

MASTER PLAN TOWN HALL
DRAFT MASTER PLAN

JUNE 17, 2016

Palm Desert Campus

Cal State San Bernardino

AGENDA

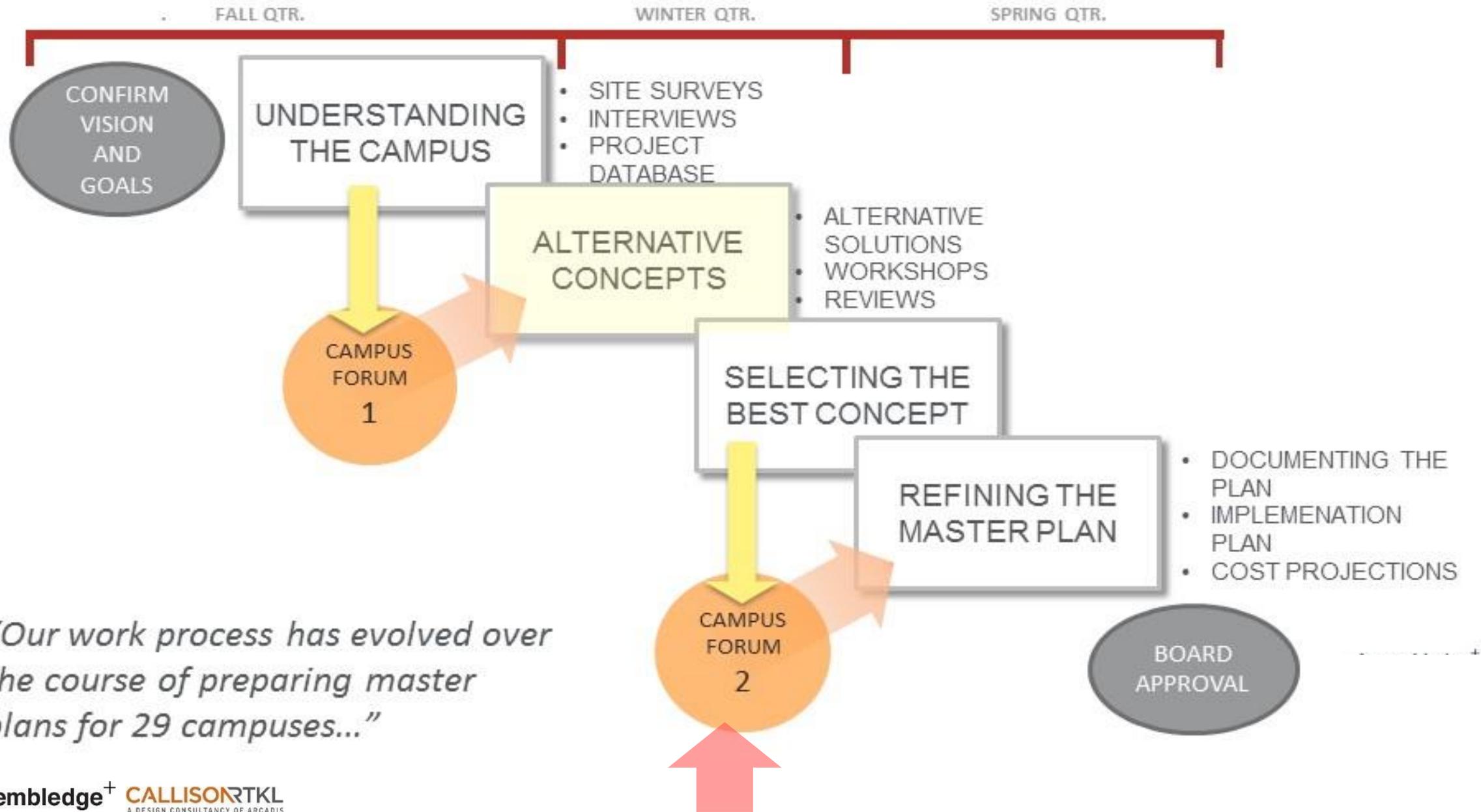
- Opening comments: President Morales
- Introduction: Jeff Thompson
- Master plan process and schedule
- Master plan goals
- Projected space requirements
- Review optional growth scenarios and feedback
- Review Consensus master plan concept
- Potential near term projects

OBJECTIVES OF THE PDC MASTER PLAN

- Upgrade Academic Facilities & Accommodate growth to 8000 FTE
- Create a collegial, aesthetic campus that supports learning
- Promote sustainability
- Enhance internal and external connectivity
- Elevate the PDC 'Brand'
- Engage and positively impact the community



MASTER PLAN PROCESS



SPACE REQUIREMENTS

NEAR TERM PROGRAM NEEDS AND POTENTIALS FOR PDC

- Library/Media Center
- Classrooms to accommodate 30-35, 60 student lecture and a large lecture room of 300-500 students.)
- Hospitality Program (including food kitchens, restaurant, industrial food labs and possible teaching hotel facilities)
- Student Union/Food Commons/Dining Hall
- Exterior seating/social area for students/shaded areas
- Sound Stage and Film Projection Building
- Student Resource Center (Writing Center, Career Services, Math Tutoring, Mentoring)
- Residence Halls (with areas that could be used for Senior Hostel or the hoapitality program)
- Gym/Small arena (Basketball/volleyball)

CSUSB PALM DESERT: CAMPUS BENCHMARKS

- Year established 1985
- Fall 2014 FTE: 1,093
- Campus Acres (excluding UCR): 180
- Campus Assignable Sq. Ft. (ASF): 61,810
- Campus Parking capacity: (current spaces): 335

CSUSB PALM DESERT: ENROLLMENT GOAL/REQUIREMENTS

- Enrollment Goal: 8,000 FTE
- Current Campus Capacity 2,500 FTE
- New Development required 879 – 1,103,000 GSF
(Equivalent to 9 or 10 buildings of approximately 80,000GSF each)
- Required Parking capacity: (at .5 spaces per FTE) 4,000

CSUSB PALM DESERT: LONG TERM SPACE NEEDS ESTIMATE

Major Campus Space Categories

Gross Square Feet Ranges



Instructional

350,000 - 490,000



Library & Media

155,000 - 200,000



Physical Education

111,000 - 115,000



Student Support

130,000 - 150,000



Administration

98,000 - 105,000



Assembly & Exhibit

10,000 - 15,000



Physical Plant

25,000 - 28,000

TOTAL 879,000 - 1,103,000

OPTIONAL MASTER PLAN CONCEPTS

UNIVERSITY NEIGHBORHOOD SPECIFIC PLAN

PLANNING AREA CONTEXT:

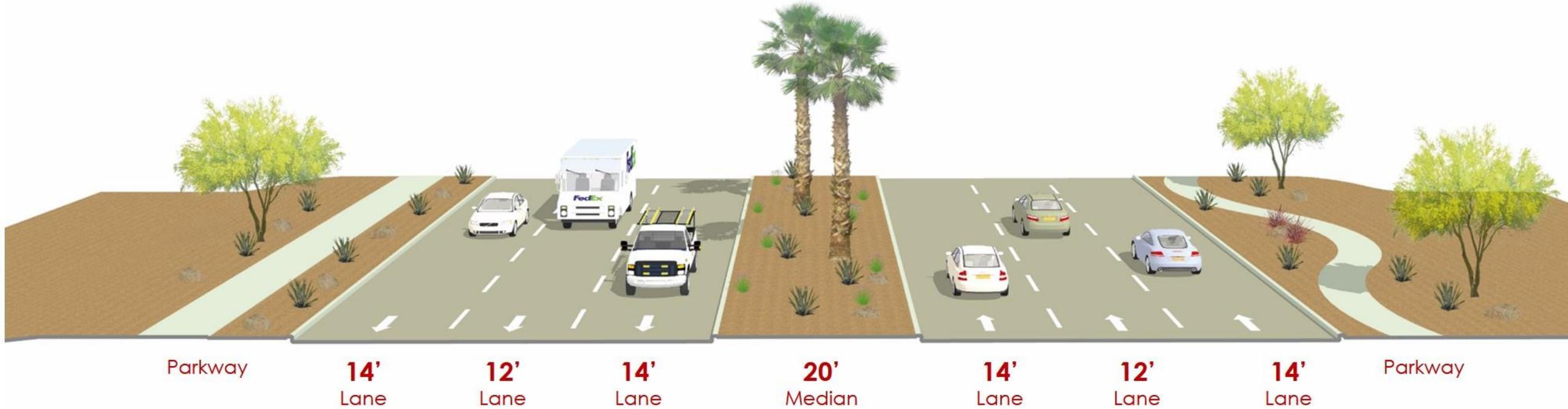
- **University Neighborhood Specific Plan**
168 Acre Planning Area at the corner of Frank Sinatra Dr and Portola Ave.
- **UC Riverside – Palm Desert Campus**
- **Pending & Approved Plans and Tracts:**
 - **University Village:** A 204 acre Neighborhood Plan directly adjacent (north) the UNSP planning area.
 - **The Millennium Palm Desert:** A 163 acre plan between Gerald Ford Dr and I-10.
 - **Spanish Walk:** Planned (partially constructed residential neighborhood at Frank Sinatra Dr and I-10.)
- **University Planning Area**



STREET FRAMEWORK

EXISTING CONDITION Gerald Ford Drive and Cook Street

EXISTING CONDITION



Parkway

14'
Lane

12'
Lane

14'
Lane

20'
Median

14'
Lane

12'
Lane

14'
Lane

Parkway

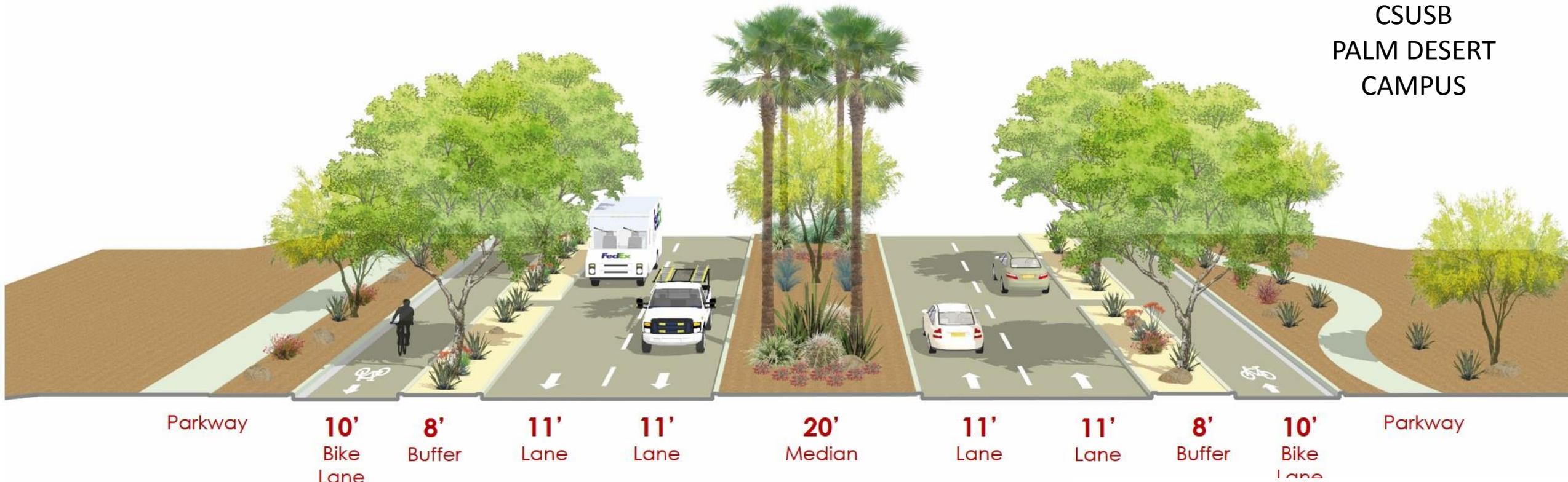


STREET FRAMEWORK

PROPOSED ALTERNATIVES Gerald Ford Drive and Cook Street

CSUSB
PALM DESERT
CAMPUS

ALTERNATIVE #3



Parkway

10'
Bike
Lane

8'
Buffer

11'
Lane

11'
Lane

20'
Median

11'
Lane

11'
Lane

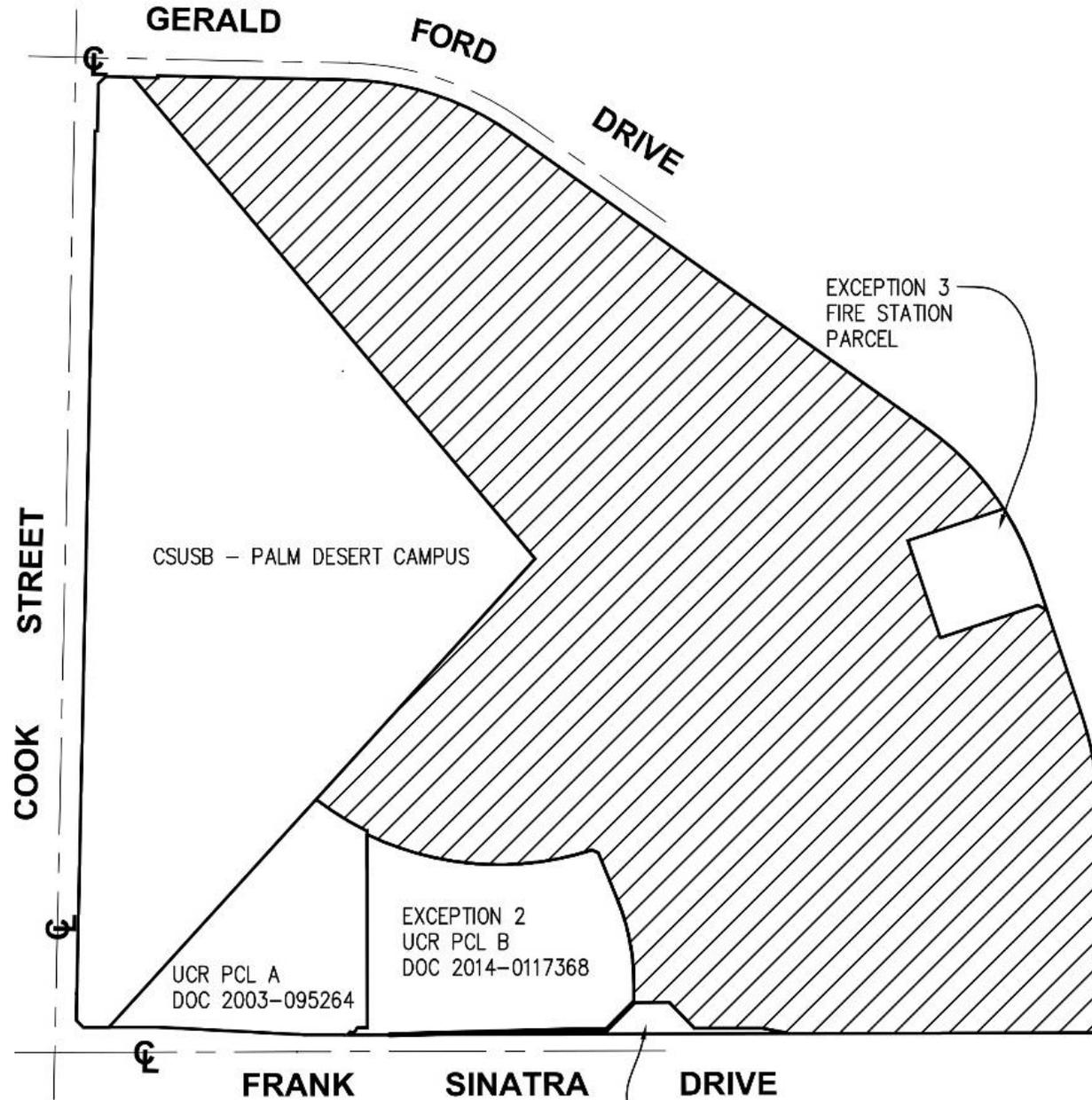
8'
Buffer

10'
Bike
Lane

Parkway



CSUSB LAND OWNERSHIP



CSUSB LAND OWNERSHIP



**EXISTING PDC
CAMPUS**



CSUSB

UCR

SCHEME A
TIERED
CENTRAL SPINE



OVERVIEW OF CAMPUS PROGRAM CONFIGURATION IN SCHEME A - FROM THE NORTH



SCHEME B COURTYARDS



OVERVIEW OF CAMPUS PROGRAM CONFIGURATION IN SCHEME B - FROM THE NORTH



LEGEND

BUILDING USE CATEGORIES

- Academic / Instructional
- Joint Library / Media Center & Student Union
- Student Housing

SCHEME C
CENTRAL
CORRIDOR



OVERVIEW OF CAMPUS PROGRAM CONFIGURATION IN SCHEME C - FROM THE NORTH



SCHEME A: TIERED PROMENADE



48%

ENGAGE CAMPUS WITH SURROUNDING CONTEXT THROUGH EMPHASIZED PEDESTRIAN ACCESSIBILITY THROUGHOUT CAMPUS

- Site design driven by existing circular roadway repurposed as pedestrian mall
- Second tiered pedestrian spine from Cook/Sinatra intersection to campus core
- Sloped topography to create tiered podiums for future buildings with views to the region (and with potential for structured parking)
- Strong campus image at Cook St and Sinatra Drive
- Integrates campus life & activities with regional views and connections to neighborhood context

SCHEME B: CONNECTED COURTYARDS



6%

OPTIMIZED ACADEMIC CLUSTERS AROUND COOL COURTYARDS FORMING TALL AND COMPACT DEVELOPMENT

- Site design driven by optimized solar orientation to reduce energy use
- Emphasizes green technology integration with architecture
- Increased density (4-5 stories) to reduce pedestrian travel distances
- Integrates campus life & activity into garden courtyards
- Encourages multi-disciplinary shared-space academic buildings
- Reflective of current trends in academic planning for

SCHEME C: CENTRAL CORRIDOR



46%

ALIGNS ALL DEVELOPMENT ALONG A CENTRAL COVERED OR SEMI-ENCLOSED CORRIDOR TO ACTIVATE PUBLIC PLAZA/PROMENADE

- Site design driven by optimized solar orientation to reduce energy use
- Second tiered pedestrian spine from Cook/Sinatra intersection to campus core
- Increased density to reduce pedestrian travel distances
- Integrates campus life & activities
- Opportunities to share resources by department
- Reflective of current trends in academic planning for shared multi-use opportunities

CONSENSUS

MASTER PLAN CONCEPT

DRAFT MASTER PLAN



OVERALL CAMPUS PLAN



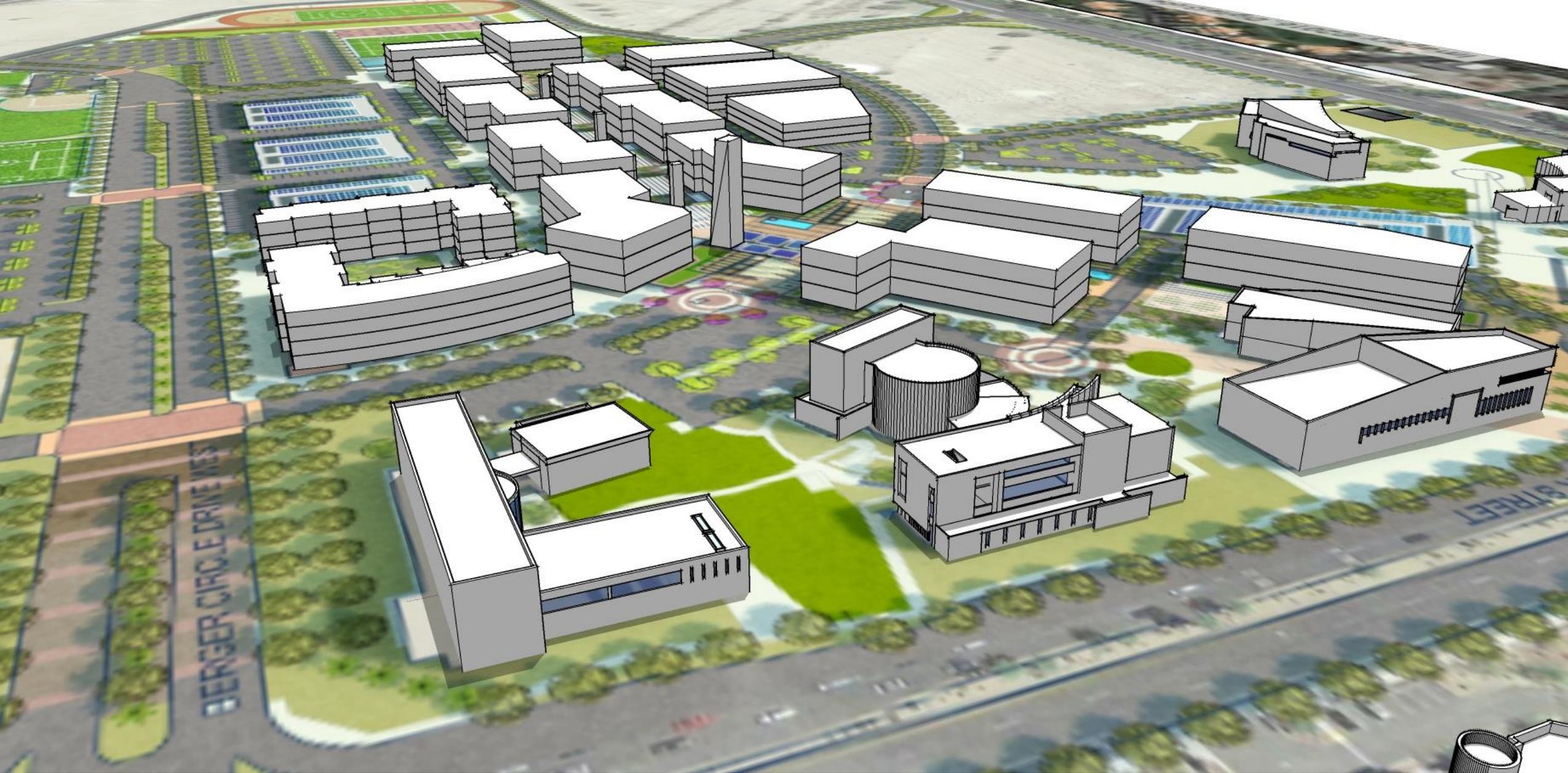


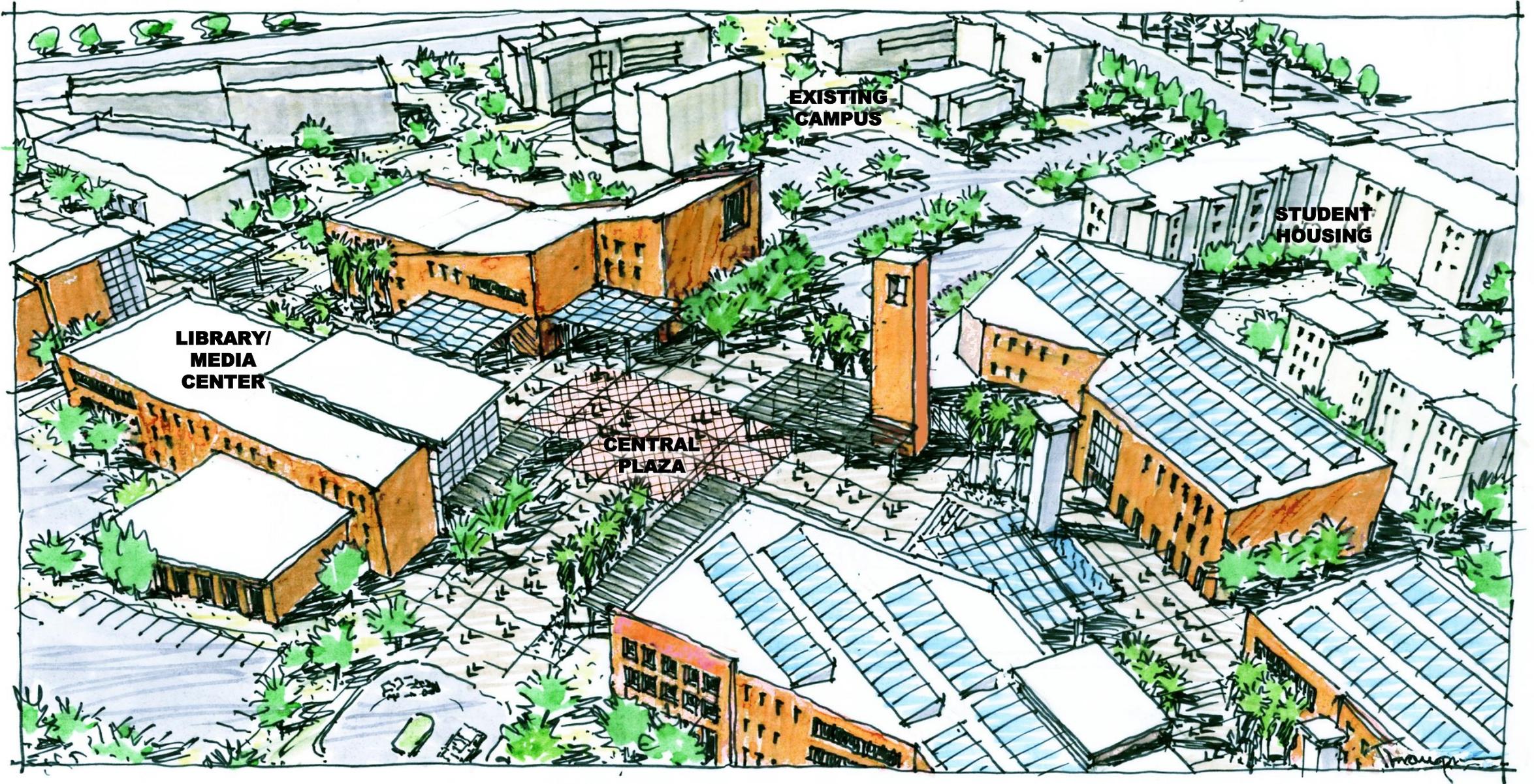
**PE/EVENTS
CENTER**

**LIBRARY/
MEDIA
CENTER**

**STUDENT
HOUSING**

**MIXED USE/
HOUSING**



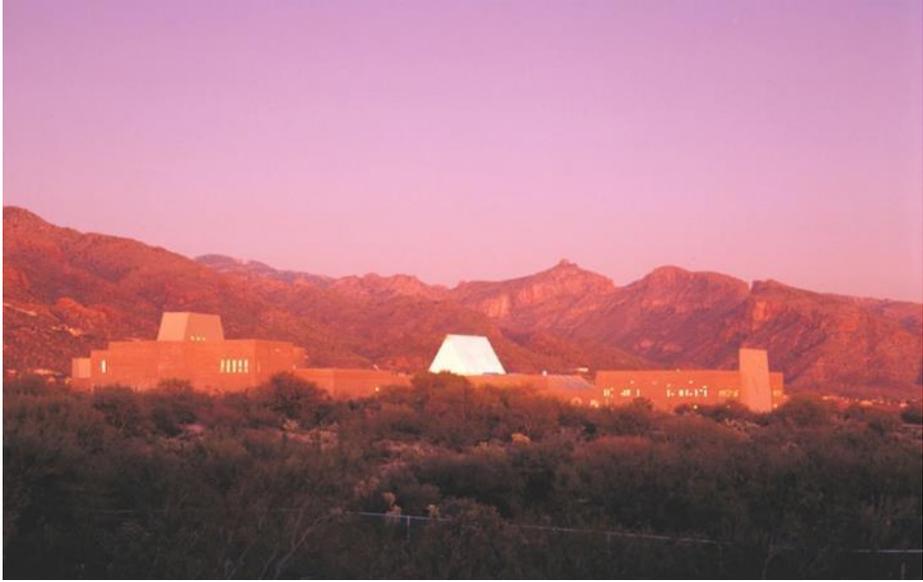


VIEW OF CENTRAL PLAZA

CAMPANILES AND CLOCK TOWERS



ARCHITECTURE TO DISTINGUISH THE CAMPUS



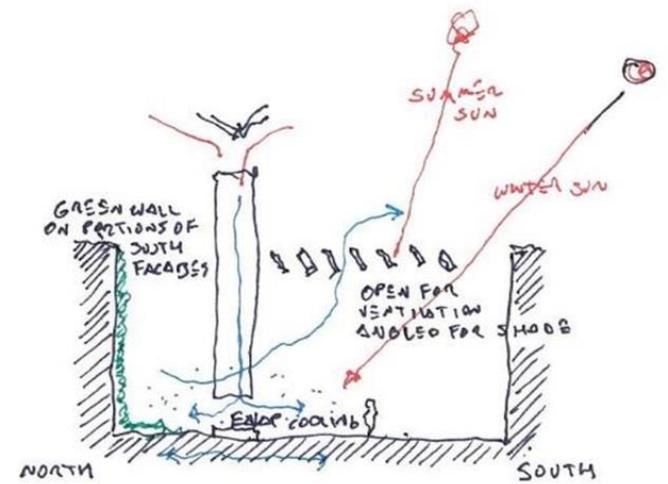


VIEW FROM COOK STREET AT FREEWAY

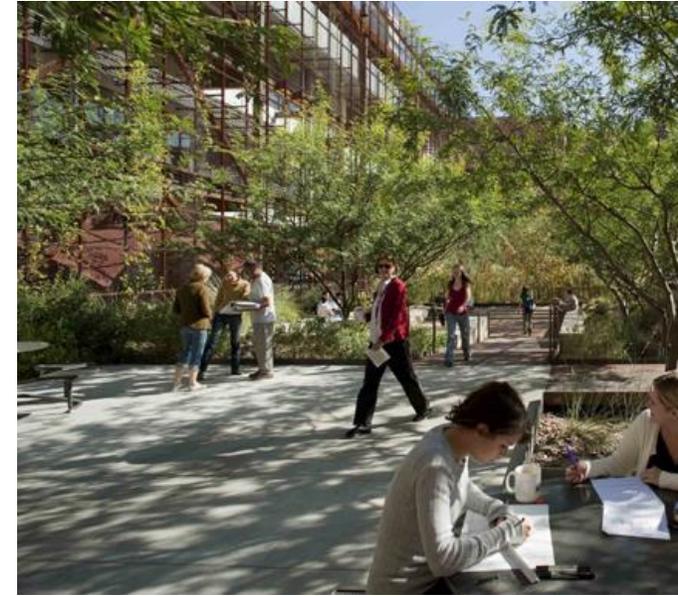


VIEW FROM COOK STREET AT FREEWAY

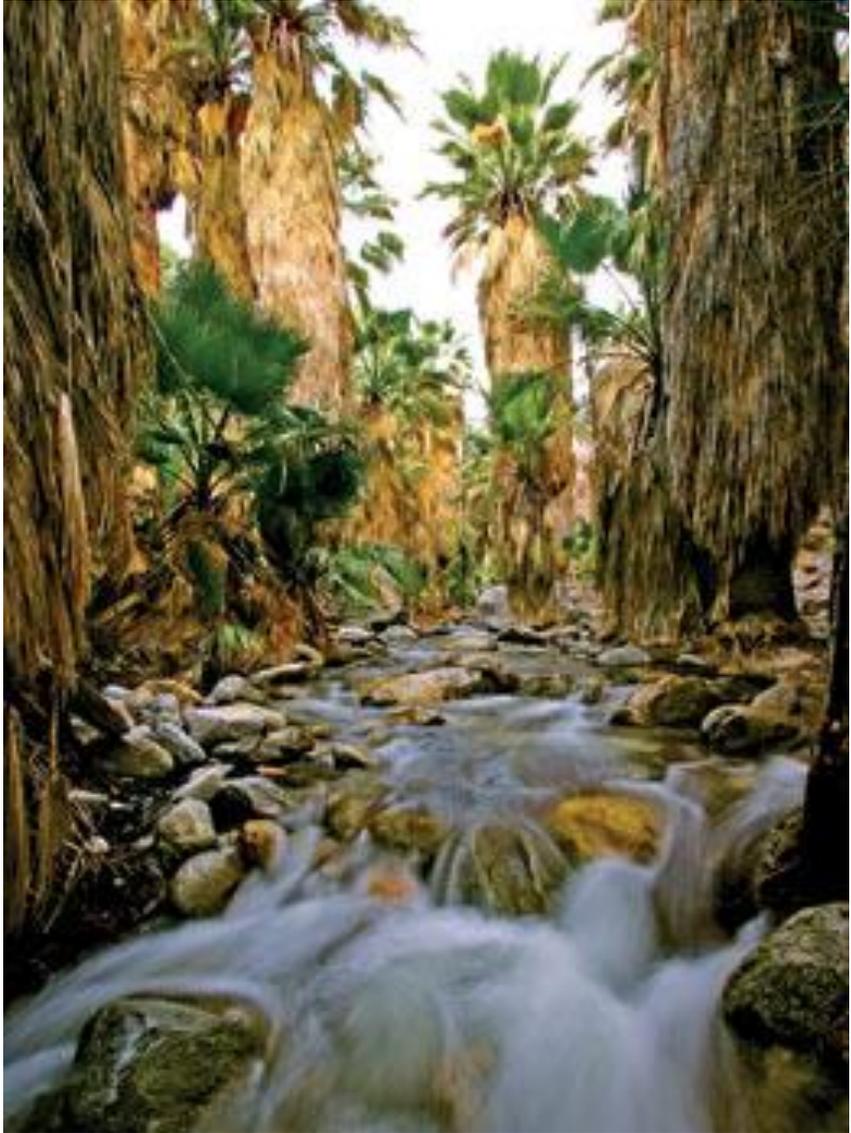
ACADEMIC STREET



ACADEMIC STREET



PALM CANYON





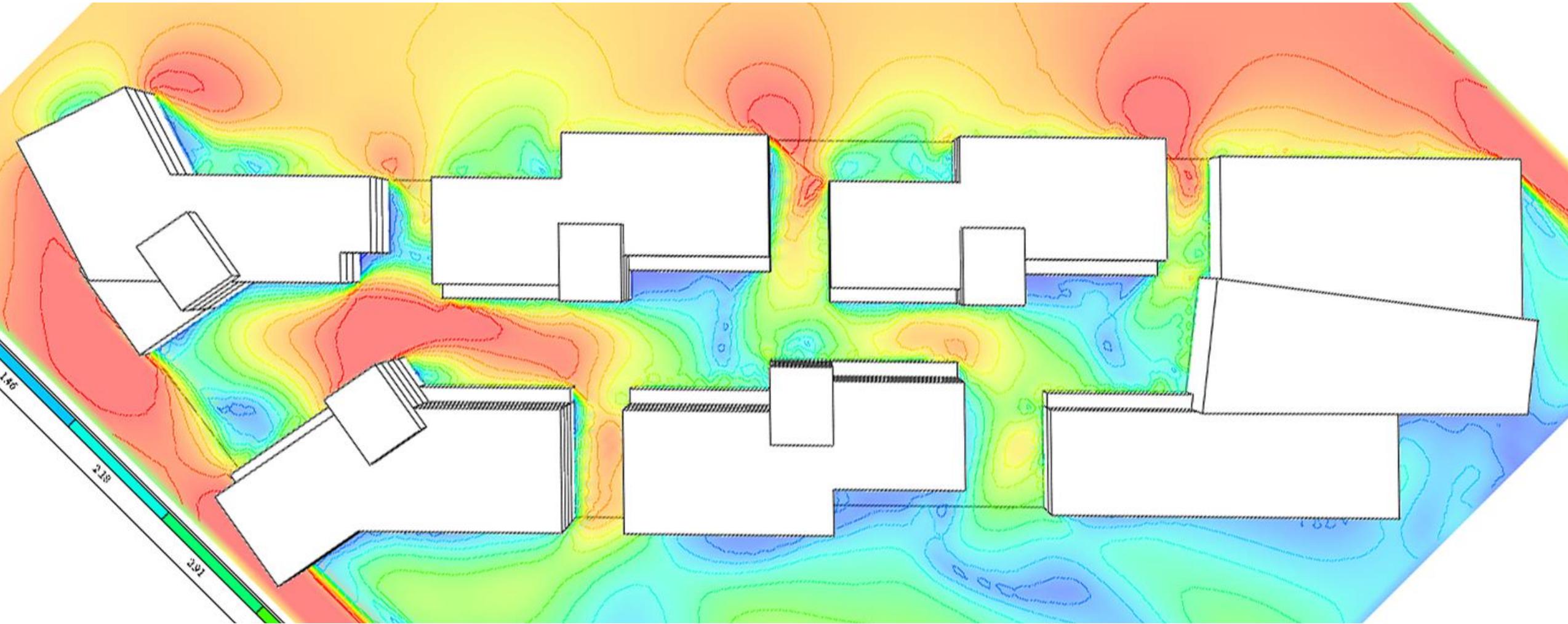
LANDSCAPE CONCEPT: COOK ST. AND FRANK SINATRA

LEGEND

1. SIGNAGE MONUMENTS
2. SCULPTURE EARTH FORM W/
SPECIMEN SUCCULENTS
3. ARRIVAL PLAZA W/ SHADE BOSQUE
4. ADMINISTRATION COURT
5. CENTRAL CAMPUS PEDESTRIAN COURT
6. NATIVE PALM ALLEE
7. SHADE TREE BOSQUE PLAZA
8. SHADE TREE ALLEE
9. DROP OFF/PICK UP
10. COOK STREET PEDESTRIAN WALK
11. OPEN SPACE/STORM WATER
RETENTION AREA
12. BRIDGE OVER RETENTION AREA
13. NATIVE TREE GROVE
14. WINDROW

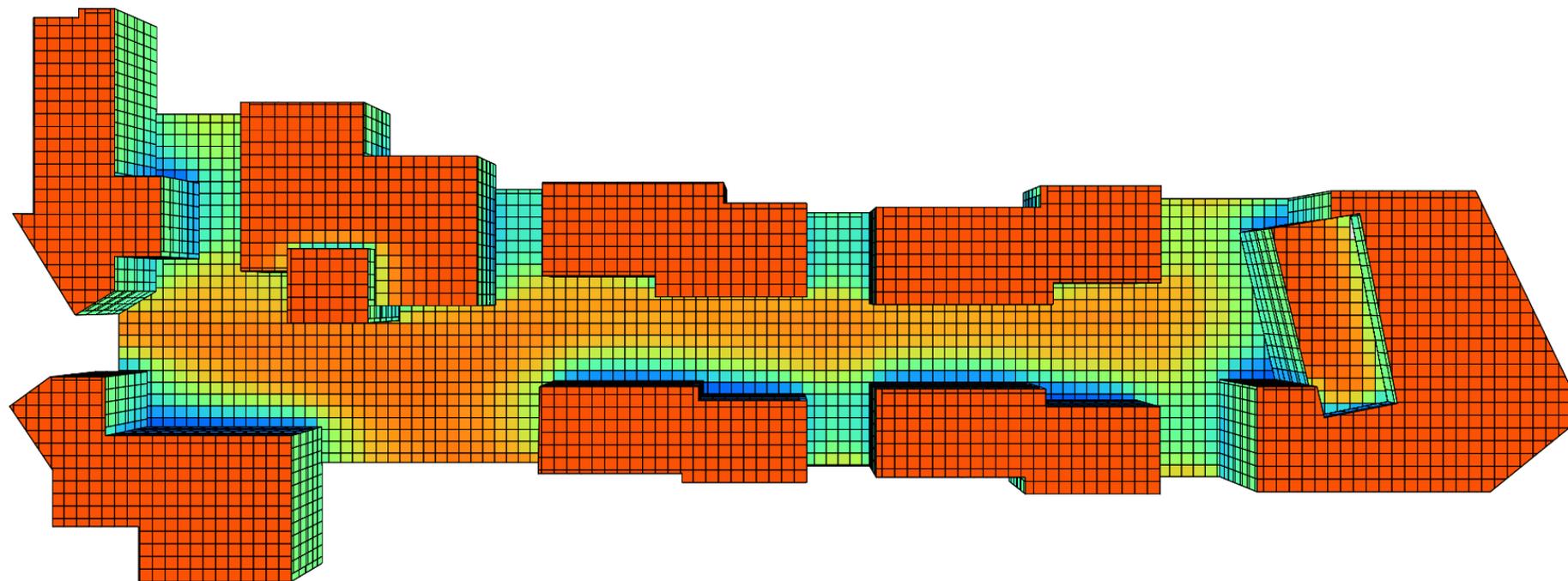
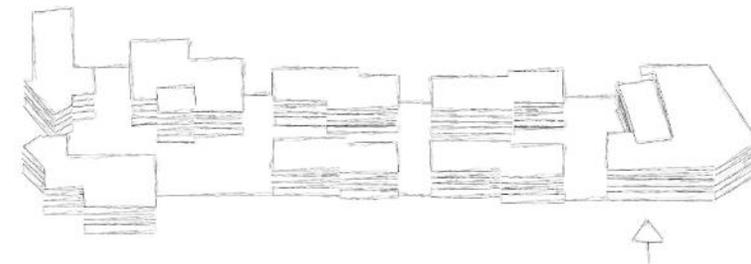


PERFORMANCE DRIVEN DESIGN



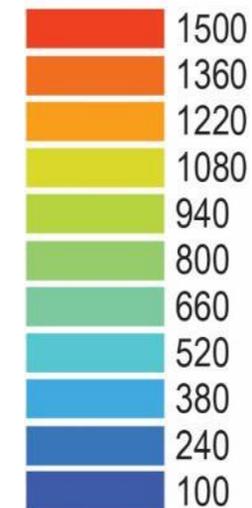
ACADEMIC STREET

Solar radiation study from
April 1st to October 31st



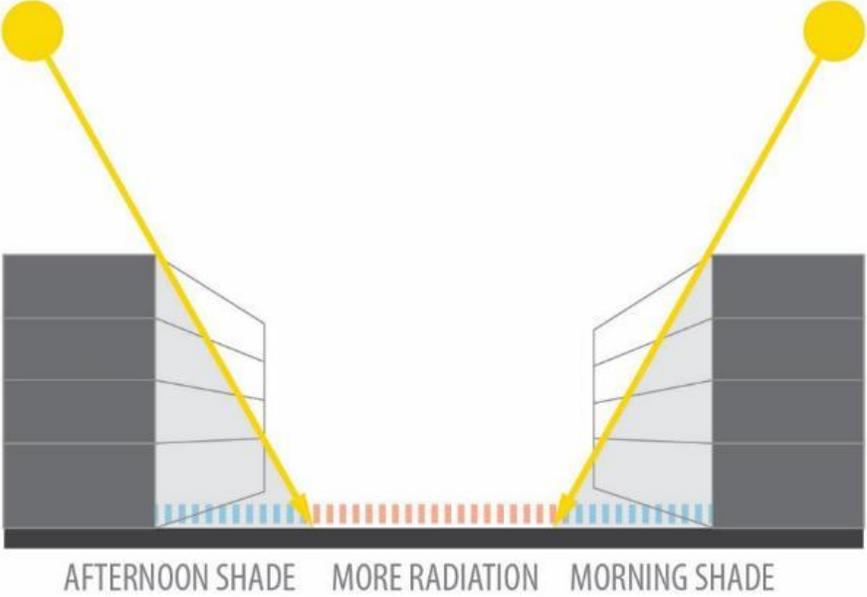
High values of solar radiation in most outdoor areas in the east west axis

kWh/m²



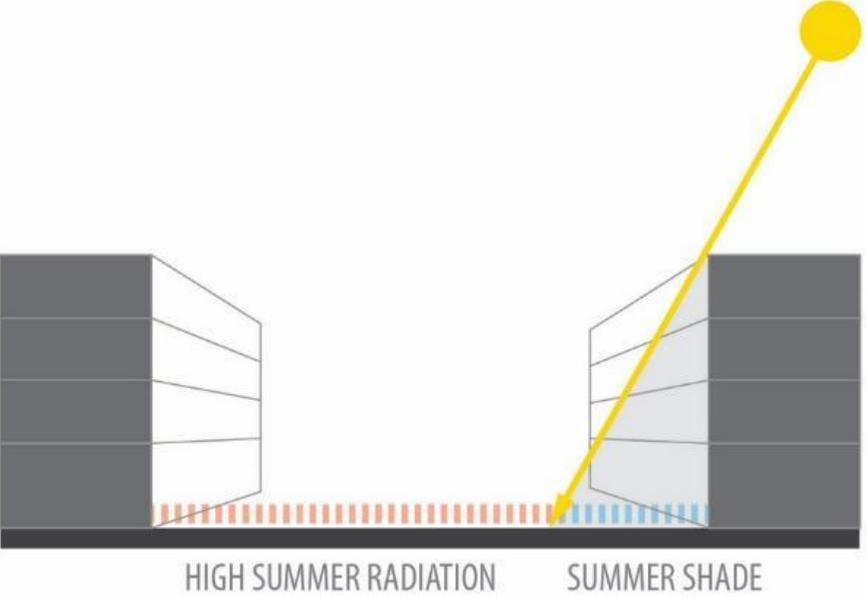
Solar Impact North-South versus East West

afternoon sun is combined with higher temperatures



NORTH-SOUTH AXIS

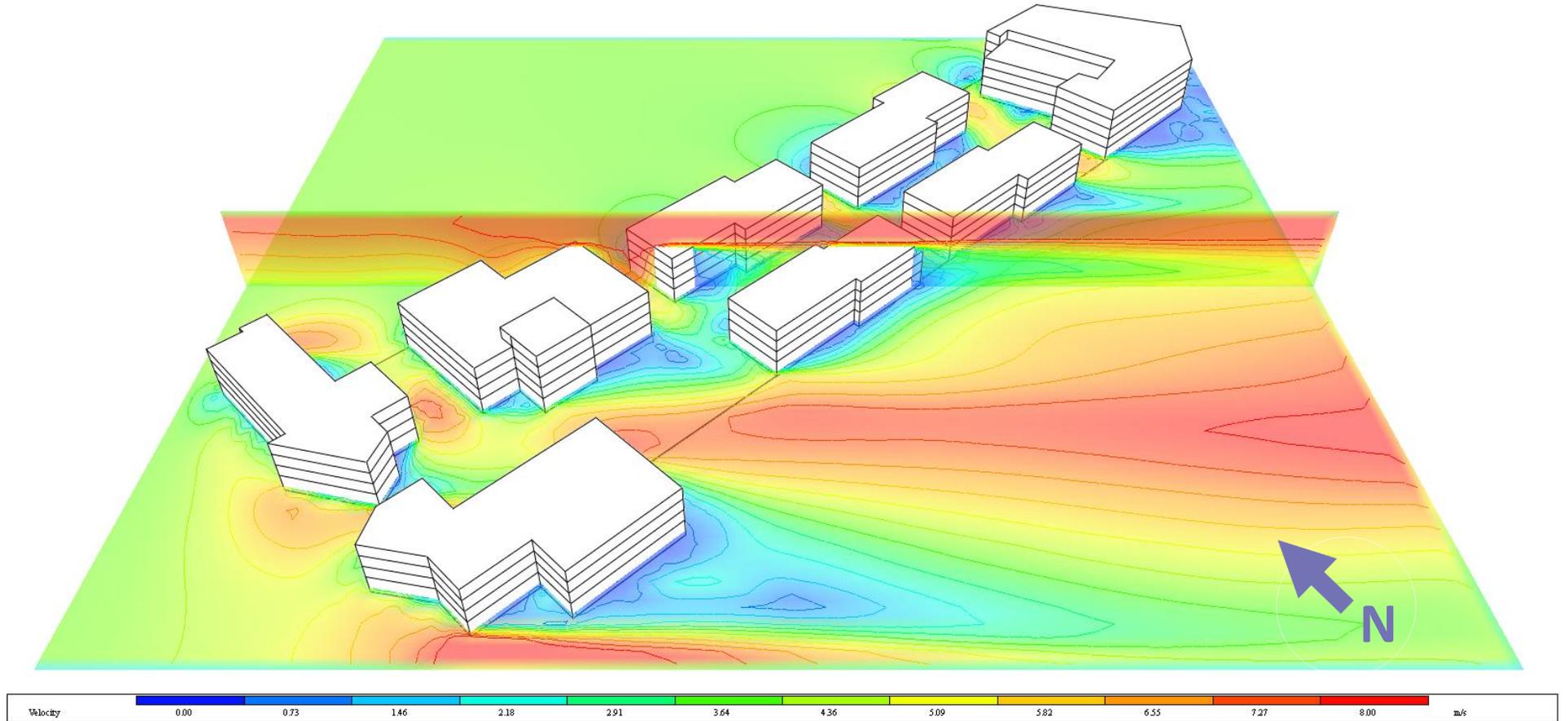
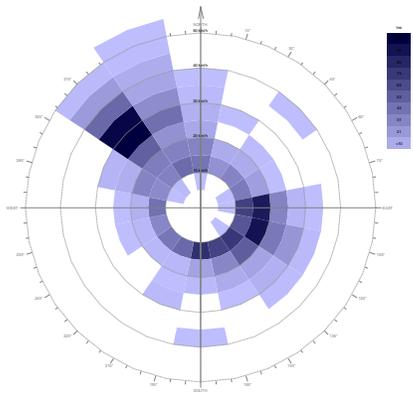
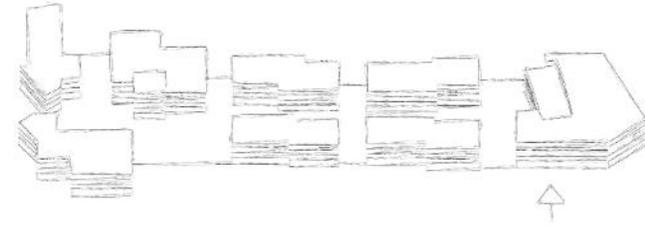
march 21st, noon



EAST-WEST AXIS

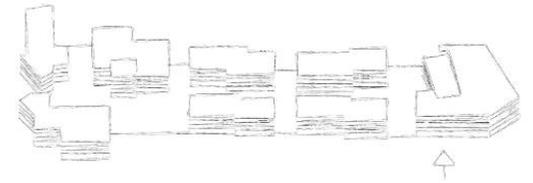
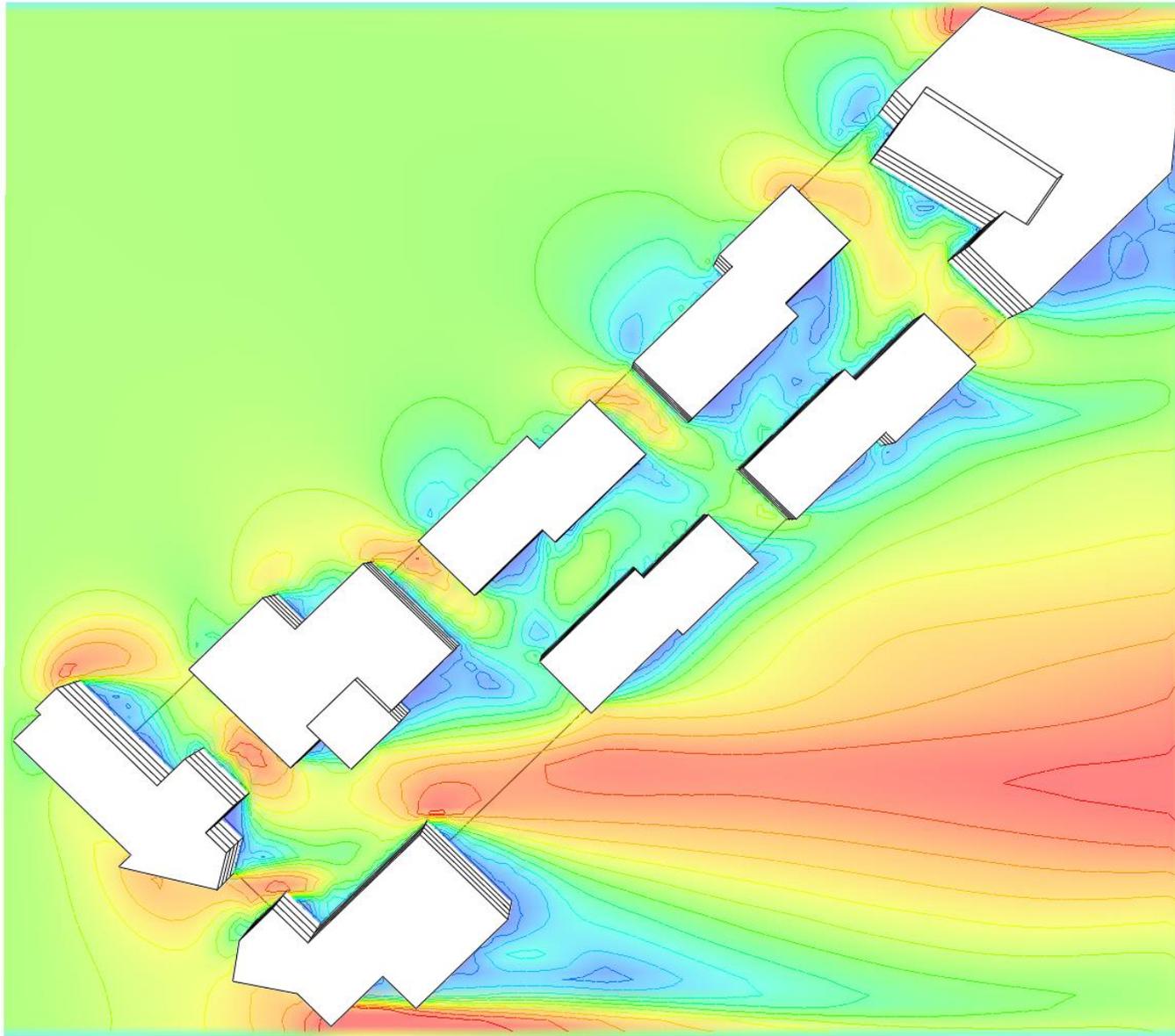
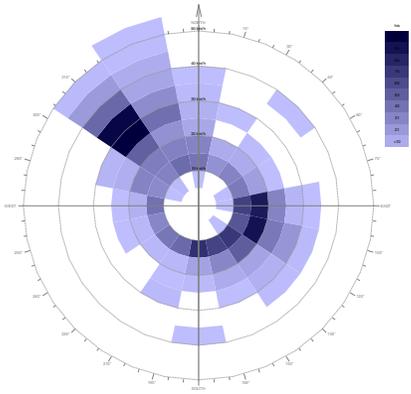
WIND

Wind direction = 315°
Wind Speed = 8.3 m/s



WIND

Wind direction = 315°
Wind Speed = 8.3 m/s



SOLAR ENERGY

SOLAR TILES



SOLAR CANOPY



DAYLIGHT



PERFORMATIVE SHADING



BIPV



SHADE





JESU
Memorial
Union
North Entrance

Map
201

VEGETATED SURFACES

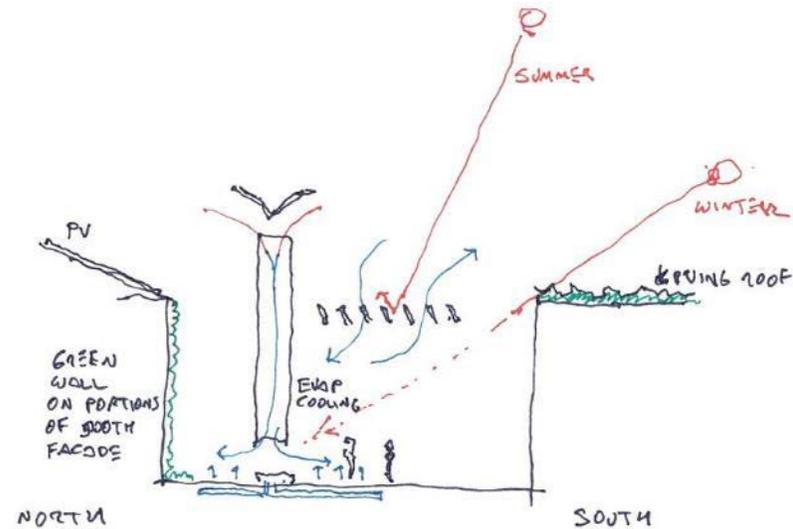
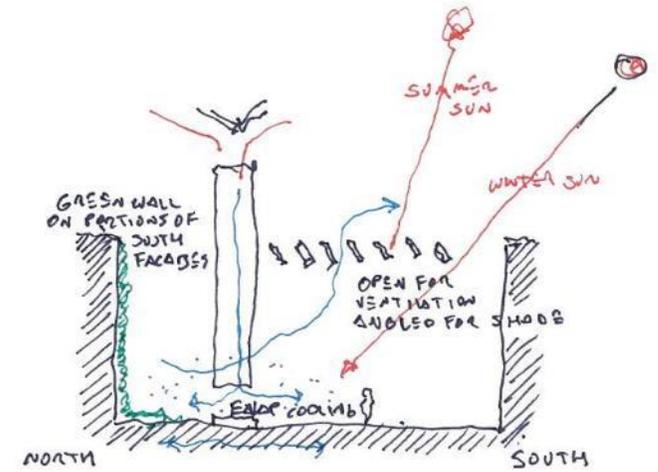
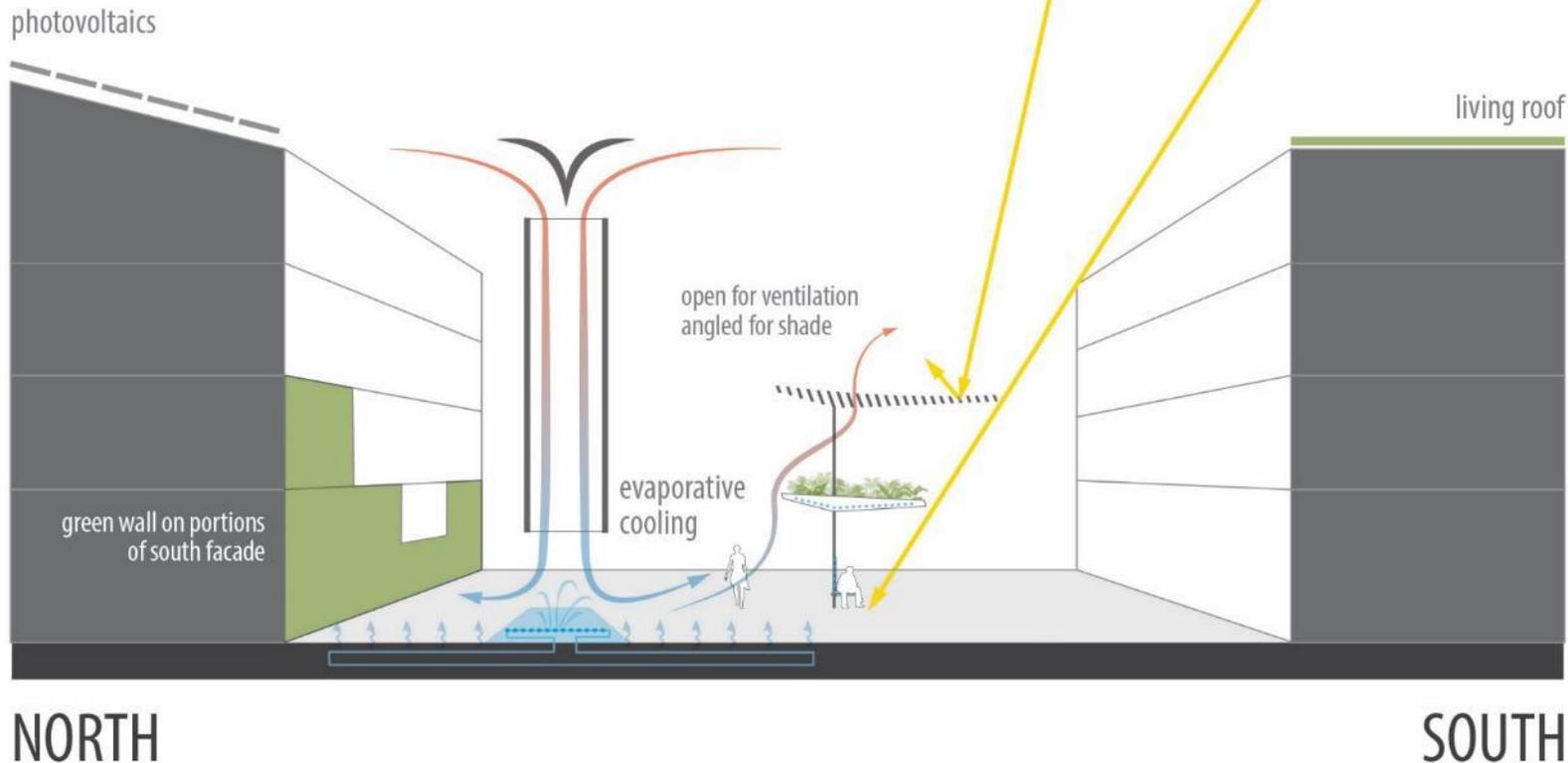


EVAPORATIVE COOLING CASE STUDIES



OUTDOOR TEACHING SPACES

- Permeable shade blocks the sun and provides opportunity for air movement.
- More shading to the south of occupied space.
- Green roof cools by radiation the space below
- Cool wall techniques on the south facades
- Living roofs on south buildings
- PV on north buildings.
- Evaporative cooling conditions air at occupant level



TOOLS FOR SUSTAINABLE COMFORT

COOLING TOWER - cools air entering at lower level while solar tower helps evacuate the air as it is warmed

Evaporative Cooling

Warm Air

Permeable Shade

Cool Surfaces

Cool Air

Cool Benches

Radiant Cooling

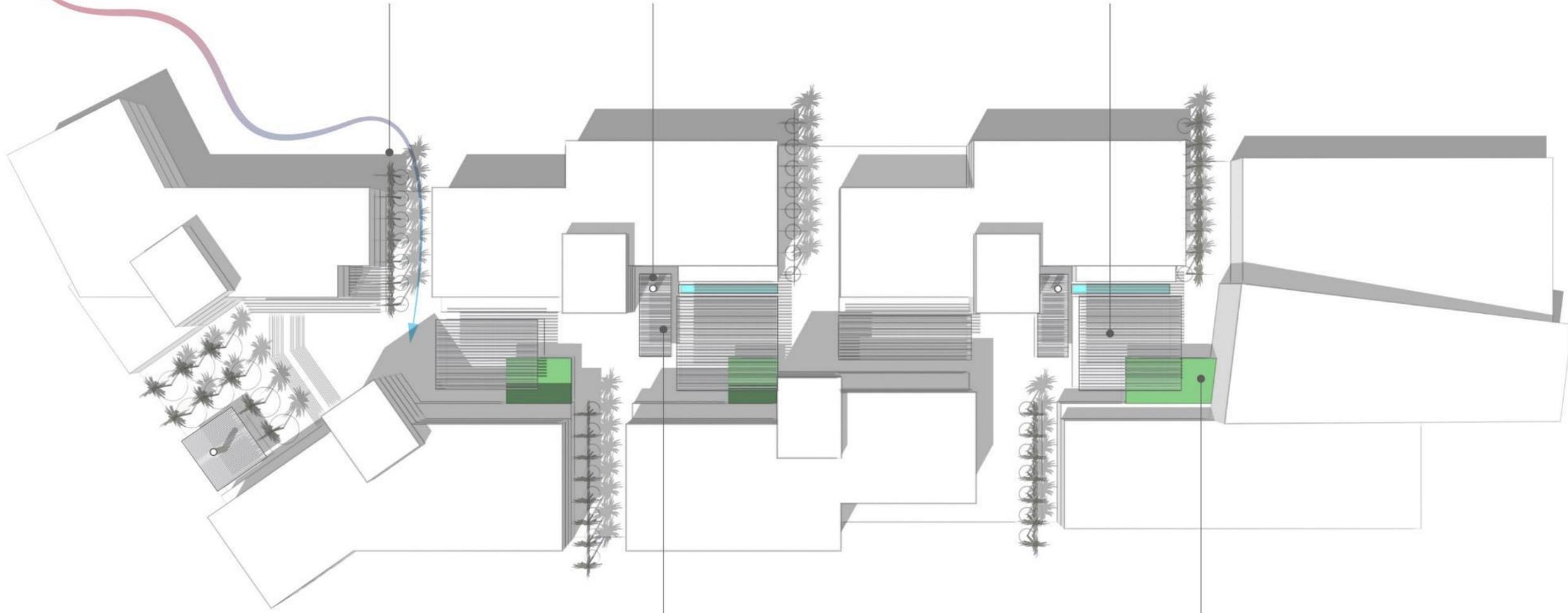


Prevailing Winds

Wind Breakers

Evaporative Cool Towers

Medium Density Shading



Dense Shading
for better Cool Tower +
Radiant performance

Green Roof Shading
with cooling effect

POTENTIAL NEAR TERM PROJECTS

LIBRARY/CAMPUS CENTERS



LIBRARY/CAMPUS CENTER EXAMPLES



JOHN SPOOR BROOME LIBRARY
CAL State Channel Islands



TANIMURA AND ANTLE FAMILY MEMORIAL LIBRARY
California State University, Monterey Bay

CLASSROOMS/LECTURE HALLS



PHYSICAL EDUCATION/EVENTS CENTER



STUDENT CENTER/FOOD SERVICE



DRAFT MASTER PLAN

JUNE 17, 2016

Palm Desert Campus

Cal State San Bernardino

