



**DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT**

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August 1, 2011

MEMO TO: Agricultural Advisory Board  
FROM: Department of Planning and Community Development

**SUBJECT: USE PERMIT APPLICATION NO. 2011-10 - MC HENRY SOLAR FARM-  
ALTERNATIVE AGRICULTURAL BUFFER AND SETBACKS**

The Stanislaus County Department of Planning and Community Development has received an application to establish a photovoltaic (PV) solar energy farm creating an aggregate peak power capacity of 25 megawatts (MW) of electricity on a 155± acre site, located at 221 Patterson Road, at the northeast corner of McHenry Avenue and Patterson Road, in the Del Rio area. Major components of the proposed Solar Star and MID facilities are: Solar field comprised of a combination of 1- and 1.5-MW power blocks, on-site substation, operations and maintenance building, 69-kV electrical switchyard, and a 700± foot long 69kV double-circuit overhead electric sub-transmission line and 12kV distribution line. Additional site improvements include: access roads, security fencing, lighting, and landscaping. The applicant has proposed an alternative to the Agricultural Buffer and Setback Guidelines. The County's Buffer and Setback Guidelines and the applicant's proposal are outlined below:

**Stanislaus County Buffer & Setback Guidelines Requirements for New Non-Agricultural Uses:**

- A minimum 150-foot wide buffer, measured from the property line of any adjoining property located in the A-2 zoning district, shall be incorporated. All buffers shall include solid fencing and vegetative screening consistent with the guidelines. In general, vegetative screen shall consist of two staggered rows of trees and shrubs characterized by evergreen foliage extending from the base of the plant to the crown.
- Fencing: The Agricultural Advisory Board in September of 2008 supported a general alternative clarifying the intent of the fencing requirement is to prevent trespassing. As part of the general alternative, fencing is not required to be made up of a solid material, but is required to be at least 6-feet in height. Fencing may be installed around the perimeter of the non-agricultural use, rather than the perimeter of the property lines containing the use.

**Applicant's Proposal**

The applicant is requesting the following alternative agricultural buffer for the northern and eastern boundaries of the project:

- 45-foot-wide buffer on the northern property line, 6-foot cyclone fencing, no vegetative screening;
- 110-foot-wide buffer on the eastern property line, 6-foot cyclone fencing, no vegetative screening;

UP 2011-10  
Alternative Ag Buffer and Setbacks  
August 1, 2011  
Page 2

### **Staff's Comments**

The western and southern boundaries of the project comply with Agricultural Buffer. The Stanislaus County Buffer and Setback Guidelines permit utilities and similar low intensive uses in the buffer area. Because utilities are allowed in the required setback area staff believes the modified northern and eastern setbacks are adequate; however, it is up to the AAB to determine if the lack of vegetative screening along these boundaries is acceptable. In the past, the Agricultural Advisory Board has approved alternative buffers for solar farm. These alternative buffers included 6-foot cyclone fencing for security purposes, modified setbacks and no vegetative screening. Interior lot line setbacks have not been addressed due to the nature of the proposed development and the project sites single common ownership. Beyond the construction phase, the potential for impacts associated with on-site employees and related activities will be minimal.

***On November 2, 2009 the Stanislaus County Agricultural Advisory Board considered and motioned to support the following Agricultural Buffer Alternatives as providing equal or greater protection than the Buffer and Setback Guidelines adopted in December of 2007 as Appendix 'A' of the Stanislaus County General Plan - Agricultural Element.***

## **AGRICULTURAL BUFFER ALTERNATIVES**

The December 2007 update to the Agricultural Element of the Stanislaus County General Plan established a buffer requirement for all new or expanding non-agricultural uses within or adjoining the A-2 zoning district. Appendix A of the Agricultural Element lays out guidelines for these buffers, which includes the following:

- ✓ A 150 ft buffer (300 feet for people intensive outdoor activities) from all property lines.
- ✓ A 6 ft high solid fence along the perimeter where a project adjoins agricultural property and 2 rows of vegetative screening (including evergreen trees and shrubs).
- ✓ Expansion of existing uses must provide fencing and vegetative screening in the area available and a 150-foot minimum building setback is required.

Any alternative to the currently adopted buffer standards must be reviewed and supported by the Stanislaus County Agricultural Advisory Board prior to Planning Commission consideration. ***These alternative standards shall be determined to provide equal or greater protection.***

*Planning staff would like the Agricultural Advisory Board to review and give its support to the following buffer alternative applicable to **all expanding non-agricultural uses** within the A-2 General Agriculture zoning district:*

- ✓ Allow the expansion of an existing non-agricultural use without a 150-foot setback or vegetative screening provided the expansion does not intensify the on-site activity.
- ✓ Allow riparian areas adjacent to rivers to serve as setbacks and vegetative screening.
- ✓ Allow permitted non-agricultural uses (including but not limited to legal non-conforming uses and homesites) adjoining the subject property to serve as part of the required setback area, provided the adjoining use is of a permanent nature which is not likely to be returned to agriculture. The overall distance from the requested use and the nearest agricultural operation (as defined by the Stanislaus County General Plan Agricultural Element) must be equal to or greater than the required setback distance. Vegetative screening shall not be required provided the minimum setback to the nearest agricultural operation is provided.

**Additional alternative standards may be presented to the Agricultural Advisory Board for review and for a recommendation of approval to the Planning Commission. Ultimate approval will be based upon a determination of equal or greater protection.**

*On September 8, 2008 the Stanislaus County Agricultural Advisory Board considered and motioned to support the following Agricultural Buffer Alternatives as providing equal or greater protection than the Buffer and Setback Guidelines adopted in December of 2007 as Appendix 'A' of the Stanislaus County General Plan - Agricultural Element.*

## AGRICULTURAL BUFFER ALTERNATIVES

The December 2007 update to the Agricultural Element of the Stanislaus County General Plan established a buffer requirement for all new or expanding non-agricultural uses within or adjoining the A-2 zoning district. Appendix A of the Agricultural Element lays out guidelines for these buffers, which includes the following:

- ✓ A 150 ft buffer (300 feet for people intensive outdoor activities) from all property lines.
- ✓ A 6 ft high solid fence along the perimeter where a project adjoins agricultural property and 2 rows of vegetative screening (including evergreen trees and shrubs).
- ✓ Expansion of existing uses must provide fencing and vegetative screening in the area available and a 150-foot minimum building setback is required.

Any alternative to the currently adopted buffer standards must be reviewed and supported by the Stanislaus County Agricultural Advisory Board prior to Planning Commission consideration. ***These alternative standards shall be determined to provide equal or greater protection.***

*Planning staff would like the Agricultural Advisory Board to review and give its support to the following buffer alternative applicable to **all non-agricultural uses** within the A-2 General Agriculture zoning district:*

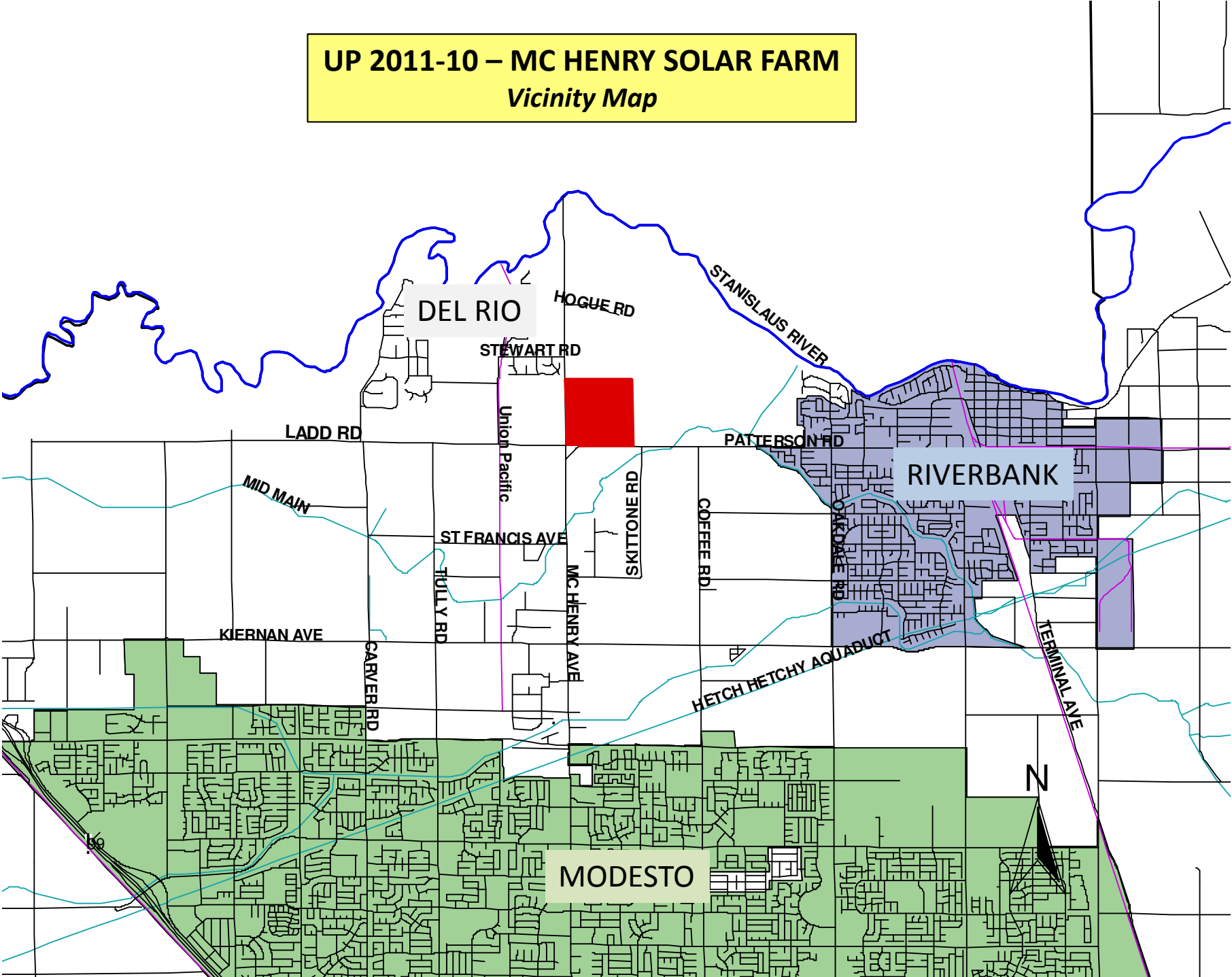
- ✓ Fencing is not required to be made up of a solid material, but shall be required to be at least 6 feet in height. The intent of the fencing requirement is to prevent trespassing.
- ✓ As a point of clarification, fencing may be installed around the perimeter of the non-agricultural use, rather than the perimeter of the property lines containing the use.
- ✓ Vegetative screening along road frontages shall only be required to the greatest extent possible giving consideration to driveways and other existing hardscape.
- ✓ Buffer and Setback standards shall not apply to projects located on a site surrounded by a minimum of 150-feet of residential type uses (including parcels of 3-acres or less in size), parks, schools or other similar non-agricultural uses.

*In addition, Planning staff would like the Agricultural Advisory Board to support the following buffer alternative, applicable to **Tier 1 and Tier 2 uses** such as nut hulling, shelling, dehydrating, grain warehousing, ag processing facilities (without incidental tasting rooms or sales) and other similar low people intensive uses:*

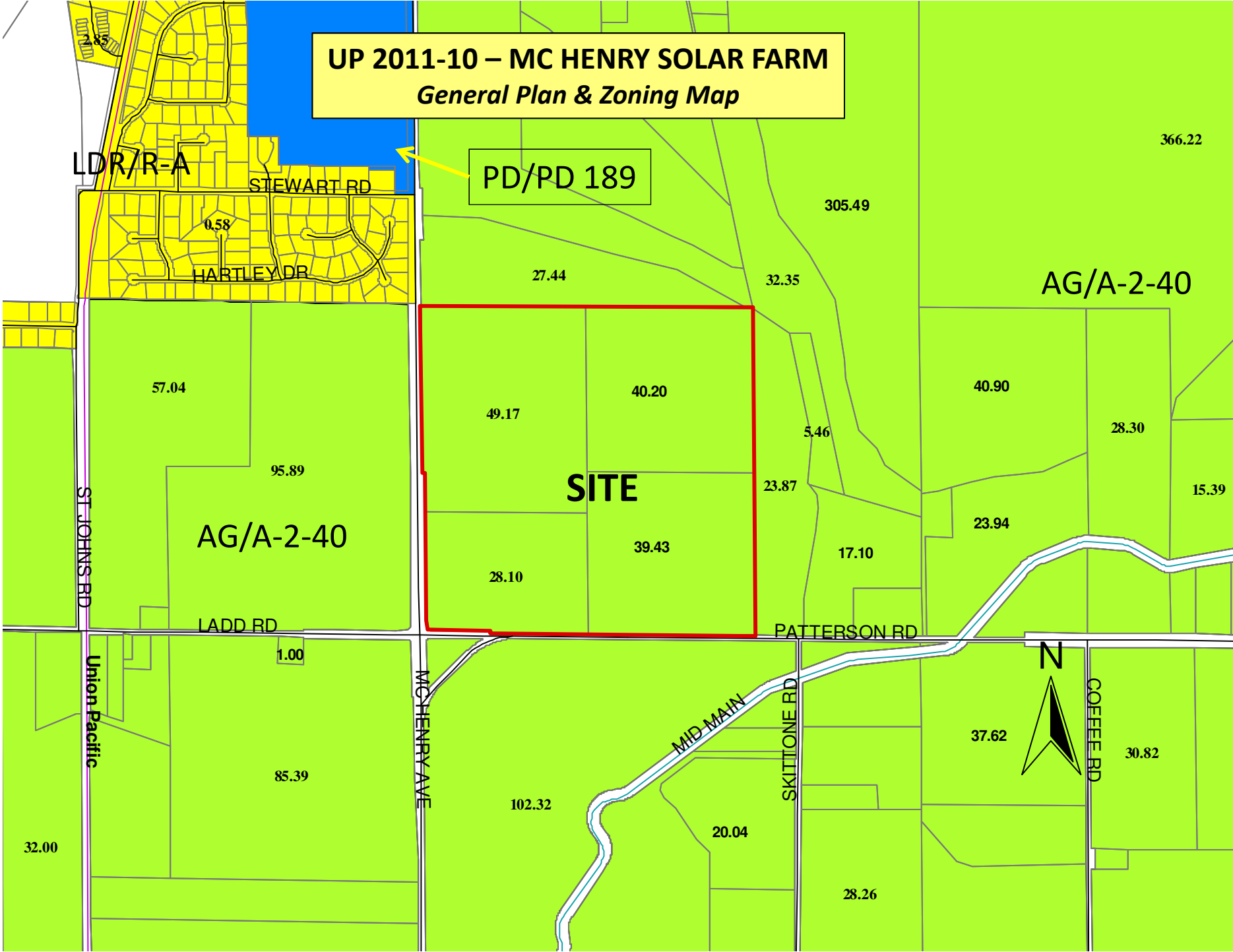
- ✓ When trespassing onto neighboring property is determined not to be an issue, the fencing requirement may be waived.
- ✓ Expansions of existing non-agricultural uses that are intended to improve efficiency and are not increasing exposure risk to spray, shall not be required to meet the 150 foot setback.
- ✓ Provided an overall distance of 150 feet or greater exists between the proposed use and the property line, no vegetative screening shall be required.

**Additional alternative standards may be presented to the Agricultural Advisory Board for review and for a recommendation of approval to the Planning Commission. Ultimate approval will be based upon a determination of equal or greater protection.**

**UP 2011-10 – MC HENRY SOLAR FARM**  
*Vicinity Map*



**UP 2011-10 – MC HENRY SOLAR FARM**  
*General Plan & Zoning Map*



LDR/R-A

STEWART RD

PD/PD 189

366.22

305.49

0.58

27.44

32.35

AG/A-2-40

57.04

40.20

40.90

49.17

5.46

28.30

95.89

23.87

15.39

**SITE**

23.94

28.10

17.10

AG/A-2-40

ST JOHNS RD

LADD RD

PATTERSON RD

N

1.00

37.62

30.82

Union Pacific

MICH HENRY AVE

MID MAIN

SKITSTONE RD

COFFEE RD

85.39

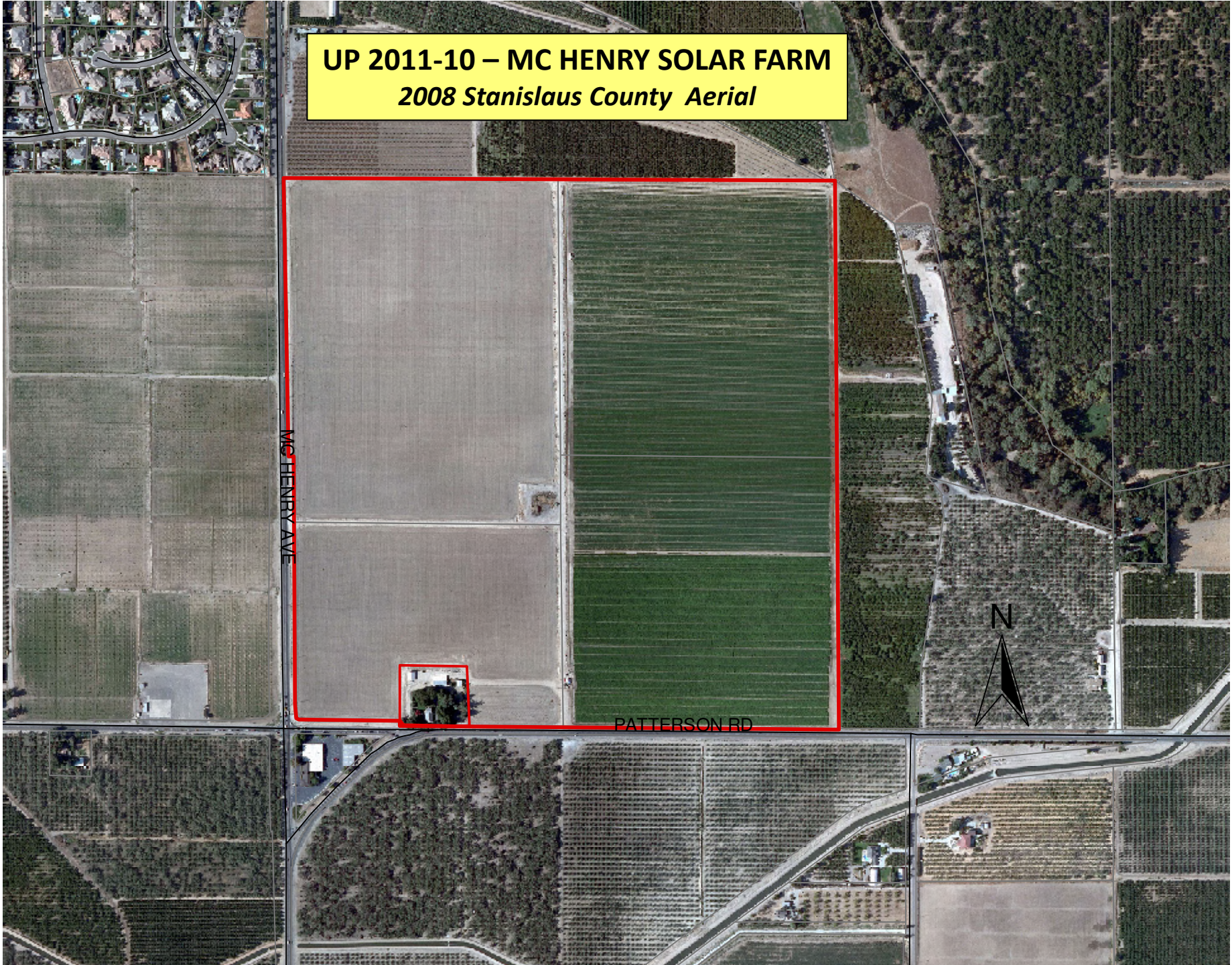
102.32

20.04

28.26

32.00

**UP 2011-10 – MC HENRY SOLAR FARM**  
*2008 Stanislaus County Aerial*

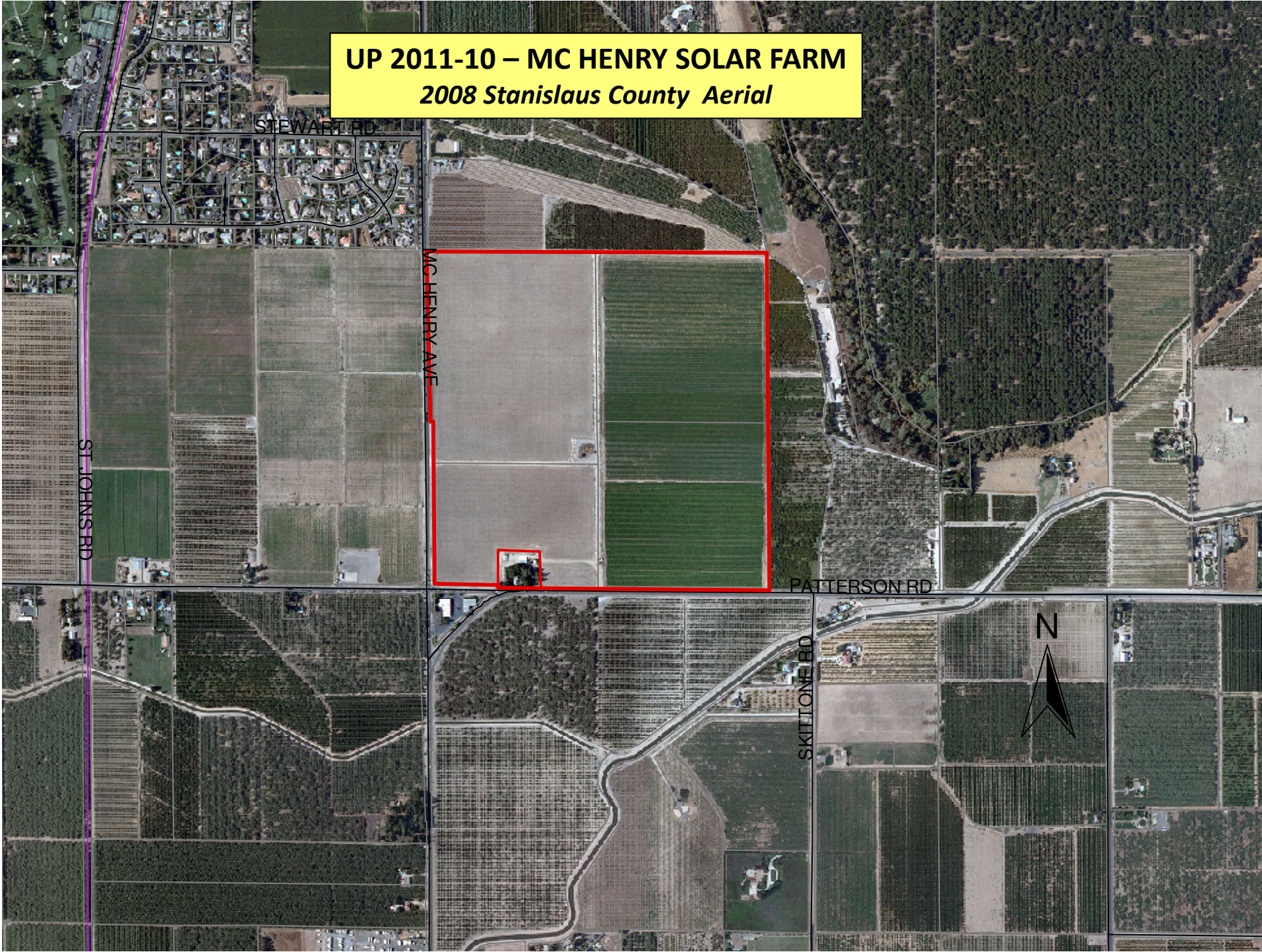


MC HENRY AVE

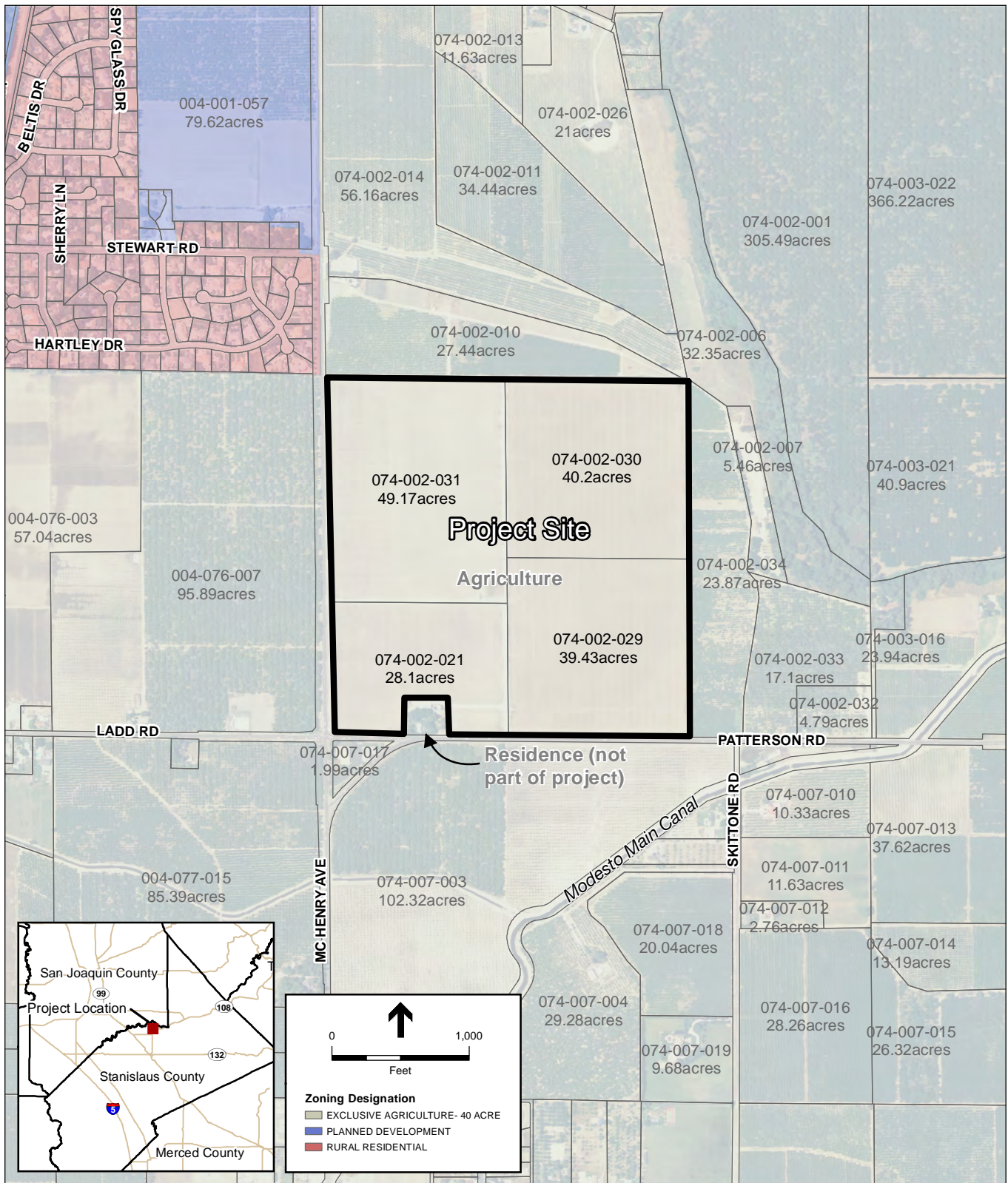
PATTERSON RD



**UP 2011-10 – MC HENRY SOLAR FARM**  
*2008 Stanislaus County Aerial*





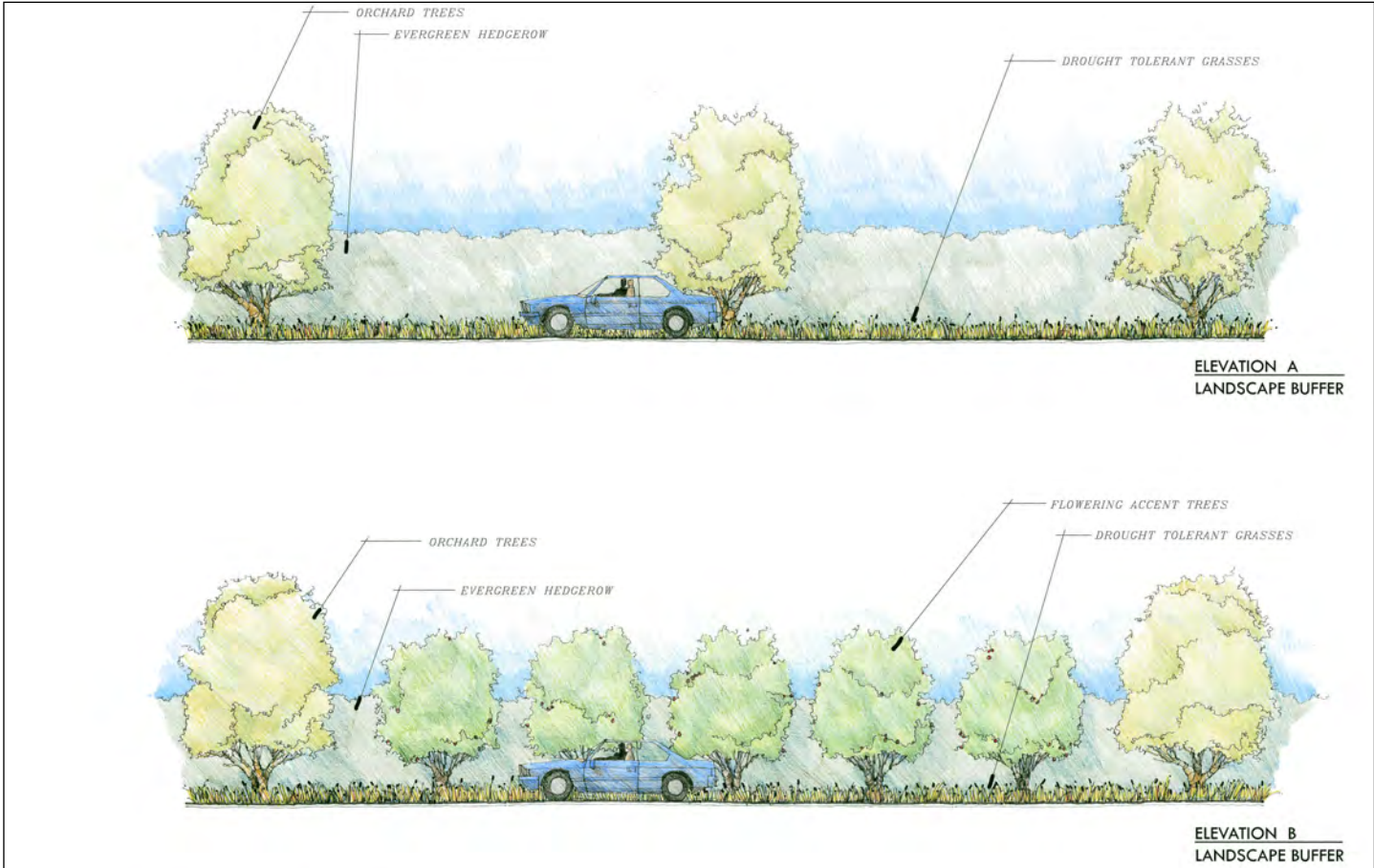
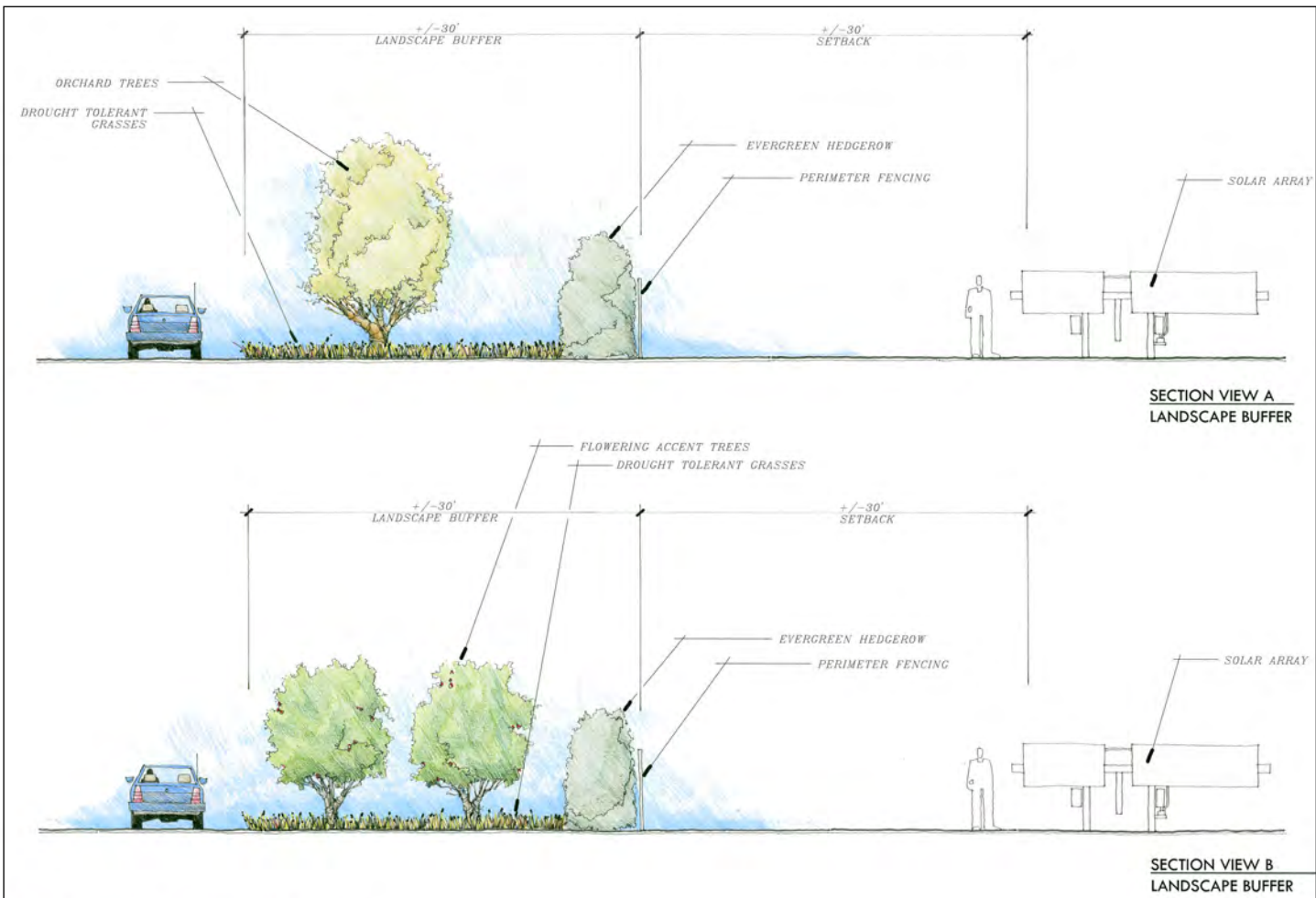
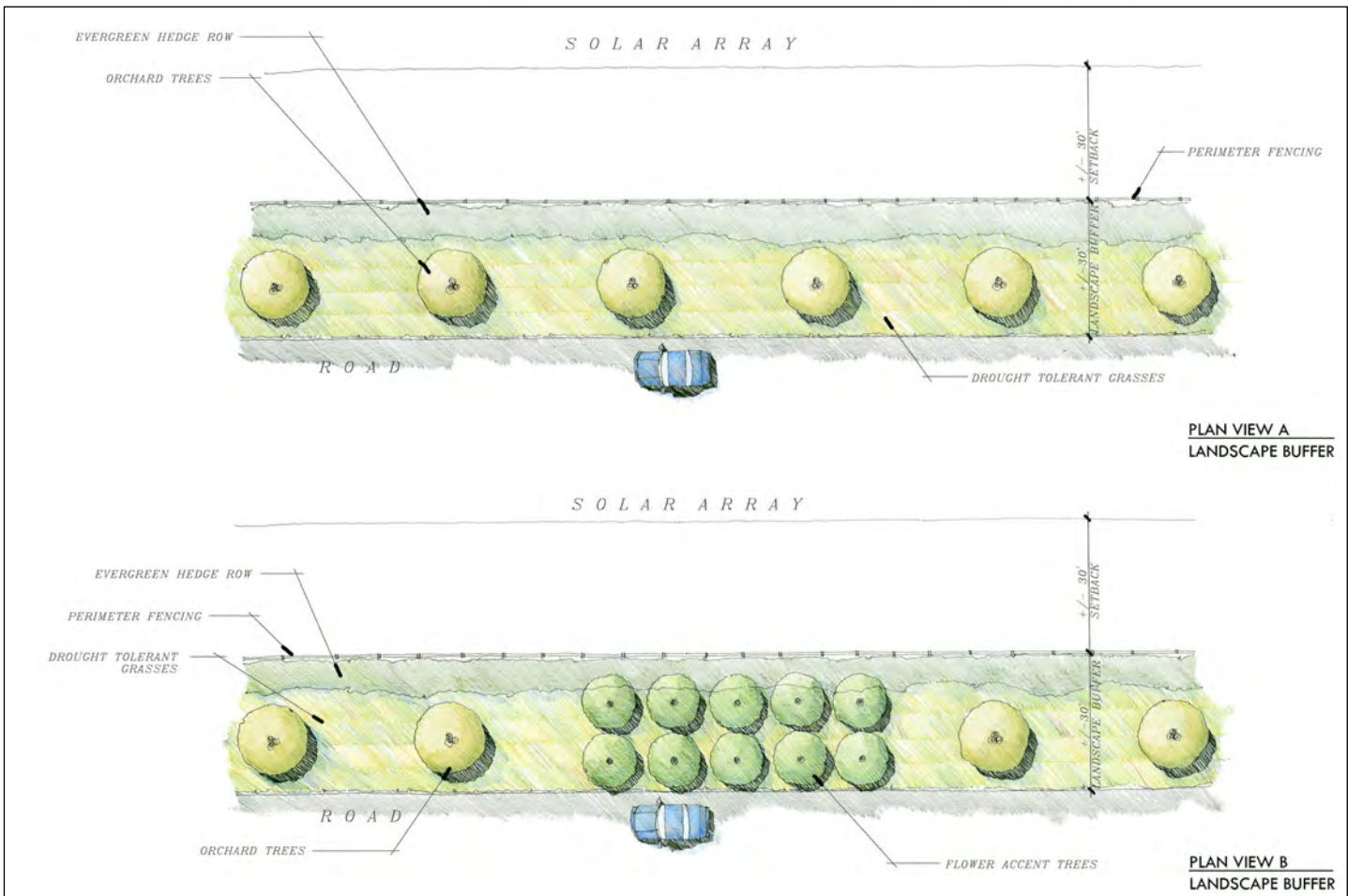


SOURCE: Stanislaus County GIS, 2010

McHenry Solar Farm . 209517.01

**Figure 2-1**  
Project Site Location Map





Note: Views A and B depict typical variability of planting patterns along the landscape buffer.



a. Photos 9 and 10: Existing view from the west side of McHenry Avenue looking east through southeast. The Project site is the green area in the middle of the photo. The dirt road and gate on the left side of the photo are the northern boundary of the Project site.



b. Simulated view of Photos 9 and 10 showing the entrance gate to the solar farm and the landscape screening along the western boundary of the Project site; solar panels are not visible behind the landscape screening. The proposed interconnection sub-transmission, distribution, and fiber optic lines are shown on new poles along the northern boundary of the site, beginning at the interconnection pole in the foreground.

4.1-12



a. Photos 10 and 11: Existing view from the west side of McHenry Avenue looking southeast though south. The Project site is the green area in the left-middle of the photo. MID's existing Ladd-Clough sub-transmission line is shown along the west side of McHenry Avenue on the right side of the photo.



b. Simulated view of Photos 10 and 11 showing the landscape screening and fence along the western boundary of the Project site; solar panels are not visible behind the landscape screening. The interconnection pole is shown in the foreground.

4.1-13