



Solano Community College

MEASURE Q BOND PROGRAM UPDATE

JANUARY 17, 2014

Solano Community College – a little about us

~11,000 students (8,500 FTES) on one campus and two centers:

- Fairfield (main campus)
- Vacaville Center (including Aeronautics at Nut Tree Airport and classes at Travis AFB)
- Vallejo Center

Over 500,000 gross square feet in 32 buildings on 285 acres

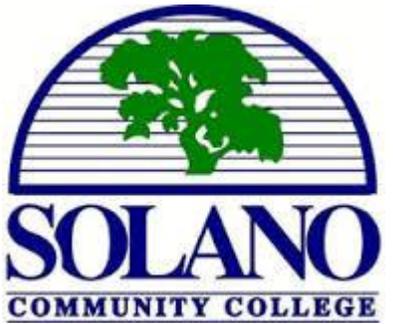
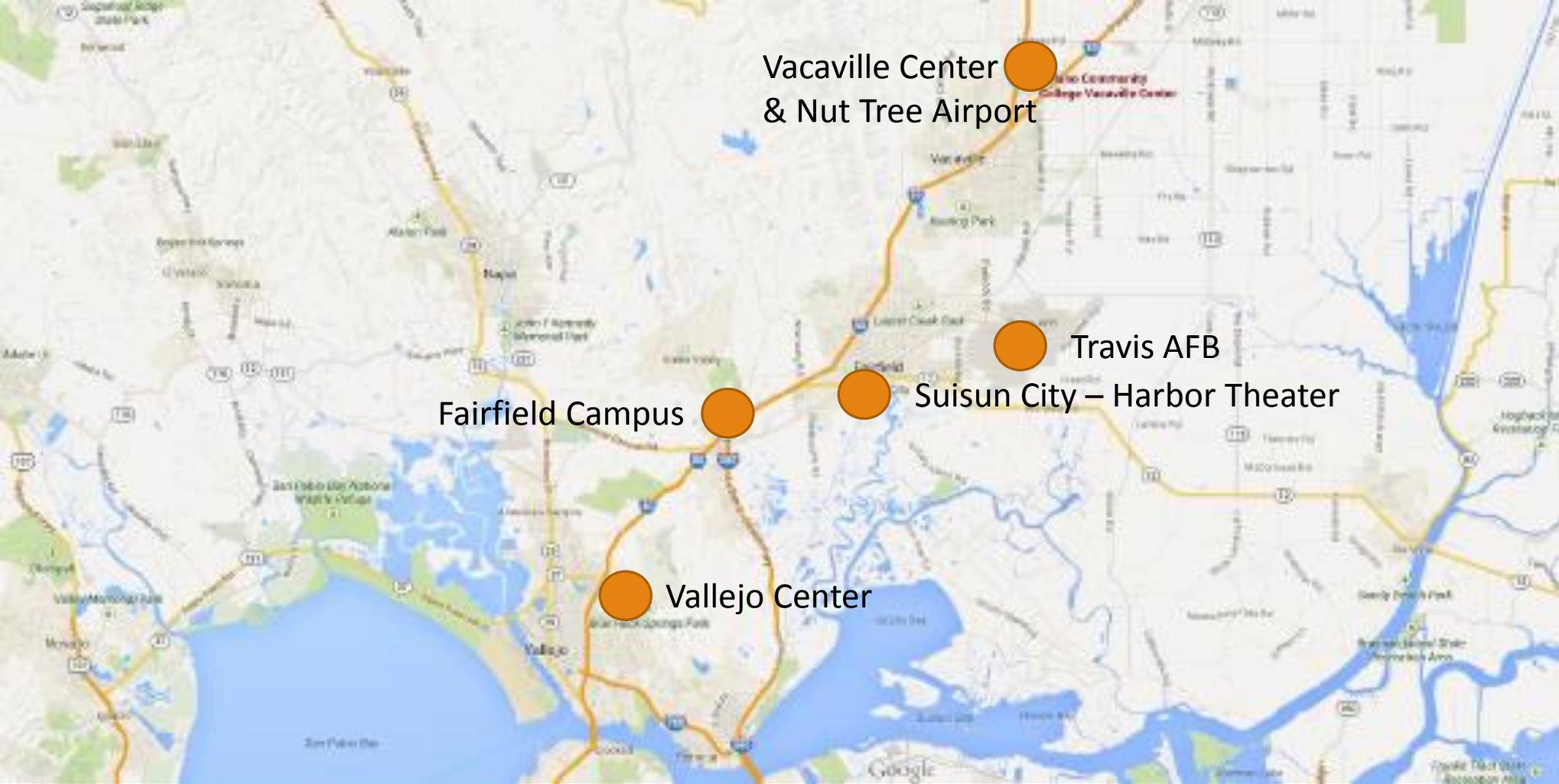
Two bonds – Measure G and Measure Q

7 member elected governing Board of Trustees

Jowel C. Laguerre, Ph.D. – Superintendent/President

Fairfield | Vallejo | Vacaville | Nut Tree Airport | Travis AFB

Measure Q update



Fairfield | Vallejo | Vacaville | Nut Tree Airport | Travis AFB

Measure Q update

Solano Community College – a little about us

Key staff participants in program

- Mr. Yulian Ligioso – Vice President College Operations
- Mr. Dwight Calloway – Director of Maintenance and Operations
- Mr. Roger Clague – Chief Technology Officer
- Ms. Laura Scott – Purchasing
- Members of Bond Team
 - Business Operations Coordinator
 - Accounting Manager
 - Purchasing
 - Accounts Payable

Fairfield | Vallejo | Vacaville | Nut Tree Airport | Travis AFB

Measure Q update

Key Dates for SOP process

January 17, 2014 – non mandatory information session

January 31, 2014 (2pm) – last day to receive written questions

February 3, 2014 (2pm) – addendum issued

February 7, 2014 (2pm) – SOQ deadline for submissions

February 14, 2014 (5pm) – Release of shortlist of interview candidates

March 5, 2014 – SOP deadline for interview candidates

March 10 to 14, 2014 – Interviews with selection committee and S/P

April 2, 2014 – Board meeting

Fairfield | Vallejo | Vacaville | Nut Tree Airport | Travis AFB

Measure Q update

Submission Requirements (section IV a)

1. Cover Letter
2. Firm Organization
3. Firm Qualifications
4. Litigation
5. Project Team Qualifications
6. Firm Resources, proposed methodologies and capabilities
7. References

8. Fee proposal for interview candidates only

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Measure Q update

Selection of Interview Finalists (section IV c)

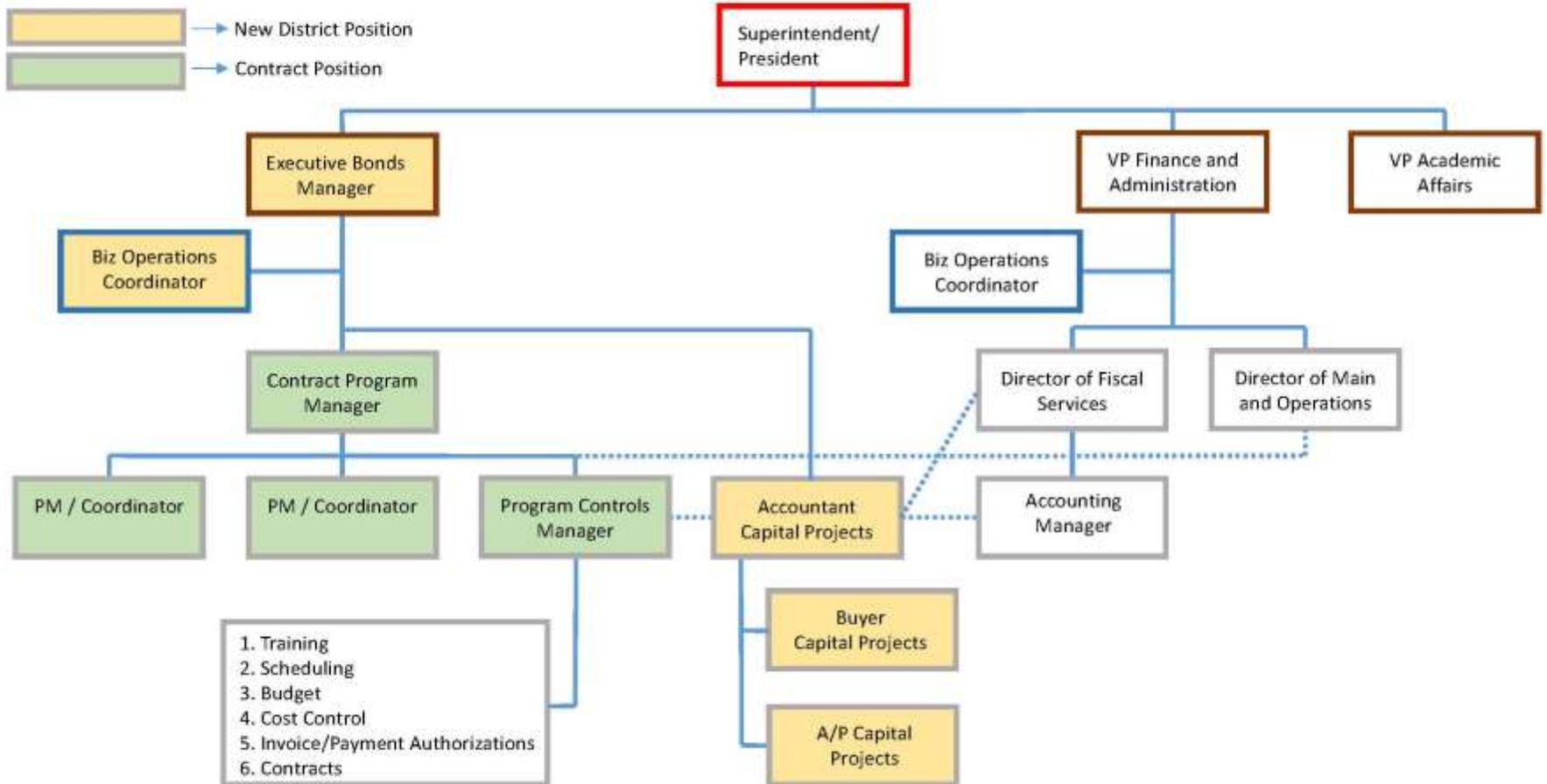
1. Relevant experience and history
2. Personnel and availability of proposed resources
3. References
4. Technical capabilities and track record with similar programs
5. Responsiveness
6. Community sensitivity
7. Qualitative factors

Fairfield | Vallejo | Vacaville | Nut Tree Airport | Travis AFB

Measure Q update

Consultant Team – Initial program start up (alternative reporting structure)

Solano Community College – Measure Q program management structure and recommendations
District option, first tranche [option 3a: blended team – full time contract program manager, alternative reporting structure]



Fairfield | Vallejo | Vacaville | Nut Tree Airport | Travis AFB

MEASURE G

\$124.5M bond

\$150.0M with interest

Spent over 12 years

Complete in December 2014

MEASURE Q

\$348.0M bond

\$32.6M State funding

\$TBD interest

Spending and Implementation plan - TBD

Projected projects for Fairfield

- Theater structural rehab and phase 2 (Speech, TV Studio, Dance)
- Veterans Center
- Science/Math building
- Learning Resource Center (LRC) and Student Success Center
- Career Technology Education (CTE)

Projected projects for Vallejo Center

- Property purchases
- Auto Technology building
- Student Success Center
- Site work

Projected needs for Vacaville Center (including Nut Tree)

- Biotechnology Building
- Vacaville Annex purchase and structural upgrade
- Aeronautics & Corporate Training

Energy Efficiency projects – District Wide

Sunpower Photovoltaic project (3 campuses)
ESCO phase 1 and 2

Other program costs

Program management (internal and consulting)
EMP/FMP/District standards
IT, M&O, ADA and other infrastructure projects

Funding Available

First tranche funding of \$120.0M*
Second tranche funding of \$70.0M (projected start in 2017)

***Next Steps: Implementation and bond spending plan for Board approval**

DRAFT Bond Spending Plan - v7a						2014				2015				2016				2017				2018				2019				2020					
Green=1st tranche; *Asterisk=added as of 140108						Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1				
	Campus	Tranche 1	State	Tranche 2		\$120m																\$70m (early sale)													
Bond Sale Schedule						\$120m																\$70m (early sale)													
EMP/FMP, District Stds, CIP 1	All	\$ 3,532,631		\$ 300,000																															
ESCO ph 1 and ph 2	All	\$ 10,500,000			Des																														
Sunpower PV	All	\$ 13,326,000																																	
Theater Mod B1200	Fairfield	\$ 5,400,000	\$ 13,671,000	\$ 5,400,000	Prog	Des				DSA	Ph 1											Ph 2													
Theater Swing and FFE	Fairfield	\$ 1,000,000																																	
CTE (Vocational Tech)	Fairfield	\$ 16,691,404																																	
Science/Math	Fairfield	\$ 28,000,000		\$ 28,000,000		Prog				Des/Doc					DSA																				
LRC (Meas Q+ State)	Fairfield	\$ 19,561,646	\$ 18,308,000	\$ 19,561,646																		Prog				Des/Doc			DSA	*					
Veterans Center	Fairfield	\$ 4,987,500				Prog				Des/Doc					DSA																				
Vallejo prop purchases	Vallejo	\$ 12,452,500																																	
Site improvements	Vallejo	\$ 2,000,000																																	
Auto Tech	Vallejo	\$ 11,800,000				Prog				Des/Doc					DSA																				
Multi-Discpl bldg	Vallejo	\$ 29,207,320																																	
TBD	Vallejo	\$ 22,068,558																																	
Biotech	Vacaville	\$ 20,000,000		\$ 20,000,000		Prog				Des/Doc					DSA																				
Corp Training & Aeronautics	Nut Tree	\$ 12,000,000		\$ 12,000,000											Prog							Des/Doc				DSA									
Agriculture and M+O	Vacaville	\$ 16,594,514																																	
Fire Training Bldg	Vacaville	\$ 12,206,806																																	
TBD	Vacaville	\$ 19,851,876																																	
Annex Purchase	Vacaville	\$ 2,500,000																																	
Annex Rehab	Vacaville	\$ 4,000,000								Prog					DSA																				
*ADA projects	All	\$ 4,779,794																																	
M & O small Projects	All	\$ 2,000,000		\$ 1,250,000																															
IT infrastructure	All	\$ 2,000,000		\$ 1,250,000																															
Other soft costs	All	\$ 8,000,000		\$ 5,500,000																															
Totals:		119,014,415		\$ 69,455,461		includes 7% program contingency for tranches 1 and 2																													

First Tranche

Second Tranche

Measure Q update

Educational Master Plan

Student Equity focus

Facilities Master Plan follows EMP

Program Reviews submitted and reviewed by Administration

Manuscript Draft presentation to Board on February 5th

Facilities Master Plan and District Standards

FFE

ADA

Traffic

Security

Sustainability

Information Technology and Audio-Visual

Maintenance and Operations (mechanical, electrical, plumbing)

Civil Infrastructure

Signage

Architecture

Landscape Architecture

CIVIL INFRASTRUCTURE

FMP Update

The screenshot shows a web browser displaying the 'Campuses' page on the Landmark website. The page features a navigation menu with 'HOME', 'CAMPUSES', 'CONTACT', 'MY ACCOUNT', and 'LOG OUT'. Below the navigation is a 'Campuses' section with three entries, each including a title, contact information, the Solano Community College logo, and a photograph of the respective center. Each entry also has a 'READ MORE' button.

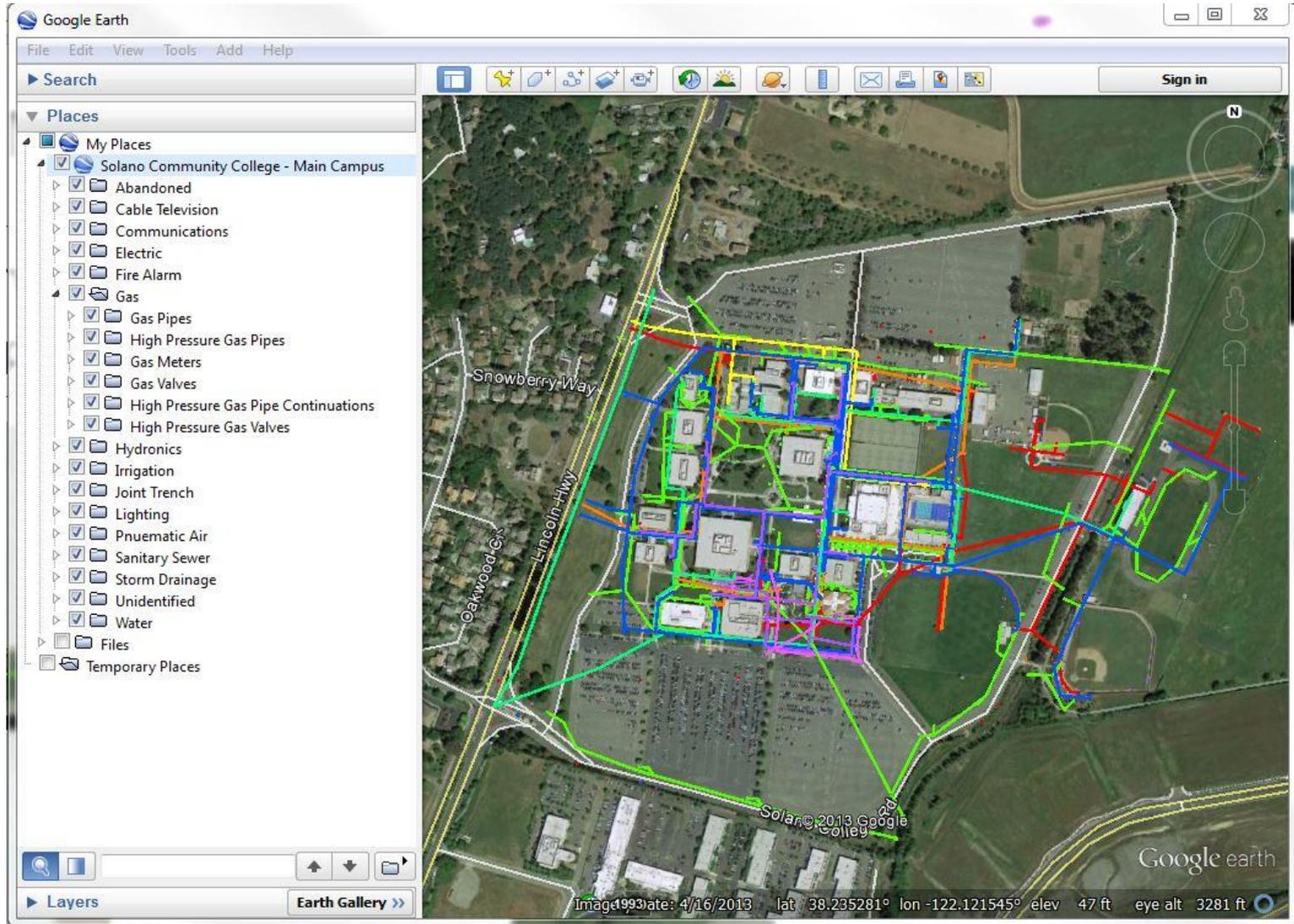
Solano Community College - Vallejo
FACILITIES/OPERATIONS CONTACT INFO
xxx-xxx-xxxx | scotts@cswst2.com

Solano Community College - Vacaville
FACILITIES/OPERATIONS CONTACT INFO
415-884-6463 | scotts@cswst2.com

Solano Community College - Main Campus
FACILITIES/OPERATIONS CONTACT INFO
xxx.xxx.xxxx | email@domainname.com

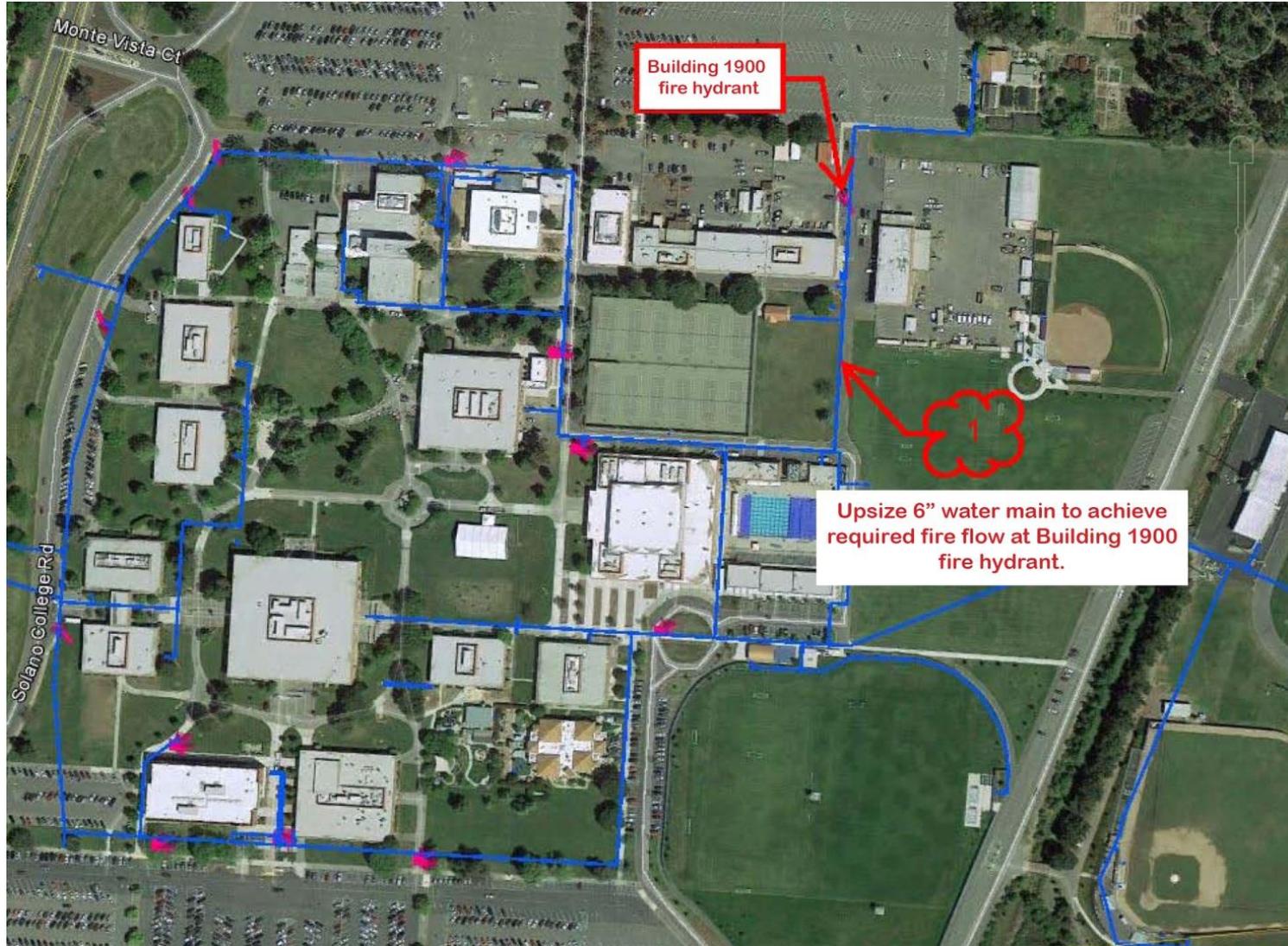
CIVIL INFRASTRUCTURE

FMP Update



CIVIL INFRASTRUCTURE

FMP Update





CURRENT ISSUES Conflicting, excessive, and inconsistencies in signage



SIGN FAMILY Examples

LEGEND

- Gateway Sign
- Vehicular Directional
- Parking Lot ID
- - - Vehicular Path of travel



PROPOSED WAYFINDING Vehicular Wayfinding

LEGEND

- Pedestrian Map (map of campus)
- Pedestrian Directional (directional sign showing high volume destinations)
- Pedestrian Entrances



PROPOSED WAYFINDING Pedestrian Wayfinding



Design Guidelines

Campuses are communities with a special emphasis on learning and socialization. These Design Guidelines provide criteria to create livable, stimulating campus environments that promote learning, creative thinking and social interaction, all essential components of the higher education experience and overall well-being.

CAMPUS VISION

Create a sustainable campus that keeps students, faculty, staff and community members engaged in district activities, education and environmental awareness.

CAMPUS GOALS

- Keep students, faculty, staff and visitors on the campus
- Create a campus that models social, economic and environmental sustainability
- Cultivate an atmosphere of academic excellence



A “complete campus” promotes educational, economic and environmental sustainability.



Edges and Entries

The edges and entries of campus are designed to clearly demarcate boundaries of the campus while providing a hierarchy of entries for both pedestrians and motorists.

Campus entries should:

- Be welcoming
- Be decorated with gateways, portals, arcades, and trellises
- Have views into the campus core
- Have a hierarchy of vehicular and pedestrian entries

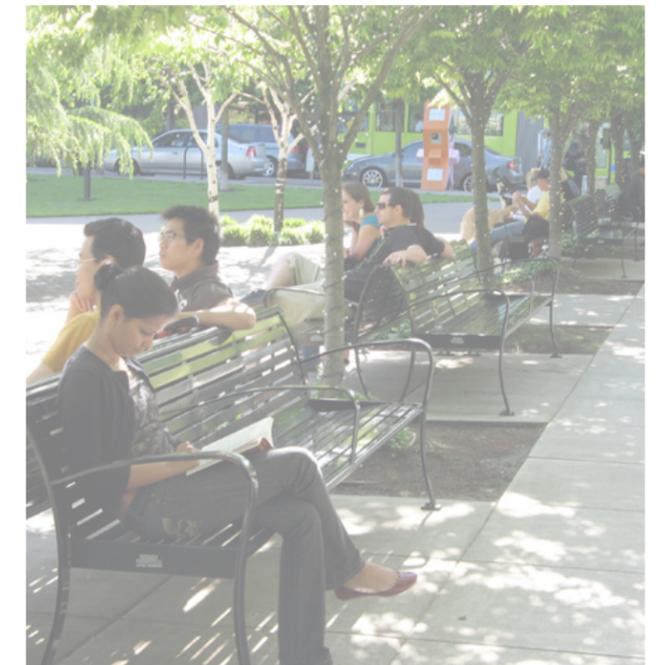
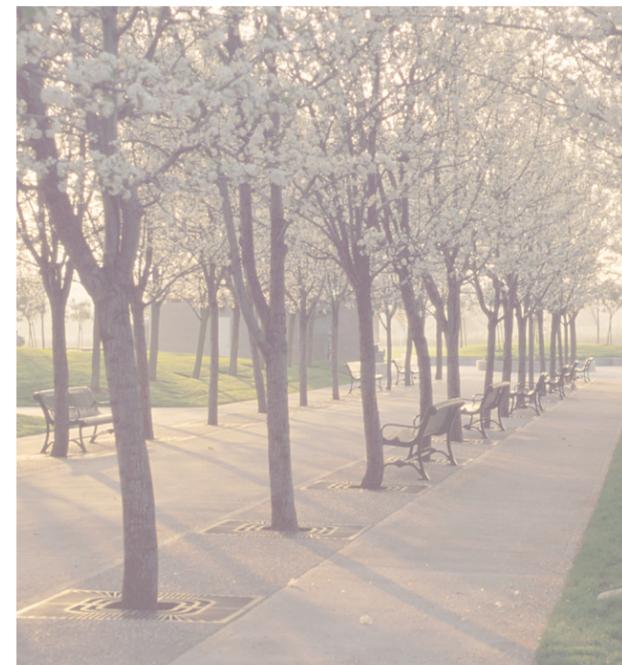


Organizing Spines

Spines are major pedestrian pathways that visually and organizationally unify the campus into a cohesive whole.

Spines should:

- Create a logical and direct path of travel through the campus
- Link pedestrian gateways and outdoor nodes to campus core
- Connect a network of buildings and spaces
- Influence the future campus layout



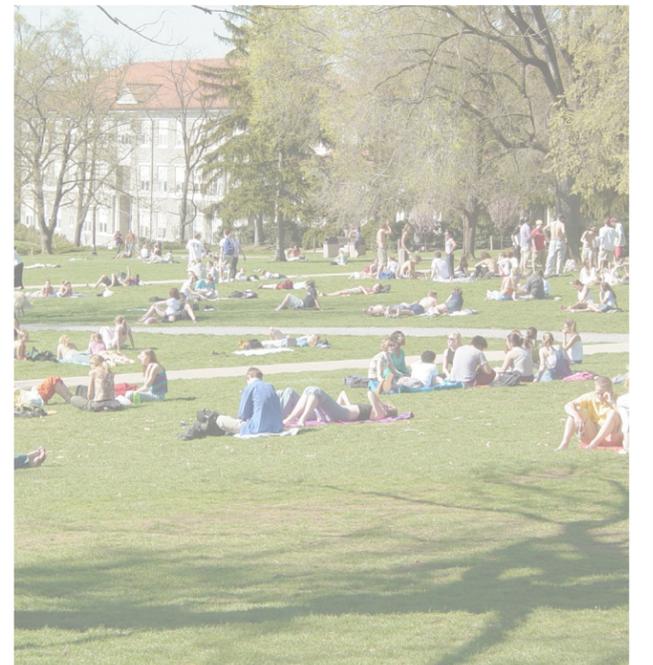


Campus Core

The campus core is centrally located and is the gathering space for informal, impromptu, or ceremonial events.

The campus core should:

- Be the focus of the primary pedestrian circulation system
- Accommodate passive and active uses
- Be activated by architecture
- Be highly visible
- Serve as the campus academic agora
- Be visually unique and recognizable



LEGEND

-  Campus Core
-  Quad

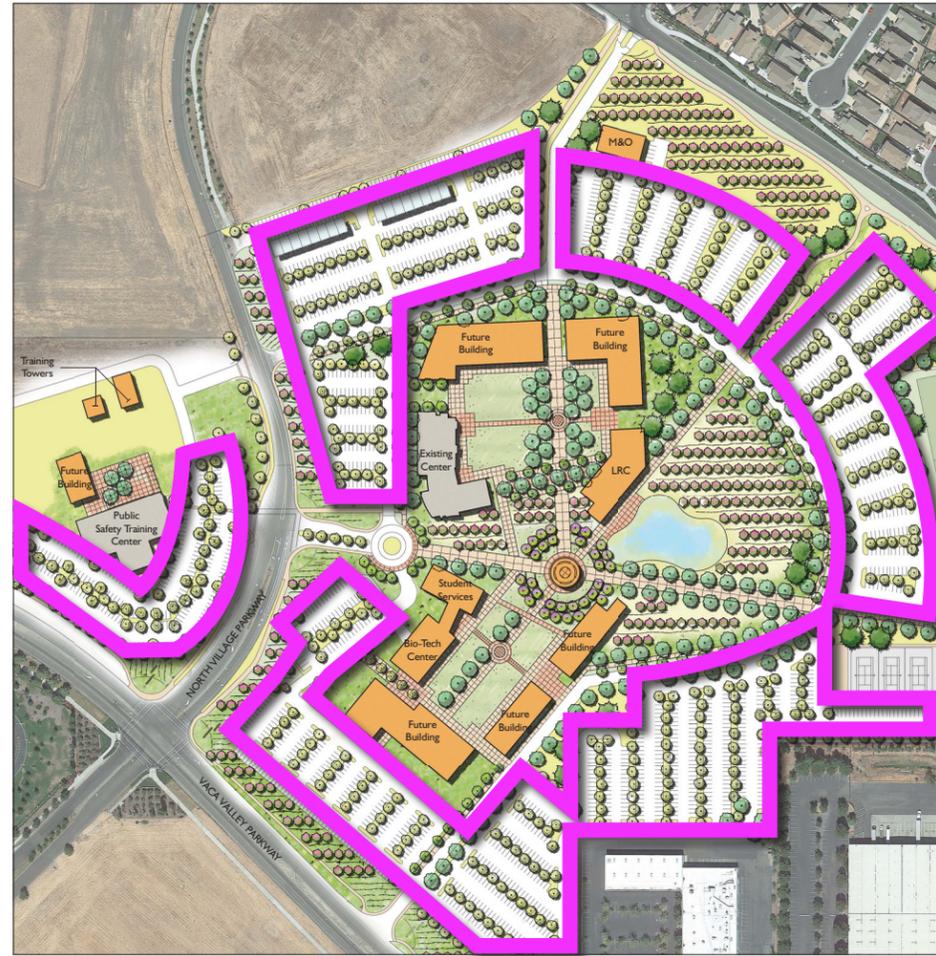


Nodes & Outdoor Spaces

Throughout the campus there are numerous opportunities to provide secondary gathering spaces which enhance campus life. These spaces can be created at the nodes which are generated when pathways intersect or at building entries and between structures. These spaces are ideal locations for outdoor plaza, courtyards and classrooms, where students can engage in educational or social activities.



- LEGEND
-  Social Node
 -  Outdoor Room



Parking Areas

Parking is an essential element that allows for safe, quick, and convenient access to campus.

Parking areas should:

- Have canopy trees for shade
- Have safe and clear pedestrian circulation
- Have evergreen screen plantings
- Separate walkways from vehicular travel
- Incorporate stormwater management features
- Be well-lit for safety



Imagesource: Rainforth Grau Architects



Imagesource: strongcitiesstrongstate.com



Imagesource: tlcd.com



Imagesource: asumag.com



Imagesource: tbparchitecture.com and tiltup.org

Campus Aesthetic

Modernization projects and new building projects should reflect current materials and technologies, especially green and sustainable ones, and should be culturally relevant. However, they should also appeal to a broad range of students and be enduring in their design.

Stakeholder feedback identified the existing Fairfield campus as outdated and boring, whereas the Vallejo and Vacaville Centers were identified as contemporary, inviting and vibrant. The existing Fairfield architecture was not to be repeated and the selected aesthetic vision for all three campuses was a tie between the “California Contemporary” aesthetic and the “California Modern” aesthetic.

The following Guidelines are not advocating a *particular* design style, but rather they capture the essence of the District selected aesthetic approaches.

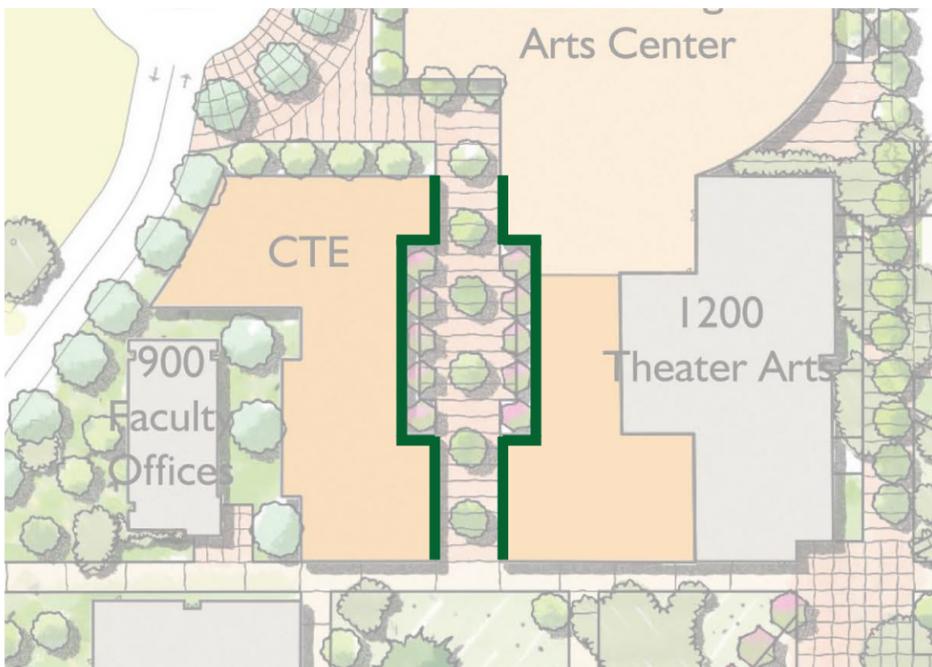


Building Form & Massing

Having a separate athletic zones on campus is important for isolating noise and large crowds.

Athletic zones:

- Should serve as an activity hub for the campus
- Should accommodate visitor use
- Should be an amenity to the neighborhood community
- Can be anchored by a sports pavilion
- Can be connected to nearby parks





Building Entries

Clear Way-finding requires Building Entries to be easily identifiable.

Building Entries Should:

- Be located per the major path of travel
- Be welcoming
- Incorporate social/waiting spaces inside and outside
- Be well signed (see Signage Master Plan for Building Signage)
- Be located in a portion of the building that is articulated uniquely from the rest of the building be it through form, material or color
- Have entry canopies (whether attached or created via an arcade)
- Automatic Sliding Doors are highly desired (see District Standards)
- If building has more than one predominant approach (for example entry from adjacent parking lot and entry from interior campus quad) provide multiple entries with similar characteristics based on these guidelines





Facade Articulation

Both modernizations and new building projects should articulate facades to provide interest and a variety of scales.

Facade Articulation can be accomplished in a variety of ways:

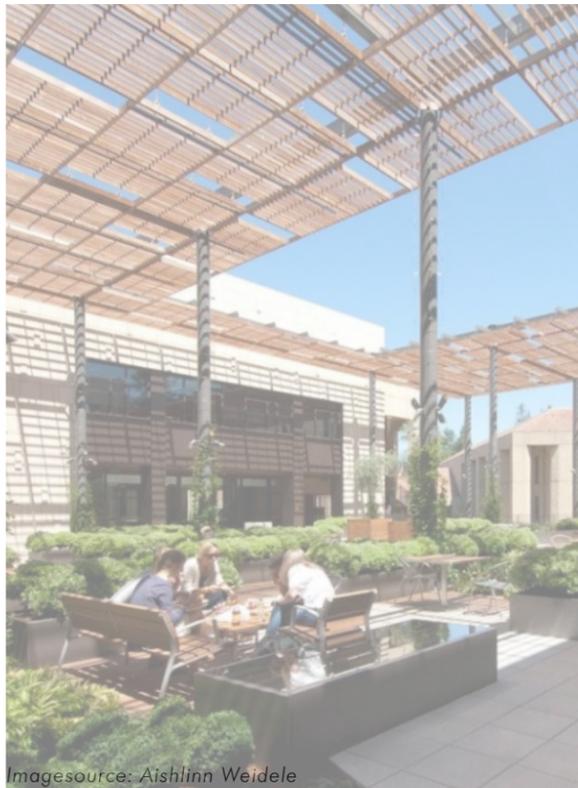
- Locating facade elements at different depths in the facade such as protruding sunshades or mullions; recessed glazing with respect to window jambs; different materials/textures that have different thicknesses at different building heights and/or locations
- Arcades on some portions of the building
- Other recesses/protrusions created by the building massing
- External Screens/Trellises/Green Walls located in close proximity to portions of the Building Facades



Imagesource: Bruce Damonte



Imagesource: David Wakely



Imagesource: Aishlinn Weidele



Imagesource: coarchitects.com



Imagesource: bmasf.com

Arcades and Trellises

The original Fairfield campus plan called for arcades to connect the buildings together, unfortunately these never got built. Apart from providing much needed shade, these arcades would have strengthened the sense of campus and provided places for students to congregate, socialize and study. While the Facilities Master Plan does not specifically call for arcades or trellises to be connected all the way around the campus, the use of arcades and trellis structures is highly desired for all campus sites.

These can be integrated into the building envelope or freestanding next to the building. They should occur in locations that promote circulation connections to adjacent buildings, or in locations that provide some useful purpose, such as waiting areas, terraces etc. Given the preferred campus aesthetic, it is preferable to have modern interpretations of the arcade.

Fairfield Color Palette



Existing Arches and Columns

Existing Stucco

Building 400 Stucco

Existing Roofing

Existing Frames & Glazing

The Structural Elements should be:

- Existing Concrete Columns should be sandblasted and cleaned
- New Columns should be exposed Concrete or White
- Arcades should be White

The Main Building Color should be:

- One of these three colors:
Match XX
Match YY
Match ZZ
- In addition they can have ONE color accent (see bottom row)

Mandatory Accent Element Color:

- One of these four colors:
Match WW
Match Cherry Wood
Match this Range of Mahogany
- Existing Buildings can opt to match Birch Wood Color in lieu of the above

These guidelines aim to create a uniformity to the Color Palette that allows for some diversity on campus but, also harmony with the existing buildings color palette. To the left are the existing building colors, and below is the future buildings/renovations color palette. The hope is that existing buildings would also move to the new color palette when they undergo major renovations.

The Mandatory Accent Element can be:

- Trim around Door/Window Openings
- Underside of Projecting Eaves / Canopy Soffits
- Sunscreens / Trellises
- Stair Tower Elements

The Framing / Glazing Elements should be:

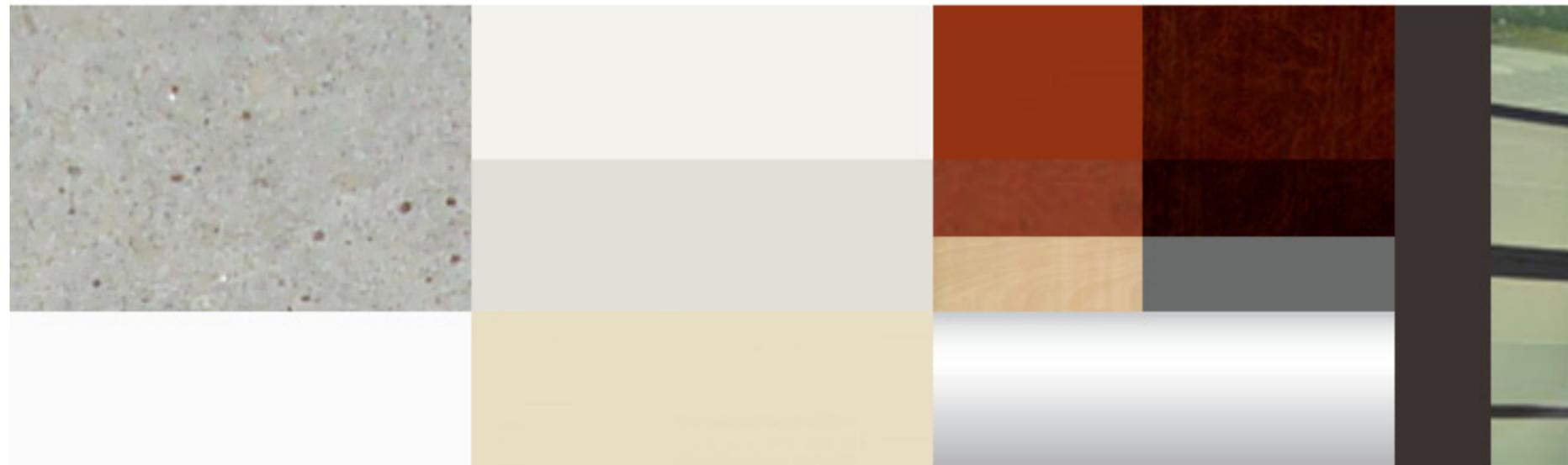
- Match __ for all Door and Window Frames
- Match __ for Glazing (see District Standards, Part III)

New Columns & Arcades

New Stucco

One Building Element to have one of these (4) tones

New Frames & Glazing



In addition to above Buildings can have ONE of these colors

Non Public Building

The Roof Coping Color should be either:

- Satin Aluminum
- Match Metal Panelling Color
- White (at arcades, Bird Protection, Sunshades etc.)

The Roof Screen Color should be either:

- Match Grey XX
- White

In addition to the Mandatory Accent Color:

- Buildings can have ONE of these additional Accent Colors for portions of the Main Body or other Elements:
Match XX
Match YY
Match ZZ

Non Public Buildings should be:

- Either Match XX or Match YY



Imagesource: perkinswill.com

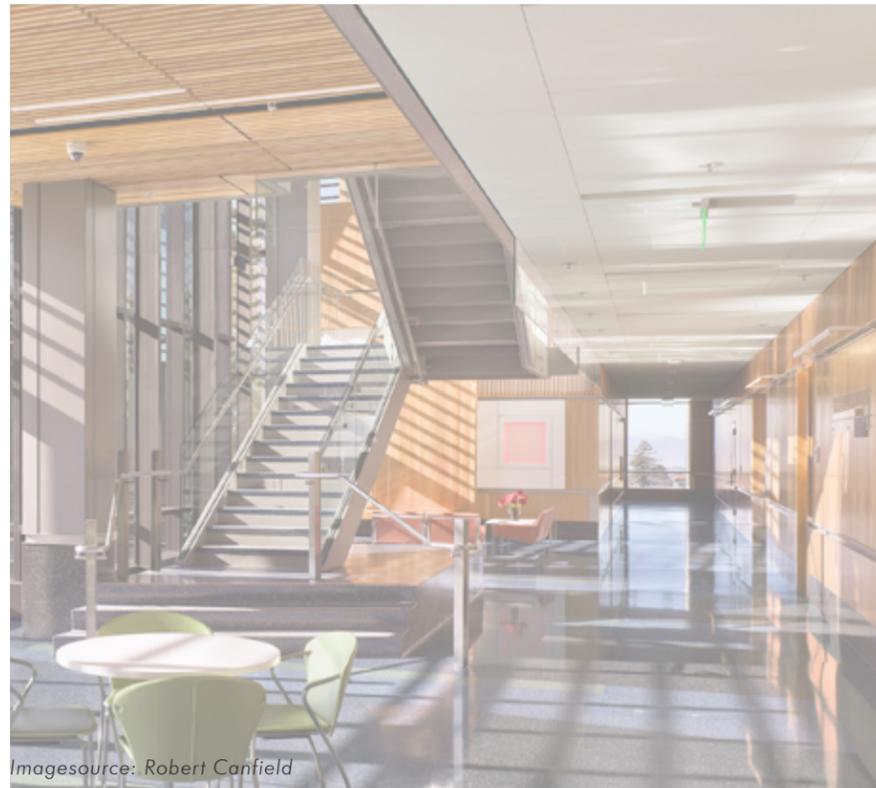
Imagesource: perkinswill.com

Interiors

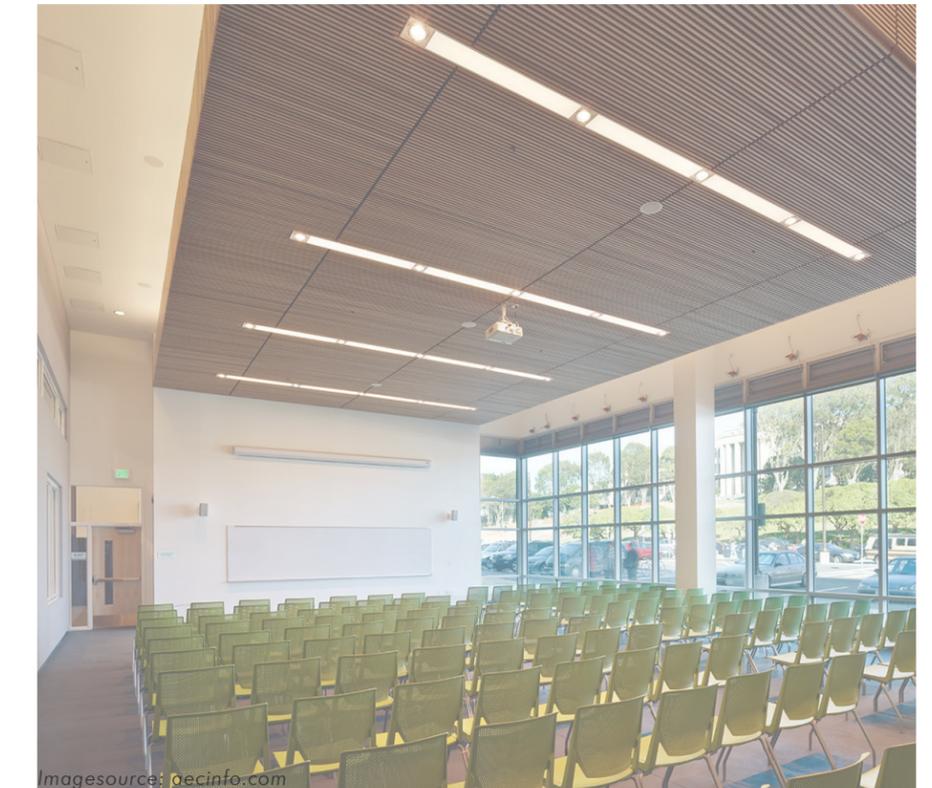
Building interiors should be light, warm, and welcoming. Naturally daylight the interiors to the best extent possible. Due to maintenance concerns of having to stock multiple paint colors, rely on other materials and furnishings to add color to the inside of buildings. Building 400 on the Fairfield campus establishes a good precedent. Refer to District Standards, Part III, for more information on acceptable and preferred materials.

Color should be introduced into the interiors by:

- Choice of materials, for example wood and wood-like products on multiple surfaces (e.g. ceiling as well as walls)
- Fabric wrapped panels, metal panelling or recycled ecoresin panels
- "Xorel" type fabric applied directly on walls
- Carpeting or other flooring
- Furniture that is either colored or upholstered with colored fabrics



Imagesource: Robert Canfield



Imagesource: oecinfo.com

Sustainability Guidelines

These guidelines were developed through conversations with Solano Stakeholders (through the Sustainability Committee) and with the collaboration of maintenance and operations staff at the District.

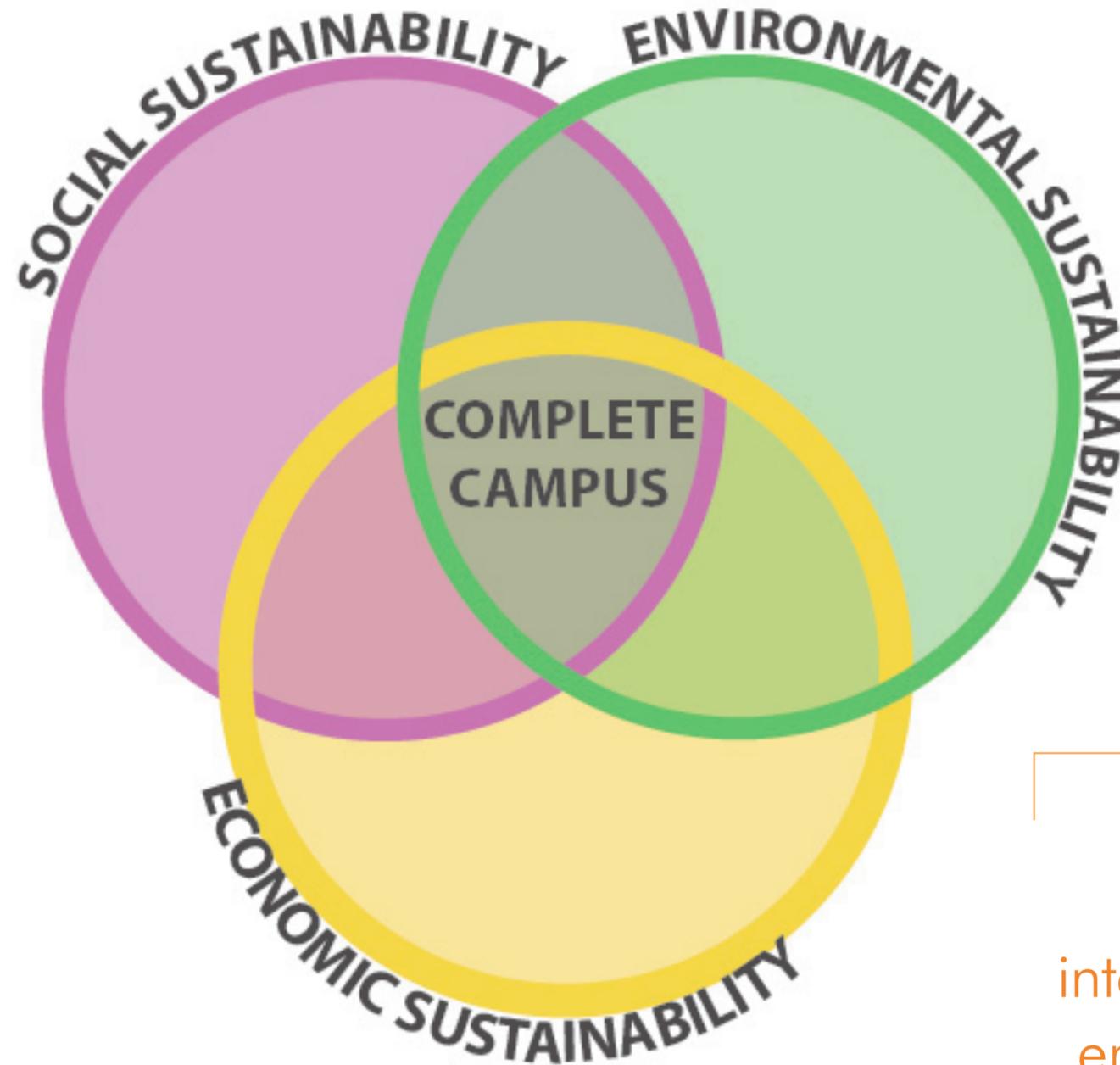
SUSTAINABILITY VISION

“Solano Community College will be a leader in sustainable practices that balance the best interests of the environment, our community and fiscal responsibility. In particular, it will reduce its ecological footprint through energy, water and waste reduction, curriculum development and community engagement.”

SUSTAINABILITY GOALS

The District will aspire to meet the following goals and target dates:

- Reduce energy consumption from the 2001-2002 baseline by 15% by the end of 2014-2015.
- Reduce the energy cost from the 2001-2002 baseline by 20% by the end of 2014-2015.
- Procure 40% of electricity from renewable sources by 2014.
- The District will endeavor to meet and exceed the following LEED standards: all major new capital projects to be designed to LEED Silver criteria and all major renovation projects to be designed to LEED Certified criteria.



balance
the best
interests of the
environment,
our community
and fiscal
responsibility

LOCATION AND TRANSPORTATION

The Facilities Master Plan is based on sustainable planning principles that should be reinforced with each Capital Improvement Project. The following apply to the Location and Transportation credits:

LEED for Neighborhood Development Location

- At Fairfield, most existing buildings have been repurposed rather than demolished and new buildings are proposed in areas with existing infrastructure.
- Buildings are proposed to be in close proximity to one another to encourage walkability and reduce vehicle distance traveled.
- New buildings should to be a **minimum of 2-stories**.

Sensitive Land Protection

- On the Fairfield Campus the land east of the campus loop road is being maintained as its natural riparian habitat, and the area fronting Suisun Valley Road is being maintained as open land.

Access to Quality Transit

- District is committed to working with local transportation agencies to improve service and routes for the benefit of its students and at this time it is expected that the existing bus stops on each campus will accommodate these improvements.
- Existing Public Transit access has been maintained on all campus sites and the Fairfield Campus bus stop is proposed to be relocated south of Building 400 with better waiting facilities.
- At the Fairfield Campus a pathway to the proposed Regional Bus Station (off-site) has been reinforced.
- At the Vacville Campus a pathway should be provided once the Regional Bus Station location has been identified.

Bicycle Facilities

- District is interested in trying out a **Bicycle Share program** and specific projects should look at opportunities to incorporate bicycle storage and shower rooms.



ImageSource: campuslifeservices.ucsf.edu

Reduced Parking Footprint

- The Facilities Master Plan proposes to reduce Parking at the Fairfield campus (current supply exceeds current and projected demand), and Vallejo is proposed to have a one-story parking deck on the additional property to reduce future parking footprint in favor of more green space.

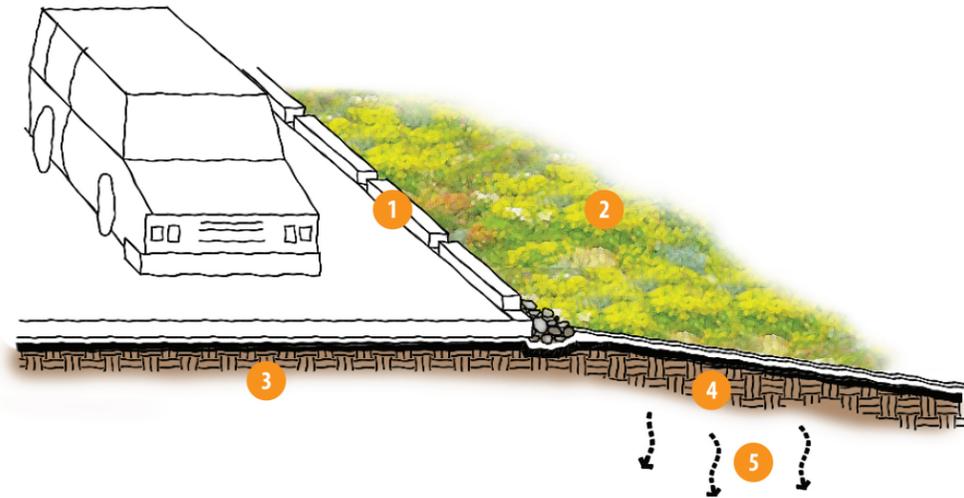
Green Vehicles

- Fairfield already has some **Electric Vehicle Charging Stations** and the District is interested in promoting Green Vehicle usage on all Campus sites thus future projects affecting parking lots should include the addition of charging stations per LEED criteria.



ImageSource: sfbike.org

- 1 Optional curb cuts evenly disperse run-off inflow
- 2 Thick vegetation and 10% maximum slope
- 3 60-foot maximum road width
- 4 15-foot minimum buffer strip width (in direction of flow)
- 5 Infiltration where feasible



Vegetated Buffer



SUSTAINABLE SITES

The Facilities Master Plan is based on sustainable planning principles that should be reinforced with each Capital Improvement Project. The following apply to the Sustainable Sites credits:

Site Development - protect or restore habitat

For the Fairfield Campus the buildings proposed are replacing demolished buildings and existing parking, which results in green space added to the campus. This is not the case with the other two campuses, where greenfields are being replaced with buildings and parking, so these credits will apply only to Fairfield.

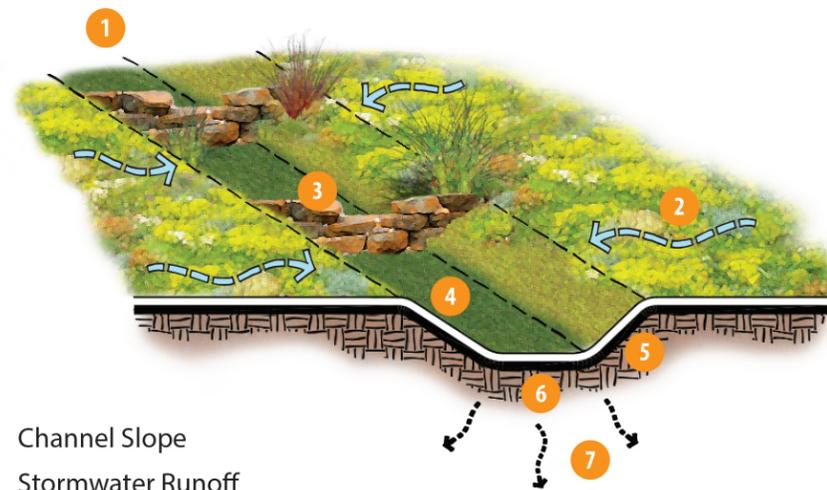
Furthermore, on the Fairfield Campus the land east of the campus loop road is being maintained as its natural riparian habitat. In addition, by allowing habitats to flourish the natural ecology of the land will thrive. To better the soils and habitat one should:

- Mulch regularly and Sheet mulch where appropriate.
- Avoid synthetic and quick release fertilizers.
- Limit use of chemical pesticide.
- Plant California Natives when suitable for microclimate.

Rainwater (Stormwater) Management

Rainwater management consists of systems that retain rainfall on sites instead of allowing it to leave via gutters and storm drains. Retaining stormwater allows for reduced irrigation water demand, an increase in groundwater recharge and an opportunity for removal of sediments and pollutants. Refer to the [Stormwater Management Plan](#) included in the Infrastructure Master Plan (see Part I) for complete details. The following are some systems that help retain rainfall on sites:

- **Vegetated Buffers** are sloped planting strips designed to capture and treat sheet flow from adjacent paved areas. Vegetated Buffers are attractive landscape features that can improve water quality, attenuate peak flows and facilitate groundwater recharge.
- **Vegetated Swales** are shallow planted channels that convey storm water runoff. The advantages of vegetated swales is that they remove particulates from the storm water flow, thereby improving the water quality. They also reduce the rate of runoff and helps facilitate groundwater recharge.



- 1 Channel Slope
- 2 Stormwater Runoff
- 3 Check Dam (Slope greater than 5%)
- 4 6-inch grass height recommended
- 5 3:1 maximum slope bank
- 6 Channel bottom
- 7 Infiltration

Vegetated Swale





Group plants of similar water needs



Plant California Natives when appropriate



WATER EFFICIENCY

Replacing aged plumbing equipment/systems with more efficient equipment/systems will reduce both overall water use and overall energy use. See Section X.X for existing plumbing equipment that was beyond its service life and recommended to be replaced. In addition the following were identified as severely aged by the District: Domestic hot water generation equipment (aged equipment and inadequate capacity); Domestic hot water piping distribution systems and Sewer and drainage piping systems throughout the campus.

Outdoor Water Use Reduction

The following will help reduce outdoor water use:

- Hydrozoning- clustering of plants with similar water requirements so that irrigation scheduling can be more effective.
- Planting California Natives when appropriate.
- Design and installation of high efficiency irrigation systems (see District Standards).
- Use of recycled or greywater where appropriate. Systems include **Detention and Wet Ponds** (see Page X for more detail) and Living Machine Systems. **Living Machine Systems** are natural and designed to recover all the water used on the campus. When centrally installed, the system will take all waste in the sanitary sewer system and recover it to be used for grey water (toilets and urinals), make-up water (cooling towers, IDEC units, etc.), and irrigation. This recovery system proves to be much more economical than rainwater harvesting systems and could yield a 7-10 year payback through reduction of water bills and reduction of sewer bills. To take full advantage of the system, the District would have to double pipe the grey water systems with a separate purple pipe water distribution piping.
- Sustainable landscaping practices including the use of mulch and compost to increase soils ability to retain moisture.

Indoor Water Use Reduction

Reduce Water Demand through low water use Water Closets, Lavatories and Urinals.

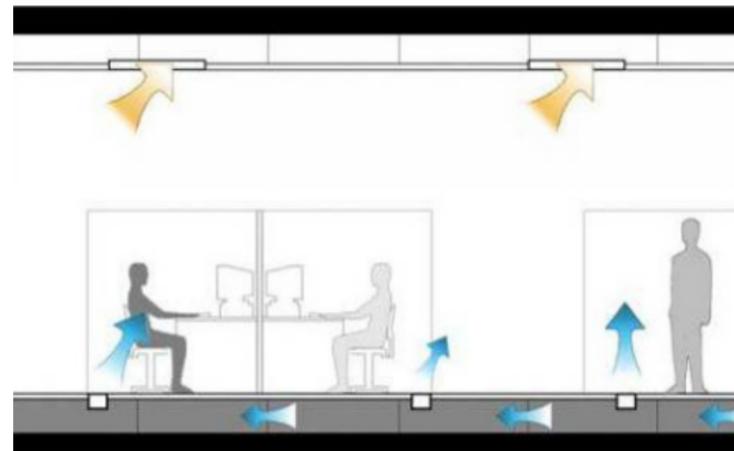
ENERGY AND ATMOSPHERE

There are an array of strategies for reducing energy use which include building integrated opportunities, HVAC system opportunities, plumbing systems opportunities and electrical systems opportunities.

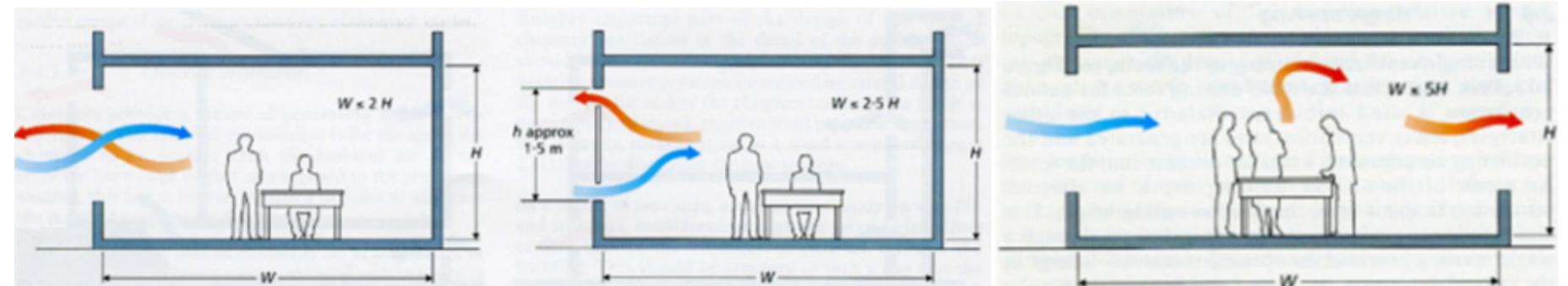
Optimize energy performance - Building Envelope

Whether the District is retrofitting existing buildings or building new ones the most cost effective solution in optimizing energy efficiency occurs within the building envelope. The following are building integrated opportunities that should be considered for each project:

- **Enhanced glazing (inclusive of its framing):** can provide valuable energy, thermal, and lighting benefits with no added maintenance and can last for decades. The Glazing District Standard should be applied to all New Buildings and glazing on Existing Buildings should be replaced with this Standard to the best extent possible.
- **Thermal Insulation Systems:** prevent energy used to heat or cool the buildings to escape the building envelope. Adding insulation where it is non-existent or minimal will enhance both the energy utilization of the building as well as the thermal comfort of the building. Thermal insulation systems should be placed to take advantage of the thermal mass of each building as much as possible.
- **Natural Ventilation:** projects should maximize opportunities for natural ventilation by creating high and low window openings (typically approximately 5% of the floor area) to create the deepest penetration possible. If possible, consideration should be provided to ventilate through central areas to create not only cross ventilation (from both sides of the building), but also stack ventilation by creating high points of relief within the buildings.
- **Shading:** projects should include shading devices within the building envelope. Choices include Horizontal External Shades, Vertical Fins, Electrochromatic Glazing and Interior Shading. Electrochromatic glazing is special glazing that “darkens” the glass at certain solar angles and temperatures which limits the amount of heat buildup in the building. Interior shading devices still allow the heat into the occupied spaces but can transition when the heat load actually affects the space. They also help to reduce glare.
- **Phase Change Materials:** “absorb” heat and release it at a later time when cooling is not at its’ peak. This system can be especially beneficial in buildings without cooling where natural ventilation is desired to maximum space thermal comfort.



Displacement Ventilation



Natural Ventilation

Table 1: Building Integrated Opportunities Priority Matrix

Measure Name	Priority Level	Only for New Building
Replace existing glazing on existing buildings	High	-
Integrate additional thermal insulation into existing buildings	Medium	-
External building shading devices or electrochromatic glazing	-	Yes
Phase Change Materials	Low	-
Internal shading	Low	-

MATERIALS AND RESOURCES

The following measures relate to the Materials and Resources credits:

Storage and Collection of Recyclables

All New and Renovation Projects should provide dedicated areas for the collection and storage of recyclable materials. Materials collected must include mixed paper, corrugated cardboard, glass, plastics, and metals. The District also plans on extending its composting collection to all buildings, and will continue to take appropriate measures for the safe collection, storage, and disposal of batteries, mercury-containing lamps, and electronic waste.

Construction and Demolition Waste Management

Project contractors should develop and implement a construction and demolition waste management plan per LEED requirements (both Planning and Execution credits).

Building Life-Cycle Impact Reduction

Existing building renovations should look to reuse materials per LEED Option 3 (building and material re-use) and New Projects are encouraged to pursue Option 4 (whole-building life-cycle assessment).

Building Product - Multiple Categories

Project teams should specify as many products and materials as possible that meet at least one of the following LEED criteria:

- Products and Materials from manufacturers who have verified improved environmental life-cycle impacts
- Products and Materials locally sourced (within 100 miles from Project Site)
- Products and Materials verified to have been extracted and sourced in a responsible manner from cradle to gate
- Products and Materials verified to minimize the use and generation of harmful substances
- Products and Materials for which the chemical ingredients within it are inventoried using an accepted methodology

Note, materials and products selected should be coordinated with District Standards where applicable.



ImageSource: sfcitizen.com

LifeCycle Analysis (LCA)



ImageSource: scienceinthebox.com

INDOOR ENVIRONMENTAL QUALITY

The following measures relate to the Indoor Environmental Quality:

Minimum & Enhanced Indoor Air Quality Performance

Improve the indoor air quality by meeting the ventilation and monitoring requirements per LEED requirements (Minimum Performance) and include as many of the Enhanced Strategies as feasible.

Low-Emitting Materials

To reduce concentrations of chemical contaminants that can damage human health, productivity and the environment, specify products with low volatile organic compound (VOC) content in materials and low VOC emissions into the air. Meet LEED thresholds for compliance and coordinate selected products and materials with District Standards where applicable.

Construction Indoor Air Quality Management Plan

Develop and implement an indoor air quality (IAQ) management plan for the construction and preoccupancy phases of the building per LEED criteria.

Indoor Air Quality Assessment

Before occupancy install new filtration media and perform a building flush-out per LEED suggested options.

Thermal Comfort

Design heating/ventilating systems and the building envelope to meet the ASHRAE Standard 55-2010, Thermal Comfort Conditions for Human Occupancy. Coordinate with Title 24 requirements.

Interior Lighting

Provide lighting controls and lighting quality per LEED criteria.



ImageSource: Sherwin Williams and Kelly Moore Paints

Daylighting

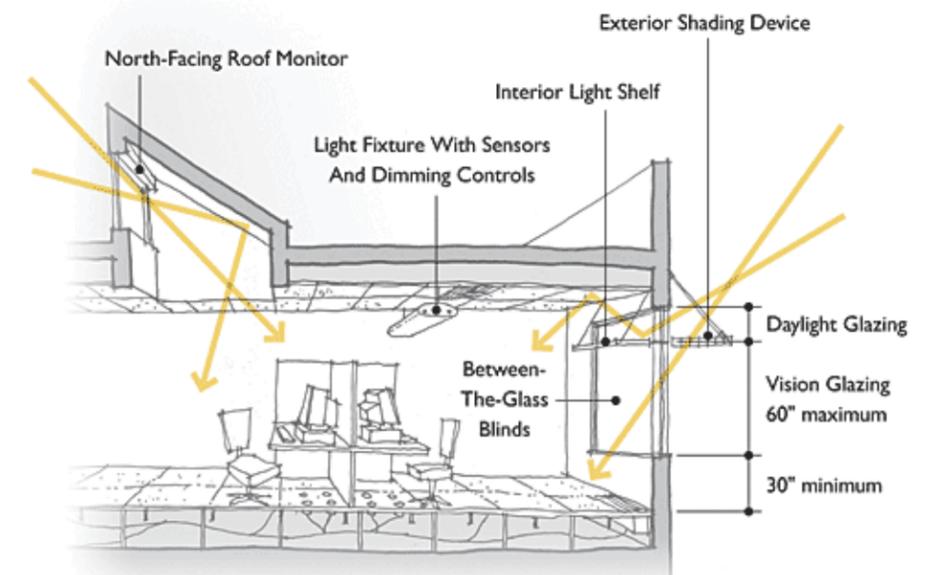
Maximize daylight penetration within buildings as much as possible, while balancing glare concerns through design or devices designed to reduce glare.

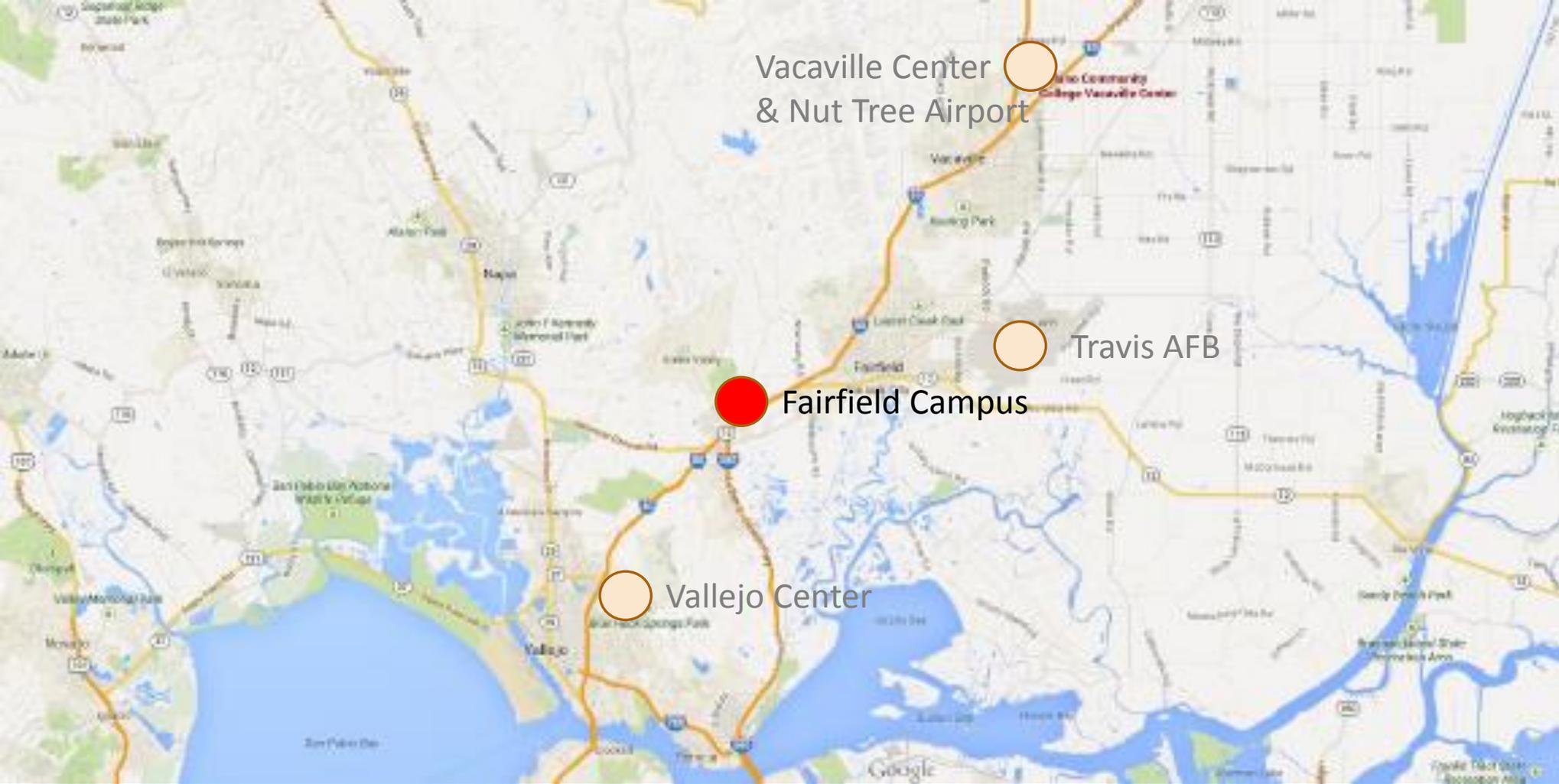
Quality Views

Maximize views to the outdoors from 75% of all regularly occupied spaces per LEED criteria.

Acoustic Performance

To provide effective acoustic design, meet the composite sound transmission class (STCC) ratings for various types of spaces, as listed in the LEED credit. Also provide HVAC noise levels per LEED listed criteria, and sound reinforcement and masking systems as needed.





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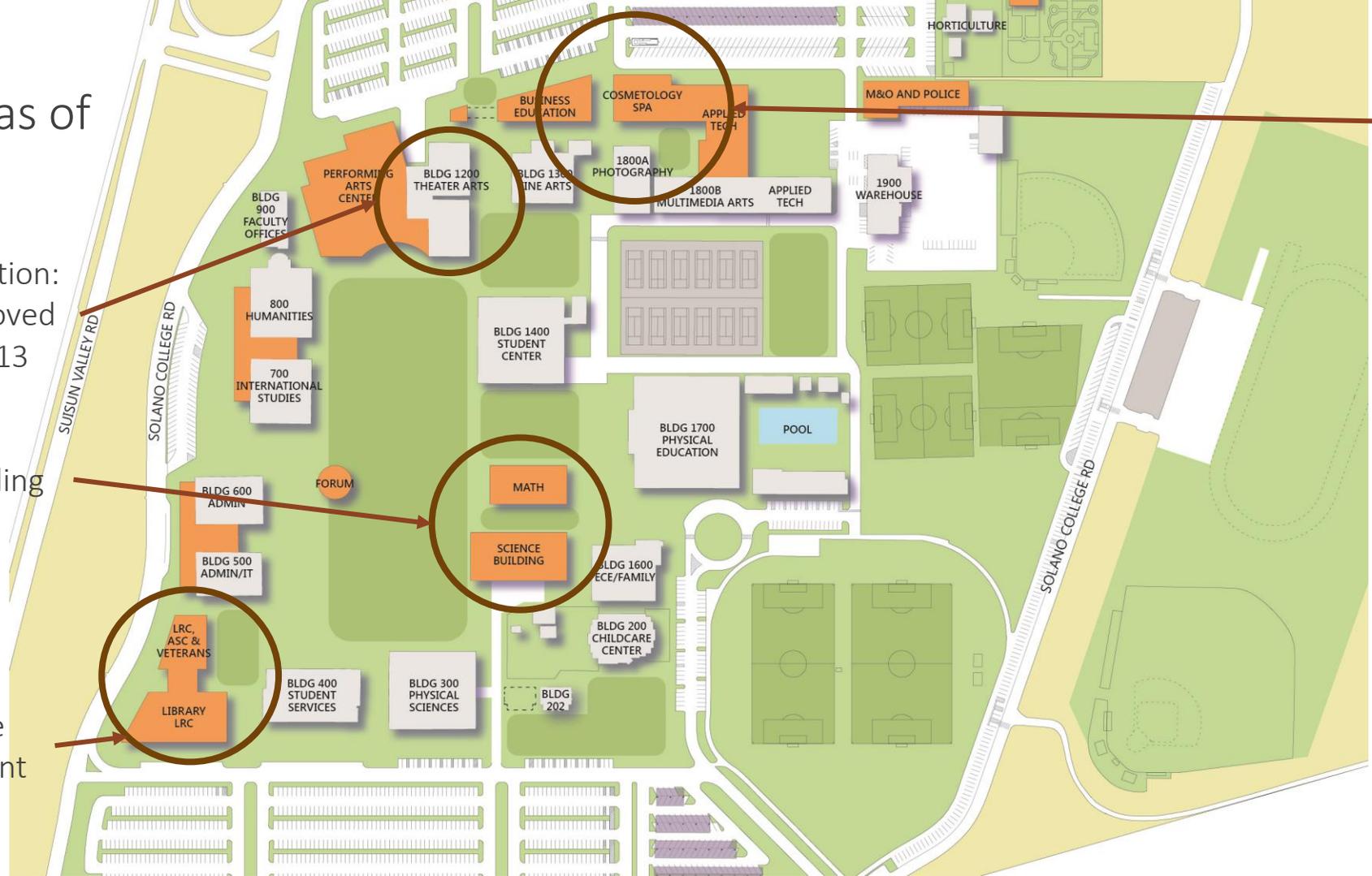
Measure Q update

Master Plan as of June 2013

Theater Modernization:
State funding approved
Design start Fall 2013

Science Math building

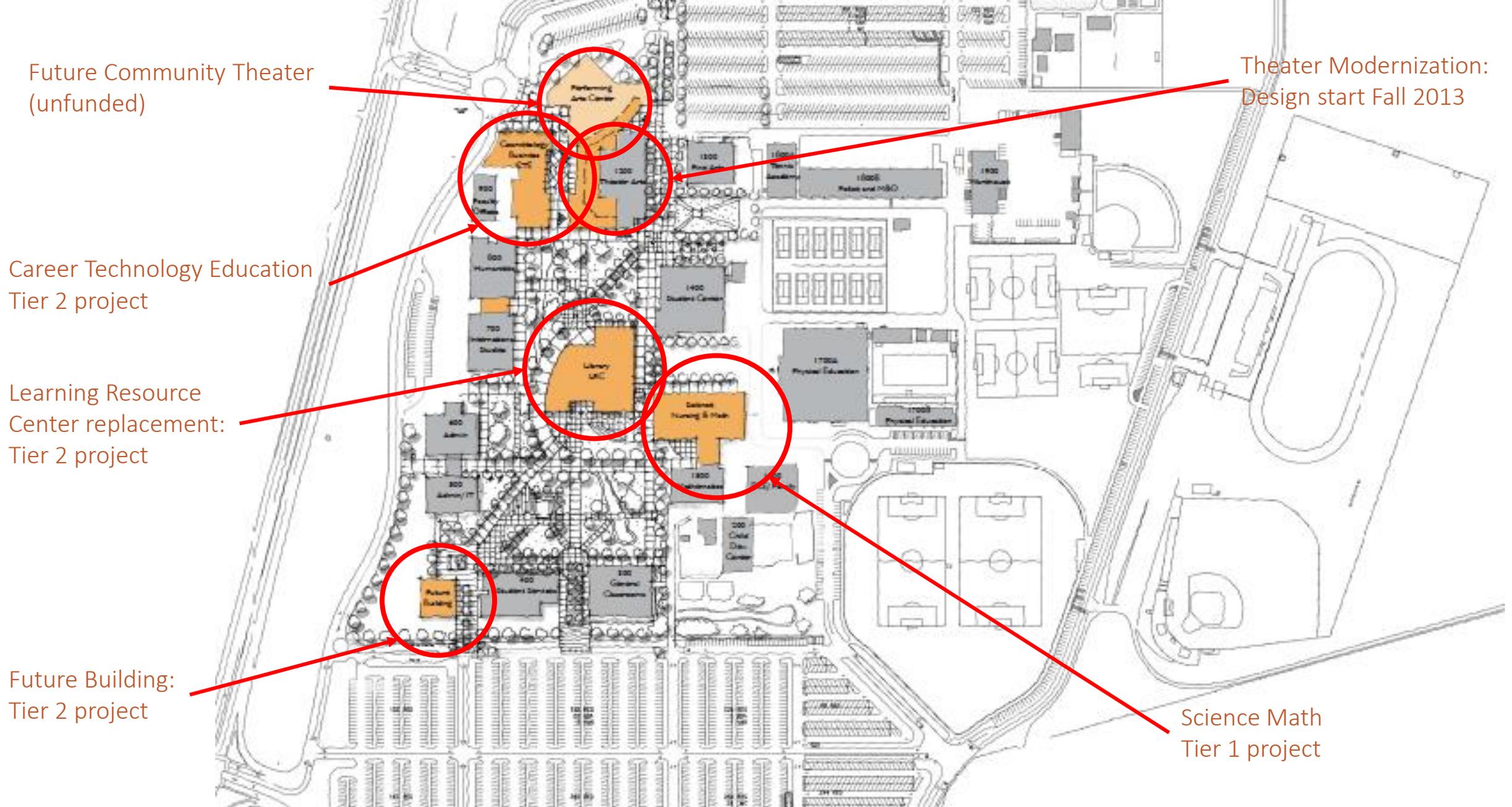
Learning Resource
Center replacement



Career
Tech Bldg

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Measure Q update – STV/vbn Architects + David Gates and Associates



Future Community Theater
(unfunded)

Theater Modernization:
Design start Fall 2013

Career Technology Education
Tier 2 project

Learning Resource
Center replacement:
Tier 2 project

Future Building:
Tier 2 project

Science Math
Tier 1 project





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Measure Q update

Vallejo Master Plan

Challenge:

*No land to expand as
Vallejo grows over time*

Solutions:

*Parking structure or
Land purchase*



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Measure Q update – STV/vbn Architects + David Gates and Associates

Potential site
9.3 acres

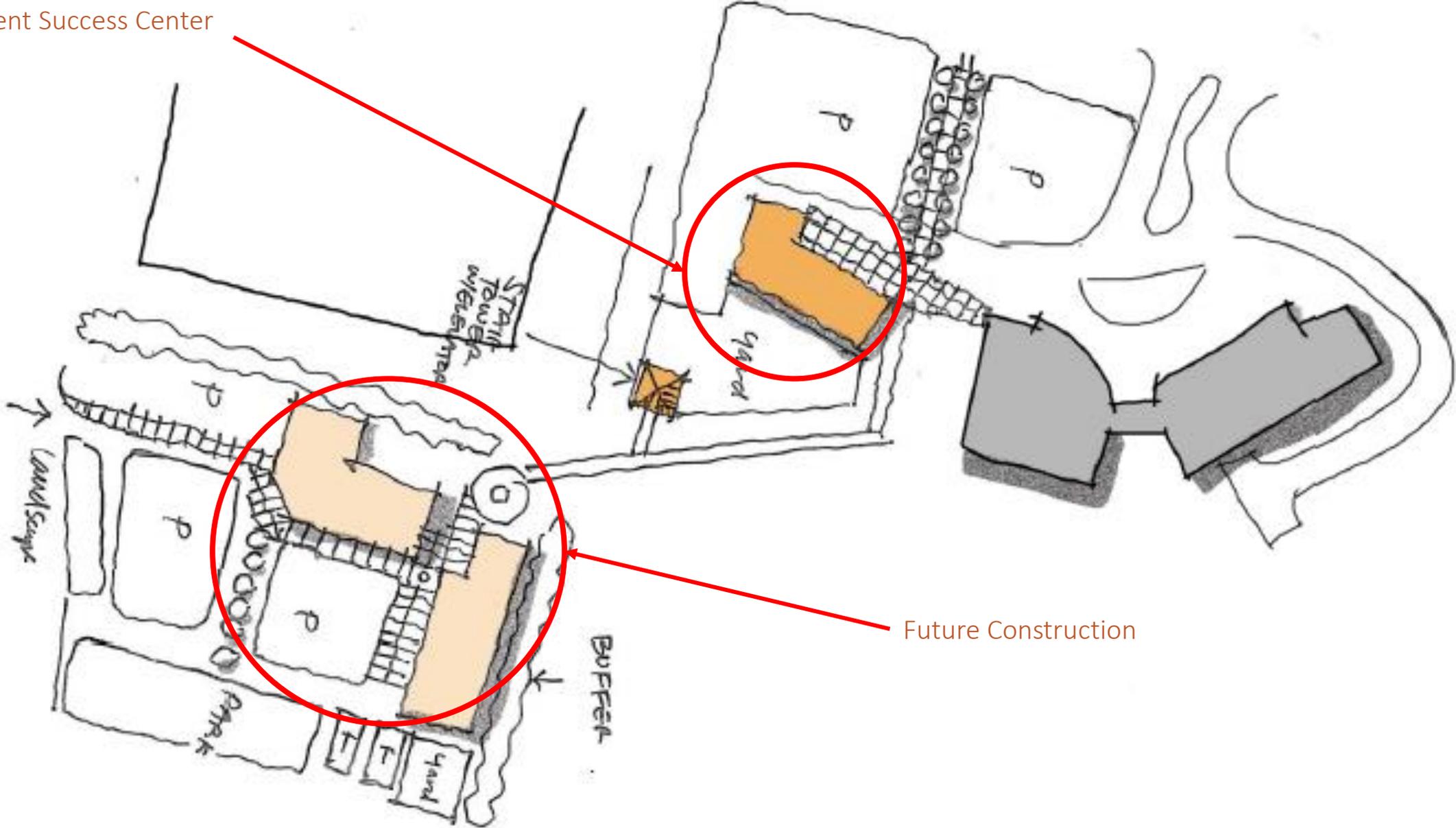
Potential site
6.5 acres

Existing
Vallejo Center

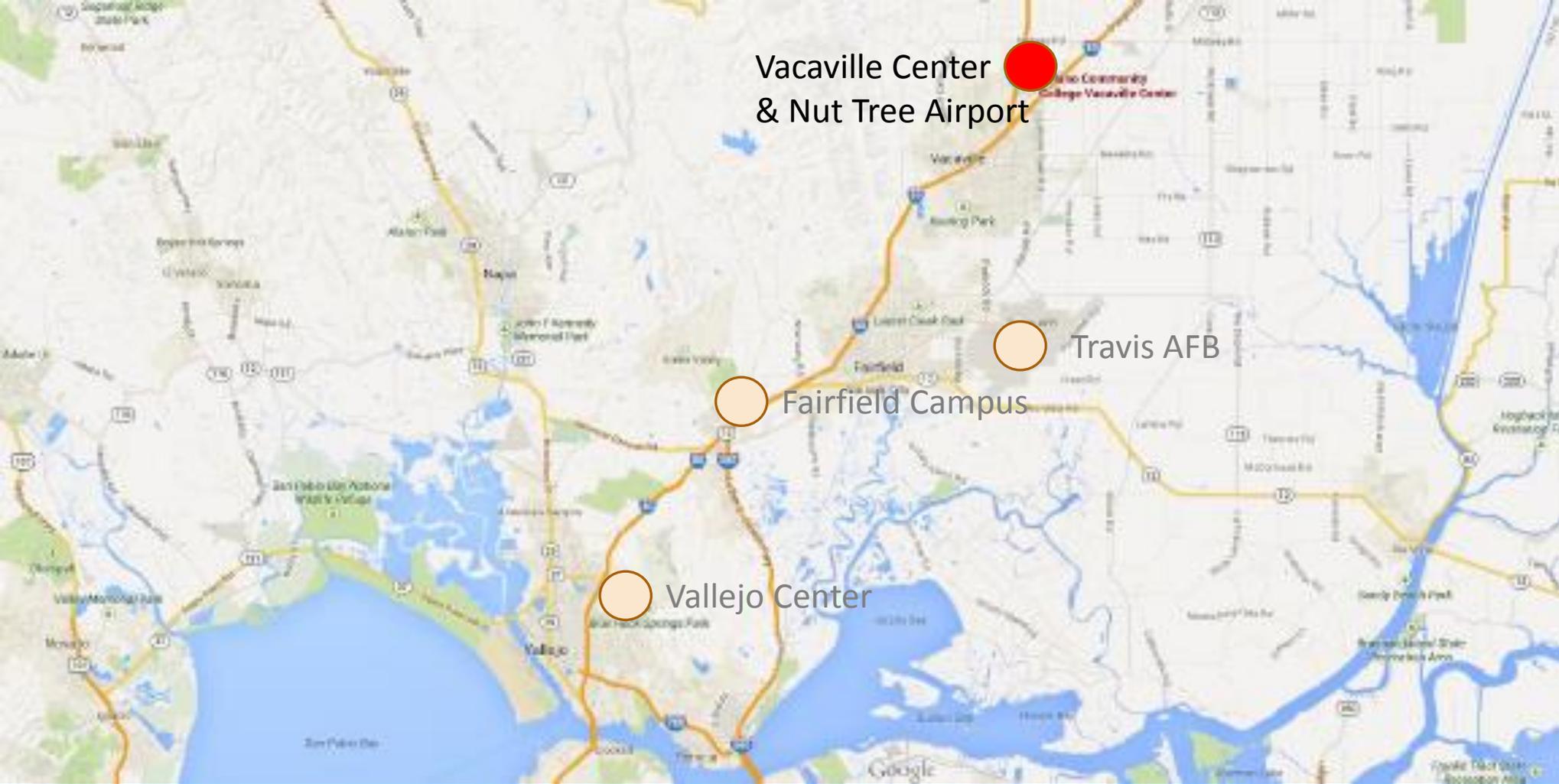


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Autotech and Student Success Center
Tier 1 project







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Measure Q update

Master Plan as of June 2013

Vacaville Annex – classes Fall 2013
Purchase and upgrade – less than the cost of a new building

Existing classroom building

Proposed BioTech Center
First tier project



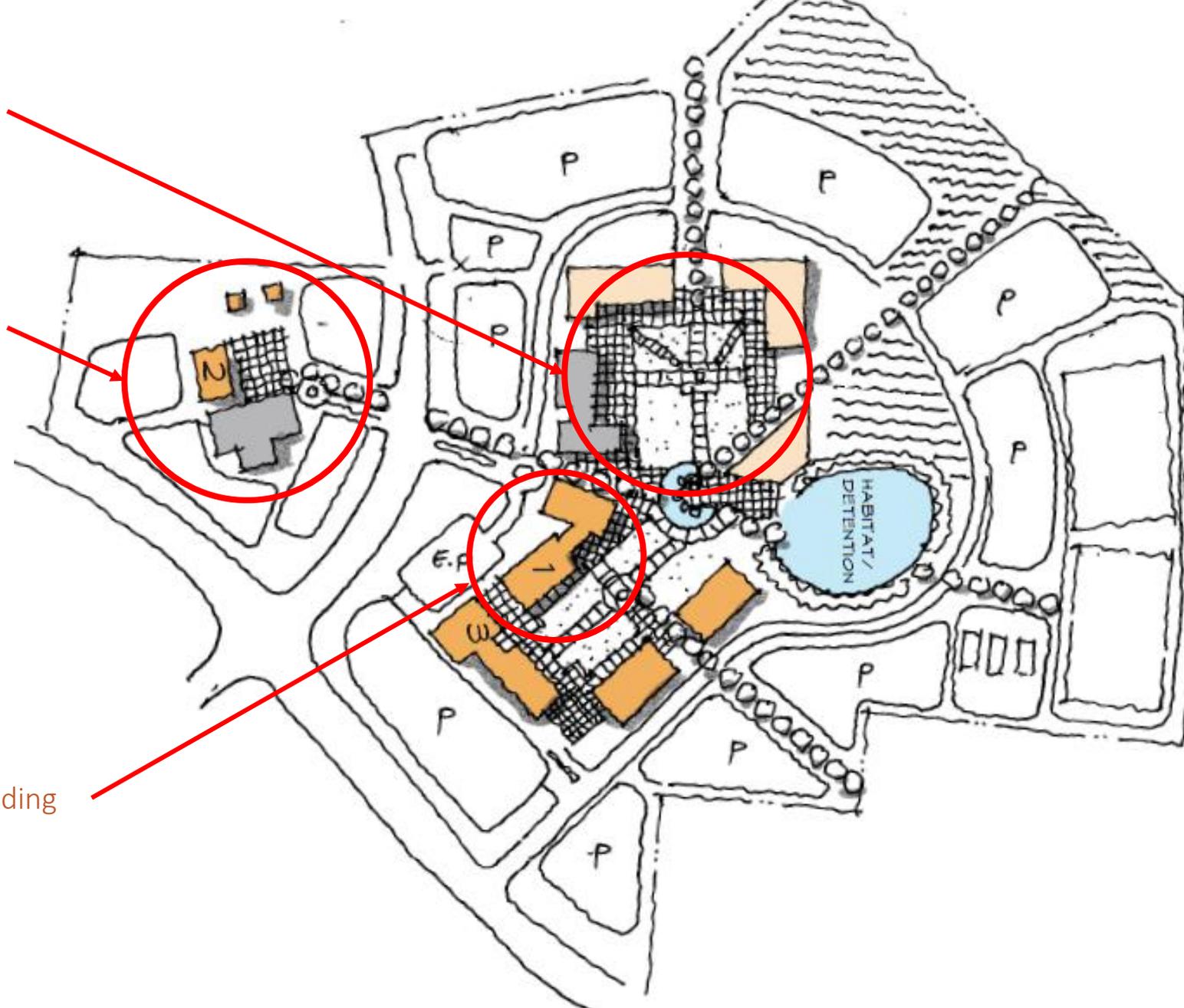
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Measure Q update – STV/vbn Architects + David Gates and Associates

Courtyard configuration
Future construction

Tier 1: Vacaville Annex:
*SCCD classrooms
*SCOE classrooms

Tier 1 project: Biotech building





Master Plan as of
June 2013

Proposed ICON aircraft
site

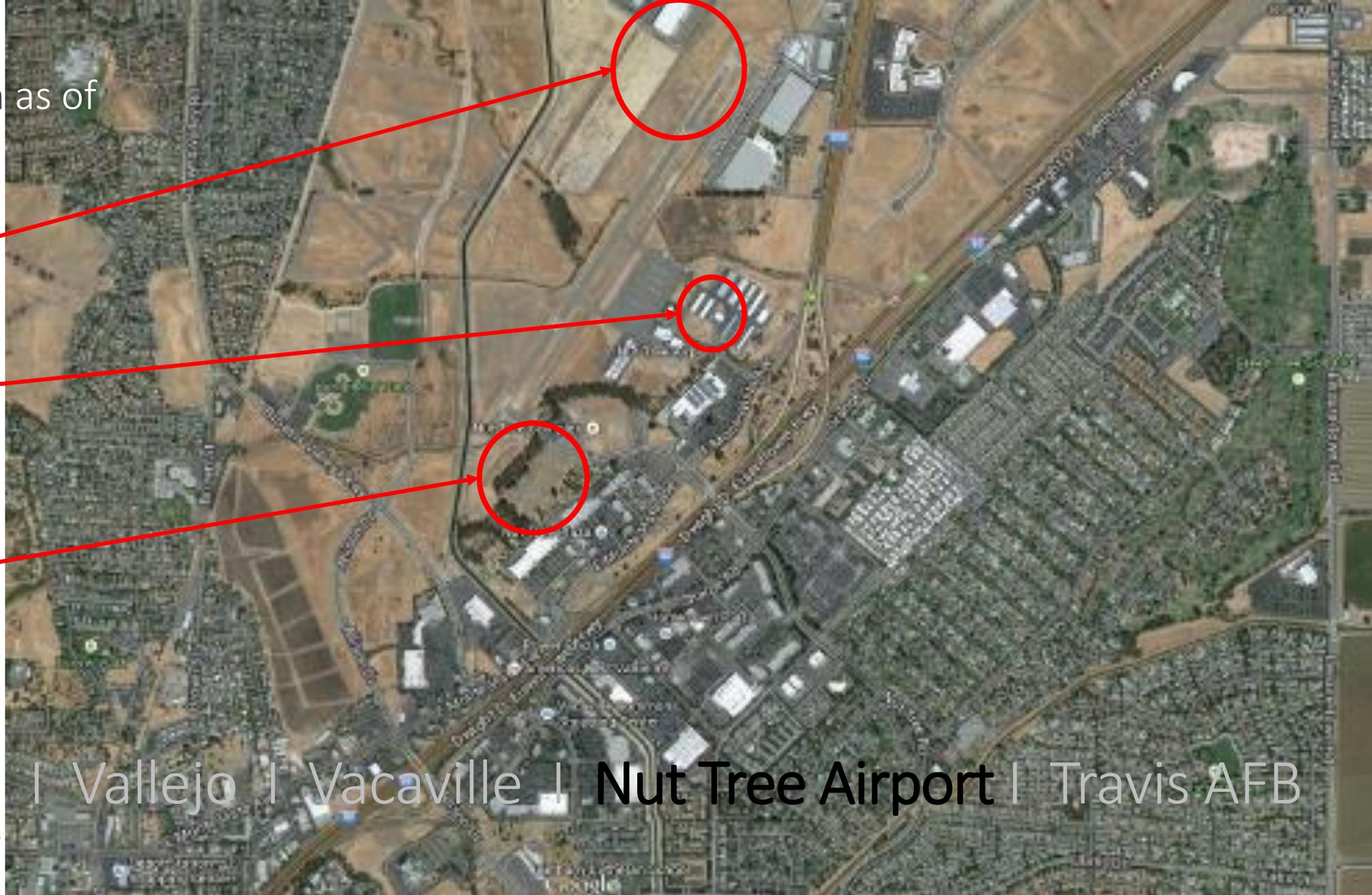
College hangar:
Aeronautics program

Jimmy Doolittle Center:

SCCD Aviation &
Corporate Training

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Measure Q update





County Road 100

NUT TREE

N.20°25'29"E
183.42' 174.16'

1059.11'
365.97'
295.12'
178.02'
157.67'
R=1438.33'
L=383.09'

329.82'
407.87'
188.89'
9.08'
215.07'
408.07'
230.56'

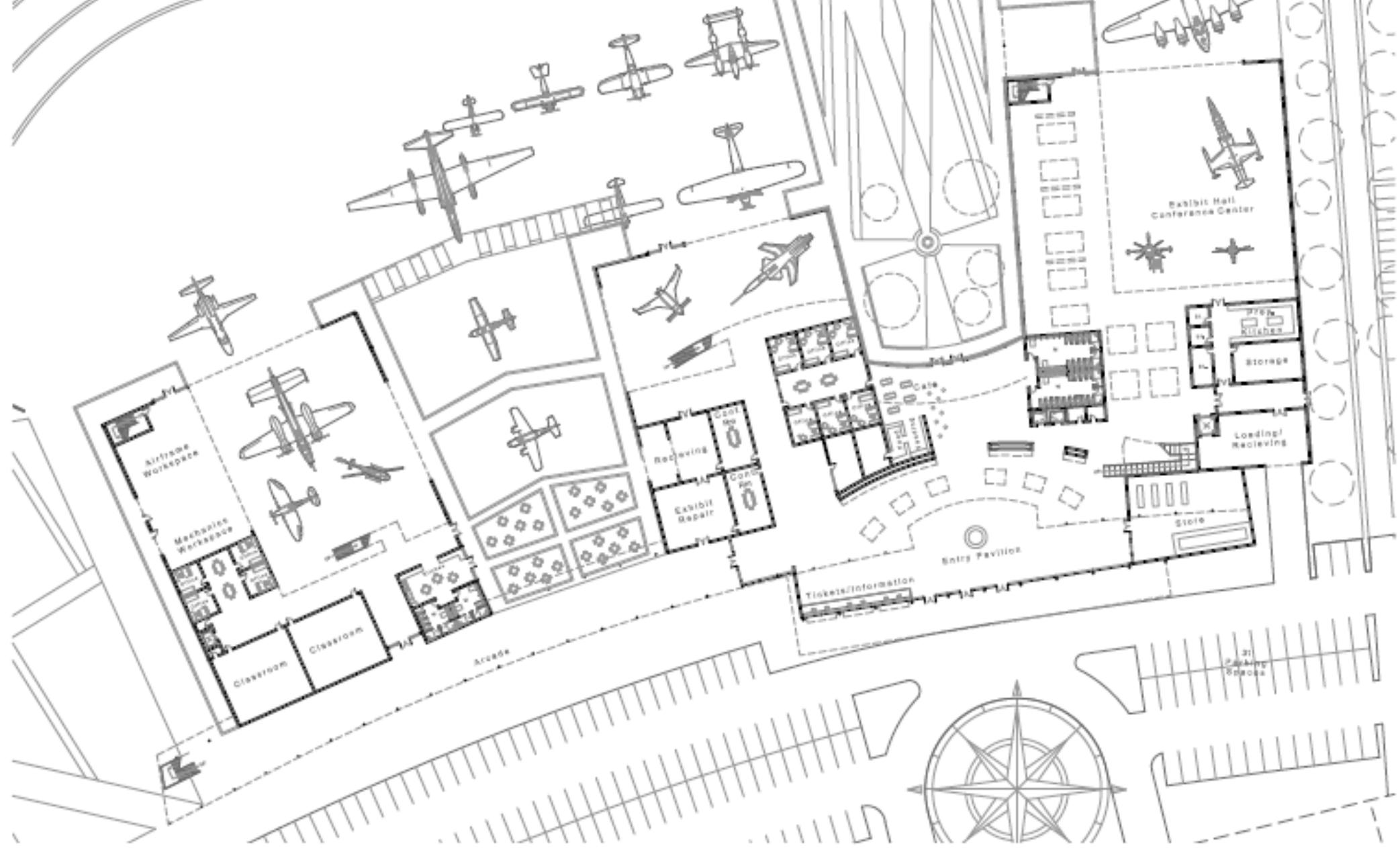
N.33°45'15"E
123.70'
551.79'
N.88°59'01"E
590.68'
652.77'
N.15°36'39"W
673.24'
L=39.48'
389.70'

59.97'
12.45'
234.25'
13.90'
17.17 AC
2.22 AC
L=88.72'
47.46'

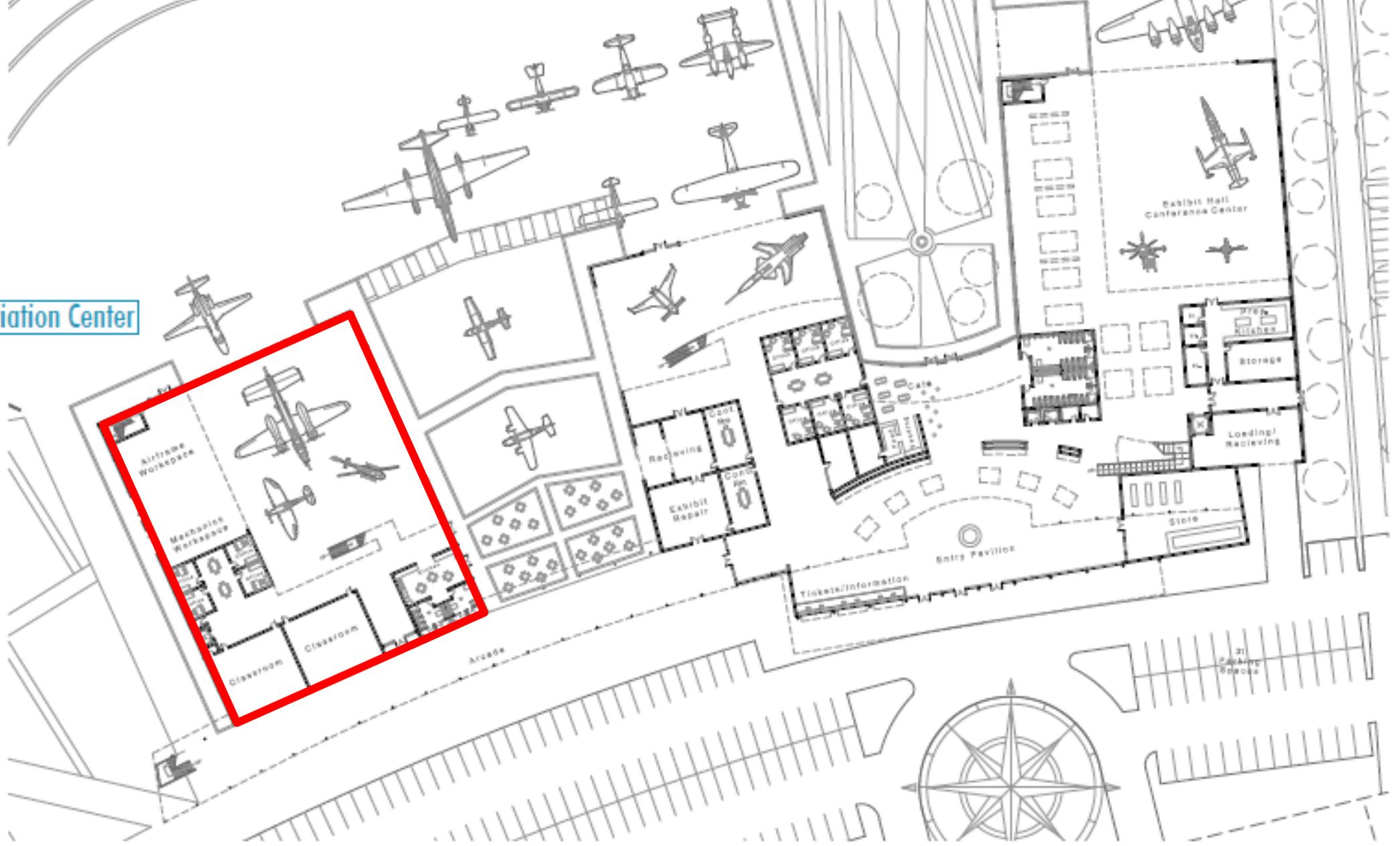
Joint property purchase:
Jimmy Doolittle Center
SCCD







SCC Aviation Center







Opportunities for efficiency:

Design Build and/or Lease-lease back delivery method – faster delivery
ESCO delivery for energy savings – straight to bottom line

Opportunities to leverage funds with strategic partnerships:

- *Nut Tree Airport – Jimmy Doolittle Museum
- *Solano County Office of Education – Classrooms at Vacaville
- *Dixon High School – Classrooms
- Suisun City – Harbor Theater performances

*started

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Measure Q update

Likely first tier projects:

- Science-Math Building – Fairfield
- Autotech Building – Vallejo
- Site Improvements - Vallejo
- Biotech Building – Vacaville
- Aviation and Corporate Training – Vacaville
- Structural upgrade – Vacaville Annex

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Measure Q update



Questions?

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Measure Q update