle properties are not currently in agricultural use, the easternmost parcel, and a portion of the Ikedas parcel, have been used for such purposes in the recent past. Accordingly, these undeveloped portions of the Mace Triangle would be subject to agricultural mitigation per the City's ordinance. The agricultural portions of the Triangle consist of the 8.4-acre easternmost parcel, and approximately 2.5 acres of the Ikedas parcel, for a total of 10.9 acres. It should also be noted that the 8.4-acre

<sup>&</sup>lt;sup>23</sup> City of Davis. Staff Report: "Open Space Acquisition – Leland Ranch resale and conservation easement." December 10, 2013.

<sup>&</sup>lt;sup>24</sup> City of Davis. *Davis Municipal Code*, *Chapter 40A*, *Right to Farm and Farmland Preservation*. Section 40A.03.030(e). April 2014.

easternmost parcel has a current City of Davis General Plan designation of Agriculture, and Class I soils.

#### Conclusion

The development of the MRIC site would result in the conversion of lands currently in agricultural use, which would require mitigation by the City of Davis. In addition, while not subject to mitigation under the State Farmland Mapping and Monitoring Program criteria, development of the easternmost parcel of the Mace Triangle would require mitigation pursuant to the City's farmland preservation ordinance. This is considered a *significant* impact.

#### Mitigation Measure(s)

The following mitigation measures would reduce the proposed project's impact related to conversion of agricultural lands. Mitigation Measures 4.2-3(a) and (b) set forth the agricultural land mitigation requirements in Davis Zoning Code, Chapter 40A.03, with which future development on the MRIC site and easternmost parcel of the Mace Triangle site shall be conditioned. While implementation of these measures would reduce the above-identified impact through preservation of agricultural land at a 2:1 ratio, the impact would not be reduced to a less-than-significant level due to the fact that active agricultural land would still be permanently converted to urban uses. Consistent with the Davis General Plan EIR, feasible mitigation measures do not exist to reduce the above impact to a less-than-significant level. Therefore, the impact would remain *significant and unavoidable*.

**MRIC** 

4.2-3(a) Implement Mitigation Measures 4.2-1(a) and (b).

Mace Triangle

4.2-3(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:

• *APN 033-630-011 (Ikedas):* 

*Mitigate conversion of approx.* 2.5 acres at a 2:1 ratio = 5 acres

• *APN 033-630-012 (Easternmost Parcel):* 

Mitigate conversion of approx. 8.4 acres at a 2:1 ratio = 16.8 acres

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 project 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 project site. The easement instrument used to satisfy this measure shall conform to the conservation easement template of the Yolo Habitat Conservancy.

4.2-4 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Based on the analysis below, the impact is considered significant and unavoidable.

#### **MRIC**

As noted previously, agricultural operations exist to the north and east of the MRIC site. These agricultural operations will continue into perpetuity given that the agricultural lands surrounding the northern and eastern sides of the MRIC site are part of the Mace 391 farmland conservation easement. The section that follows will assess the potential for the development of the MRIC to hinder the adjacent agricultural operations.

#### MRIC Agricultural Buffer

Pursuant to Section 40A.01.050 of the City's Municipal Code, the MRIC will include a minimum 150-foot wide agricultural buffer along its northern and eastern boundaries. The agricultural buffer for the MRIC would be comprised of two components: a 50-footwide agricultural transition area located contiguous to a 100-foot-wide agricultural buffer that would be contiguous to the adjacent Mace 391 agricultural areas.

#### Proposed 100-foot portion of MRIC Site Agricultural Buffer

As indicated in Figure 3-18 of the EIR Project Description, the applicant intends for the project's agricultural buffer to serve drainage and water quality functions. Per 40A.01.050(c), drainage channels, storm retention ponds, and drainage swales are all permissible uses within the first 100 feet of the agricultural buffer. As such, utilizing the first 100 feet of the MRIC agricultural buffer for drainage purposes will not conflict with the City's agricultural buffer/right-to-farm ordinance.

## Proposed 50-foot portion of MRIC Site Agricultural Buffer

As indicated in Figure 3-14 of the EIR Project Description, the 50-foot transitional portion of the MRIC's agricultural buffer is intended to include a biking and walking trail. Such a public amenity is permissible under section 40A.01.050(d) of the Code.

## Adjacent Ongoing Farming Operations

As discussed above, the Mace 391 property, adjacent to the MRIC site, will continue to be farmed into perpetuity; and as such, it can be expected that pesticides will continue to be sprayed in the near vicinity of the MRIC site.

The Yolo County Agricultural Commissioner has established conditions covering the use of restricted materials, the purposes of which are to minimize undue hazards and risks associated with the application and handling of restricted materials. Condition #1 addresses the use of restricted materials in the proximity of environmentally sensitive areas. Examples given for environmentally sensitive areas include residential areas (cities, towns, rural neighborhoods), schools, playgrounds, bus stops (when in use), parks, hospitals, shopping centers, occupied labor camps, organic crops, estuaries, reservoirs, lakes, waterways, livestock, state wildlife management areas, and critical habitats of rare, endangered or threatened species. According to Condition #1, restricted pesticides shall not be applied in close proximity to environmentally sensitive areas unless the minimum distance between the closest operating nozzle and the sensitive area is maintained as follows:

TYPE OF PESTICIDE	MINIMUM	DISTANCE BETWEEN
APPLICATION EQUIPMENT	CLOSEST	OPERATING NOZZLE
	AND THE	NON-TARGET AREA
		WARNING/CAUTION
AIRCRAFT	.500 FEET	300 FEET
AIR BLAST ORCHARD SPRAYER	.300 FEET	50 FEET
GROUND RIGS (except when applying baits)**	.100 FEET	50 FEET

With the use of ground rigs, the Mace 391 farmer could apply pesticides within 50-100 feet of any environmentally sensitive areas on the MRIC site, depending upon the type of pesticide being applied, as shown in the above chart.

While Condition #1 does not include bicycle/pedestrian trail within its definitions for environmentally sensitive areas, the Yolo County Agricultural Commissioner would consider such a trail an environmentally sensitive area, in that it introduces people in this

Chapter 4.2 – Agriculture and Forestry Resources

Yolo County, Yolo County Agricultural Commissioner. *Conditions Covering the Use of Restricted Materials*. January 1, 2014.

portion of the project site, who would utilize this area for recreational purposes.<sup>26</sup> The pedestrian/bike path would be located further than 100 feet from the project's eastern and northern property lines, and thus, outside of the range of any ground rig spraying that could occur on the Mace 391 property. Furthermore, an approximately 20-foot agricultural access road is located on the Mace 391 property, along its boundary with the MRIC Site. Therefore, the nearest possible distance at which ground rigs might spray pesticides would be approximately 120 feet from the proposed MRIC pedestrian/bike trail, which per the Yolo County Agricultural Commissioner's conditions, would be considered acceptable for ground rig application.

As noted in the above chart, aerial application of "danger" labeled pesticides requires a 500-foot buffer from environmentally sensitive areas. Assuming that the proposed 50-foot transition zone of the MRIC buffer would contain an environmentally sensitive recreational trail, a total setback of 500 feet would be required from this trail. Only 100 feet of this setback amount would be provided by the MRIC agricultural buffer. This means that 400 feet of the required setback would need to encroach onto the adjacent farmer's land. Therefore, during times when aerial application of pesticides is deemed necessary by the adjacent farmer, the proposed innovation center will indirectly result in what might be considered "induced" conversion of off-site agricultural land by disrupting the ability to farm a portion of the adjacent property. This is considered an adverse impact.

## Mace Triangle

Should additional development of the Ikedas parcel and easternmost Mace Triangle parcel occur in the future, effects to off-site farmland would not be expected to occur because the Mace Triangle site is surrounded by the MRIC site. Unlike the MRIC, the Mace Triangle site would not be subject to adjacent agricultural operations.

#### Conclusion

Development of the MRIC could result in other changes in the existing environment which, due to their location or nature, could result in induced conversion of off-site farmland, which would be considered a *significant* impact. The Mace Triangle, however, would not result in other changes in the existing environment that could lead to adverse impacts to off-site farmland.

#### Mitigation Measures(s)

While implementation of the following mitigation measure would reduce the above identified MRIC impact, it would not fully eliminate the potential burden placed on the adjacent farmer, nor is successful completion of the mitigation measure guaranteed.

Personal phone communication with Nick Pappani, Vice President of Raney Planning & Management, Inc. and John Young, Yolo County Agricultural Commissioner, February 10, 2015.

Therefore, the impact from development of the MRIC would remain *significant and* unavoidable.

**MRIC** 

4.2-4

Prior to recording the first final map, the applicant shall attempt to purchase a "no aerial spray" easement from the adjacent property owner. It is anticipated that the easement will need to be 400 feet wide along the MRIC Site's northern and eastern boundaries. The applicant shall submit the written proof of the easement to the Department of Community Development and Sustainability.

*Mace Triangle – none* 

4.2-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources. Based on the analysis below, the impact is *less than significant*.

In order to further demonstrate the project's consistency with the Davis General Plan and Municipal Code, Table 4.2-4 includes a list of the relevant agricultural policies and regulations and a corresponding discussion of how the project is consistent with each. As demonstrated in the table, the proposed project is generally consistent with the relevant City of Davis policies and regulations adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.

#### Compatibility of MRIC with Adjacent Agricultural Operations

Please note that with respect to compatibility of the proposed MRIC uses with adjacent on-going agricultural operations, the below table includes a detailed analysis, under the agricultural buffer requirement section.

#### Compatibility of Mace Triangle with Adjacent Agricultural Operations

The Mace Triangle portion of the proposed project site currently contains developed uses, such as the Ikedas Market, a City-owned water tank, and the Park-and-Ride lot. Only the easternmost parcel has been in agricultural use. The Mace Triangle site would be prezoned to a new PD, which would be consistent with the proposed Davis General Plan land use designations of Public/Semi-Public and General Commercial for the Mace Triangle.

#### Compliance with Existing Law

Section 40A.01.030 of the Davis Municipal Code requires a Right to Farm deed restriction for any property located within one thousand feet of agricultural land, agricultural operations or agricultural processing facilities or operations. The Right to

Farm deed restriction would inform prospective buyers/leases of the existing agricultural operations adjacent (east) to the MRIC Site.

## Conclusion

The proposed project is generally consistent with the relevant General Plan policies discussed in the below table. As discussed in Table 4.2-4, in order to ensure compatibility with City ordinance regulations, a deed restriction informing prospective buyers or leasees that agricultural operation would continue adjacent to the sites is required. The provision of a deed restriction is required by the Municipal Code and the project applicant would be required to comply with all of the applicable Municipal Code regulations. Therefore, the project would have a *less-than-significant* impact.

Mitigation Measure(s) *None required.* 

	Table 4.2-4 City of Davis Policy and Regulation Discussion			
	Policy	Project Consistency		
	Chapter 1, Land Use and	Growth Management, of the Davis General Plan		
N. Urban Agricultural Transition Area				
LU N.2	Include the lands in this category within city limits whenever feasible.	The current Urban Agriculture Transition Area (UATA) within the vicinity of the MRIC site is currently outside of the Davis city limits, along the eastern side of Mace Boulevard and northern side of CR 32A. Therefore, while the project includes a request to relocate the UATA from the eastern side of Mace Boulevard to the eastern boundary of the 212-acre MRIC Site, this would not be a change from the current condition because the Davis General Plan Land Use Map currently shows the UATA on Yolo County land. <sup>27</sup>		
LU N.3	Segments can vary in width but to the greatest extent possible, a minimum 150-foot width should be pursued. Wider segments should be pursued when opportunity permits.	The relocated UATA would be a minimum of 150 feet in width along the eastern and northern sides of the MRIC site, and therefore consistent with this policy.		
LU N.4	Where public access is desired, the width of the buffer must be sufficient to also include a 100-foot wide area where public access is restricted to allow for ground spraying on adjacent agricultural land.	The proposed project site is located in an Urban Agriculture Transition Area. The project would include a 150-foot wide agricultural buffer in the boundary of the site, discussed in further detail below. Pursuant to Policy LU N.4, 100 feet of the buffer would be restricted from public access. It should be noted that the project anticipates the creation of a pedestrian and bicycle trail within the 50-foot transitional area of the buffer.		
LU N.5	<ul> <li>Ideally, wider segments should be located where:</li> <li>Willing sellers are available,</li> <li>Natural resource protection opportunities exist,</li> <li>Open space recreation opportunities exist.</li> </ul>	The 150-foot wide UATA for the MRIC site is consistent with Davis' Ordinance requirements and appropriate for the types of innovation center uses proposed for the project. Additional width is not necessary to ensure land use compatibility between the adjacent agricultural operations and the proposed project. See the Agricultural Buffer requirement section of this table for more detailed discussion.		
LU N.6	Prime agricultural land should remain in agricultural production in the wider segments of the Urban Agriculture Transition Area.	The relocated UATA for the MRIC site would be 150 feet in width and would not require wider segments. See discussion for LU N.5.		

<sup>&</sup>lt;sup>27</sup> City of Davis. *Davis General Plan [pg. 69]*. Adopted May 2001. Amended through January 2007.

Table 4.2-4 City of Davis Policy and Regulation Discussion			
Policy Project Consistency			
	Chapter 15, Agriculture	e, Soils and Minerals, of the Davis General Plan	
AG 1.1	Protect agricultural land from urban development except where the general plan land use map has designated the land for urban uses.	The proposed project site is not in the City of Davis city limits or SOI and, as such, is not designated for urban uses by the General Plan. While the MRIC will result in a significant and unavoidable impact to agricultural land conversion, the project will be required to provide 2:1 agricultural land mitigation, as well as a minimum 150-foot buffer along the site's northern and eastern boundaries. In addition, further growth in the vicinity of the MRIC site is effectively prohibited by the surrounding agricultural properties under conservation easement.	
AG 1.2	Promote and enhance local agriculture.	The proposed project site is located adjacent to existing agricultural operations and would maintain a 150-foot agricultural buffer. The project would convert agricultural land on the project site to non-agricultural uses. In a good faith effort to promote and enhance local agriculture, the buffer would allow agricultural operations adjacent to the project site to continue once the project is developed. In addition, prior to full buildout of the proposed project, agricultural land uses are permitted on-site on a transitional basis until the property owner seeks to develop the remainder of the property for urban uses.  As such, with implementation of Mitigation Measures 4.2-3(a) and (b), a finding of substantial compliance with this policy can be made.  Please see additional discussion below under the "Agricultural Buffer Requirement" section.	
AG 2.1	Foster the growth of environmentally friendly agricultural business and industry in Davis.	The proposed project site is located adjacent to existing agricultural operations and would maintain a 150-foot agricultural buffer in order to allow agricultural operations adjacent to the project site to continue once the project is developed. In addition, according to the project objectives, the proposed MRIC would provide an integrated, campus-like project offering a variety of lot sizes that will respond to the current and future needs of technology start-ups, industry leaders, research and development, and products manufacturing firms; allowing for a full range of research to market uses. It should be noted that agricultural research businesses are included as potential uses. Furthermore, the Center would provide a suitable space in which to retain existing local businesses and to attract and grow innovative high-value added, technology oriented	

	Table 4.2-4 City of Davis Policy and Regulation Discussion			
Policy		Project Consistency		
	•	companies. Therefore, the project would encourage agricultural and other businesses and industries in the City, and a finding of substantial compliance with this policy can be made.		
AG 3.1	Develop programs to help to conserve soil resources.	The proposed project does not include a program to help to conserve soil resources. However, approximately 64.6 acres (or 30 percent of the MRIC site) would be preserved as green space. Although the project would increase the amount of impervious surfaces after development, a sufficient amount of pervious surfaces and soil resources would be preserved in order to allow for groundwater absorption.		
AG 4.1	Discourage the extraction of mineral resources in the planning area.	The proposed project does not include extraction of mineral resources in the planning area. See Section 4.6, Geology, Soils, and Mineral Resources, for a complete discussion.		
	Chapter 40A, Right to Farm and Farmland Preservation, of the Municipal Code			
Chapter 40A, Right to Farm 40A.01.030 Deed restriction.  As a condition of approval of a discretionary development permit, including, but not limited to, tentative subdivision and parcel maps, use permits, and rezoning, prezoning, and planned developments, relating to property located within one thousand feet of agricultural land, agricultural operations or agricultural processing facilities or operations, every transferor of such property shall insert the deed restriction recited below in the deed transferring any right, title or interest in the property to the transferee.		In accordance with Section 40A.01.030 of the Davis Municipal Code, any transferor of the MRIC site, or any portion thereof, shall insert the deed restriction set forth in Section 40A.01.030 in the deed transferring any right, title, or interest in the property to the transferee.  Mace Triangle  Any future development on the Mace Triangle would not be located within 1,000 feet of on-going off-site agricultural operations. The Mace Triangle Site is bordered by CR 32A and then the MRIC site to the north and east, the UPRR tracks and I-80 to the south, and the Park-and-Ride lot and Mace Boulevard to the west. Development internal to the Mace Triangle, on the Ikedas parcel, could be within 1,000 feet of on-going agricultural operations, should the easternmost parcel (033-630-012) not be developed, or developed at a later date. Among the entitlements being evaluated for the Mace Triangle in this EIR are prezoning and a preliminary planned development. Therefore, in accordance with the City's deed restriction requirements, any future transfer of the Ikedas property shall include the City's deed restriction language.		

Table 4.2-4			
City of Dav	is Policy and Regulation Discussion		
Policy	Project Consistency		
40A.01.050 Agricultural buffer requirement.	MRIC		
(a) In addition to the right to farm deed restriction and notice requirement, the city has determined that the use of property for agricultural operations is a high priority. To minimize future potential conflicts between agricultural and nonagricultural land uses and to protect the public health, all new developments adjacent to designated agricultural, agricultural reserve, agricultural open space greenbelt/agricultural buffer, Davis greenbelt or environmentally sensitive habitat areas according to the land use and open space element maps shall be required to provide an agricultural buffer/agricultural transition area. In addition, development limits or restricts opportunities to view farmlands. Public access to a portion of the agricultural buffer will permit public views of farmland. Use of nonpolluting transportation methods (i.e., bikes) and use of the land to fulfill multiple policies including, but not limited to, agricultural mitigation and alternative transportation measures meets the policy objectives of the Davis general plan. The agricultural buffer/agricultural transition area shall be a minimum of one hundred fifty feet measured from the edge of the agricultural, greenbelt or habitat area. Optimally, to achieve a maximum separation and to comply with the five-hundred-foot aerial spray setback established by the counties of Yolo and Solano, a buffer wider than one hundred fifty feet is encouraged.	As shown in Figure 4.2-4, the proposed green space plan includes a minimum 150-foot buffer along the boundary of the MRIC site, though the City's Agricultural Buffer Ordinance requires a minimum 150-foot buffer along the northern and eastern sides of the MRIC site, given that these are the boundaries of the MRIC site that are adjacent to lands designated for agricultural reserve. More specifically, the lands immediately east of the MRIC site comprise the "Mace 391" permanent agricultural easement. The farmer of the Mace 391 agricultural easement property is in the process of preparing the land to plant almond trees.		
(b) The minimum one-hundred-fifty-foot agricultural buffer/agricultural transition area shall be comprised of two			
components: a fifty-foot-wide agricultural transition area	Pursuant to Section 40A.01.050 of the City's Municipal Code, the agricultural buffer for		

Table 4.2-4 City of Davis Policy and Regulation Discussion			
Policy Policy	Project Consistency		
located contiguous to a one-hundred-foot-wide agricultural buffer located contiguous to the agricultural, greenbelt, or habitat area. The one-hundred-fifty-foot agricultural buffer/transition area shall not qualify as farmland mitigation pursuant to Article 40A.03 of this chapter.	the MRIC would be comprised of two components: a 50-foot-wide agricultural transition area located contiguous to a 100-foot-wide agricultural buffer that would be contiguous to the adjacent Mace 391 agricultural areas.		
(c) The following uses shall be permitted in the one-hundred-foot agricultural buffer: native plants, tree or hedge rows, drainage channels, storm retention ponds, natural areas such as creeks or drainage swales, railroad tracks or other utility corridors and any other use, including agricultural uses, determined by the planning commission to be consistent with the use of the property as an agricultural buffer. There shall be no public access to the one-hundred-foot agricultural buffer unless otherwise permitted due to the nature of the area (e.g., railroad tracks). The one-hundred-foot agricultural buffer shall be developed by the developer pursuant to a plan approved by the community services director or designee. The plan shall include provision for the establishment, management and maintenance of the area. The plan shall incorporate adaptive management concepts and include the use of integrated pest management techniques. The property shall be dedicated to the city in fee title, or, at the discretion of the city, an easement in favor of the city shall be recorded against the property, which shall include the requirements of this article.	Proposed 100-foot portion of MRIC Agricultural Buffer  As indicated in Figure 3-18 of the EIR Project Description, the applicant intends for the project's agricultural buffer to serve drainage and water quality functions. Per 40A.01.050(c), drainage channels, storm retention ponds, and drainage swales are all permissible uses within the first 100 feet of the agricultural buffer. As such, utilizing the first 100 feet of the MRIC agricultural buffer for drainage purposes will not conflict with the City's agricultural buffer/right-to-farm ordinance.		
(d) The following uses shall be permitted in the fifty foot agricultural transition area: bike paths, community gardens, organic agriculture, native plants, tree and hedge rows, benches, lights, trash enclosures, fencing, and any other	Proposed 50-foot portion of MRIC Agricultural Buffer  As indicated in Figure 3-14 of the EIR Project Description, the project's agricultural buffer is intended to include a biking and walking trail.		

# Table 4.2-4 City of Davis Policy and Regulation Discussion

## Policy Project Consistency

use determined by the planning commission to be of the same general character as the foregoing enumerated uses. There shall be public access to the fifty-foot agricultural transition area. The fifty-foot agricultural transition area shall be developed by the developer pursuant to a plan approved by the community services director or designee. Once the area is improved, approved, and accepted by the community services department, the land shall be dedicated to the city.

#### Phasing of the MRIC

It should also be noted that the MRIC is expected to have a long-term buildout based upon market analyses prepared for the project. As a result, the possibility exists for portions of the MRIC to be built and operating while agricultural operations continue within other portions of the overall 212-acre MRIC Site. Although phased development of the MRIC could result in the temporary juxtaposition of agricultural operations and research/office/R&D, and/or manufacturing, and/or ancillary retail uses, farming operations would continue to be feasible in this area so long as the Agricultural Commissioner's pesticide application restrictions are abided by. Mitigation Measure 4.2-1(b) of this section requires the MOA for the MRIC to encourage ongoing agricultural uses at the site until the project is fully built-out.

## Mace Triangle

Should additional development of the Ikedas parcel occur in the future, any adjacent farming on the easternmost parcel would not be anticipated to pose significant incompatibilities with the Ikedas site. For example, aerial spraying is already prohibited for this area given the near proximity of the Ikedas fruit stand and University Covenant church. Although potential development of the MRIC and the Ikedas parcel would result in a strip of agricultural land between commercial and innovation center uses, farming operations would continue to be feasible in this area so long as the Agricultural Commissioner's pesticide application restrictions are followed.



Figure 4.2-4 Green Space Plan