



NAVAE VITAE

SUPPLEMENTAL PACKAGE

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SITE DIAGRAMS



REGIONAL CONTEXT

At the crossroads of Central Coast and the San Francisco Bay area, the Monterey Bay region is home to towering sea cliffs and fog-cloaked redwood forests of Big Sur; the ballet of ever-shifting sand dunes in Fort Ord National Monument, and the ancient volcanic formations at Pinnacles National Park.

The city of Monterey preserves the colorful, historic waterfront life John Steinbeck vividly portrayed in Cannery Row. The small village feel of Carmel-by-the-Sea provides a welcoming haven for a rich arts scene. Farther north you can find Gilroy, the Garlic Capital of the World and Santa Cruz, with its bohemian roots, famous for its vintage seaside amusement park and its reputation as the birthplace of mainland surfing in the U.S.

Nestled among visual, natural, historic, and cultural backdrop lies the campus of California State University at Monterey Bay (CSUMB), inhabiting the former military base for the past 25 years.



CSUMB CONTEXT

In reviewing the regional context of the campus, we analyzed the parks and green spaces, highways and major roadways, and recreation fields and water bodies of the area.

Parks and Green Spaces

The campus is located in the midst of the Fort Ord Military Preserve, adjacent to the nearby National Forest to the southeast. There is also a large public greenway adjacent to Highway 1 to the west. In the center of campus, directly south of the competition site is a wonderful natural area designated as the Southern Oak Woodland, through which a significant portion of the pedestrian pathway traverses.

Highways and Major Roadways

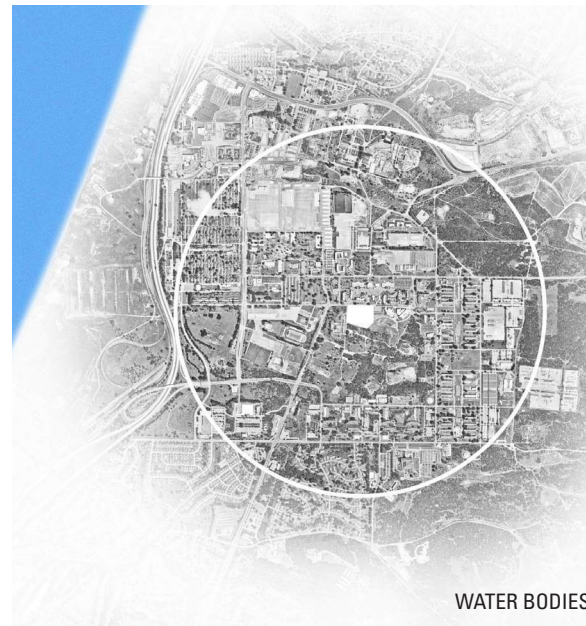
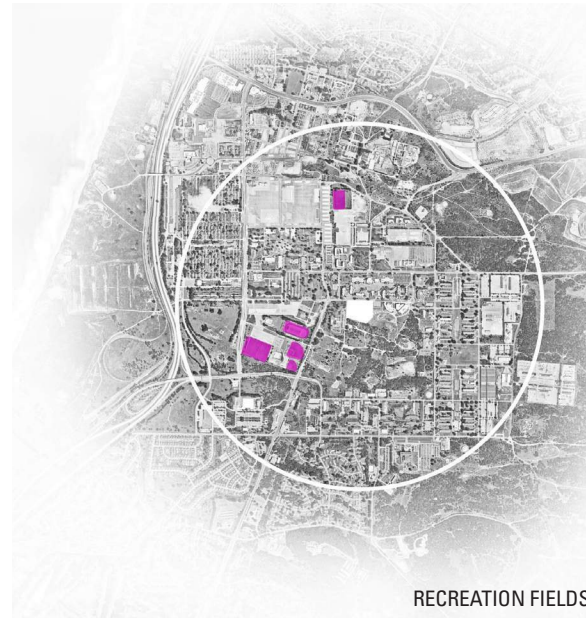
One unique feature of the campus is that it does not abut the primary north-south vehicular artery, Highway 1. Because of the rolling topography, the natural vegetation and the low-rise nature of the campus buildings, most passers-by do not know of CSUMB's existence. Nevertheless, there are significant roadways to support the campus bus system, and the future development of two multi-modal hubs at the eastern and western edges of campus.

Recreation Fields

The recreation fields in the region are limited to those existing on campus, or proposed in the master plan for the future.

Water Bodies

The semi-arid regional weather limits any significant water bodies to Monterey Bay, but there is potential for spectacular views to the ocean from an upper level of a campus building.



CSUMB MASTER PLAN

As noted in the current campus master plan document, there are several design drivers that focus on sustainability, placemaking, stewardship, and partnerships. The themes within the overall design surround Land Use, Open Space, Mobility, Water, Energy, and Campus Identity.

1. Land Use

Our design moves the building closer to the street, to help activate the future pedestrian streetscape.

2. Open Space

Our design focuses on shaping the open space in support of the master plan by introducing a connecting pathway through the building via a ramp, that ties the perimeter walking trail directly with the rest of the campus.

3. Mobility

The new inter-modal hubs at the eastern and western edges of campus will encourage pedestrian, bicycle, and scooter movement through the interior core of the campus. The long face of our scheme creates some visual closure at the end of the primary east-west axis.

4. Water

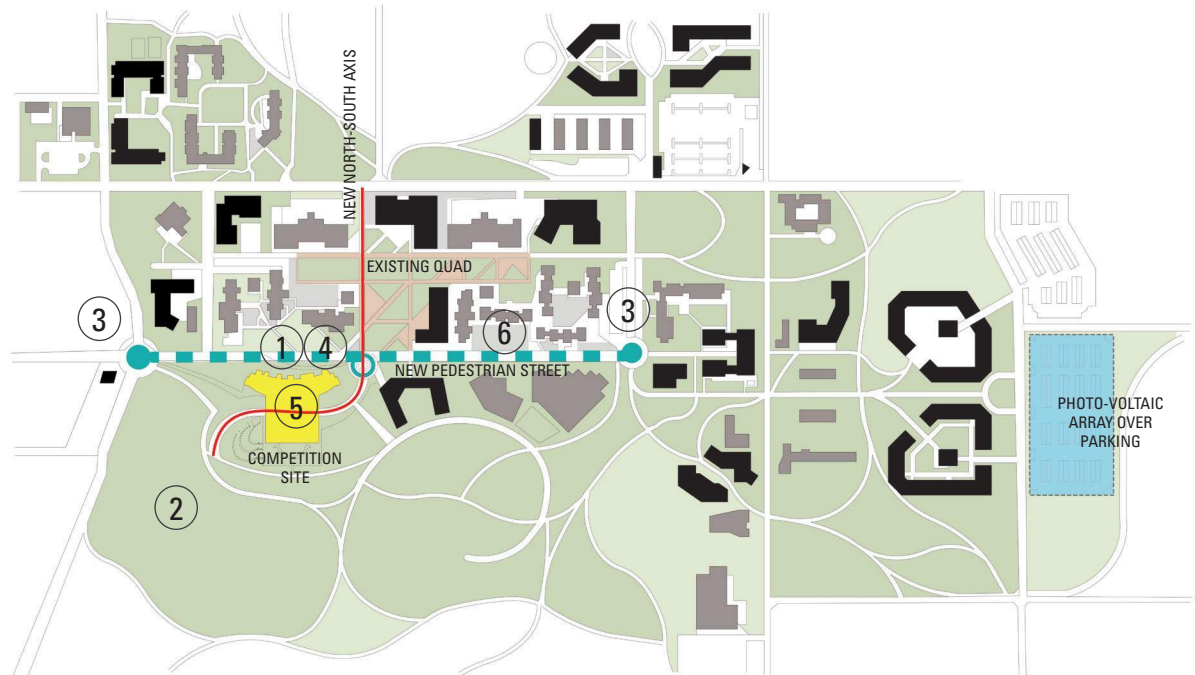
Our scheme collects multiple forms of precipitation into bio-swales, celebrating rainwater capture through the use of collection ponds, graywater re-use, and natural infiltration along the building's northern face.

5. Energy

Our scheme leverages the creation of energy through PV panels, wind turbines, and even the actual movement of the occupants of the building.

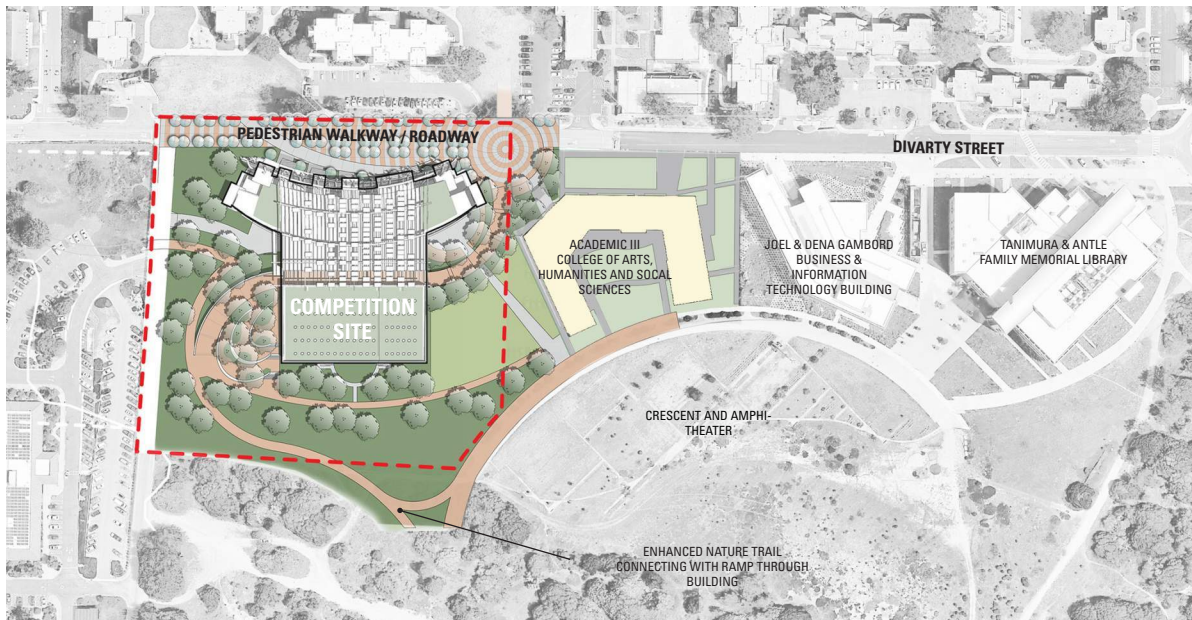
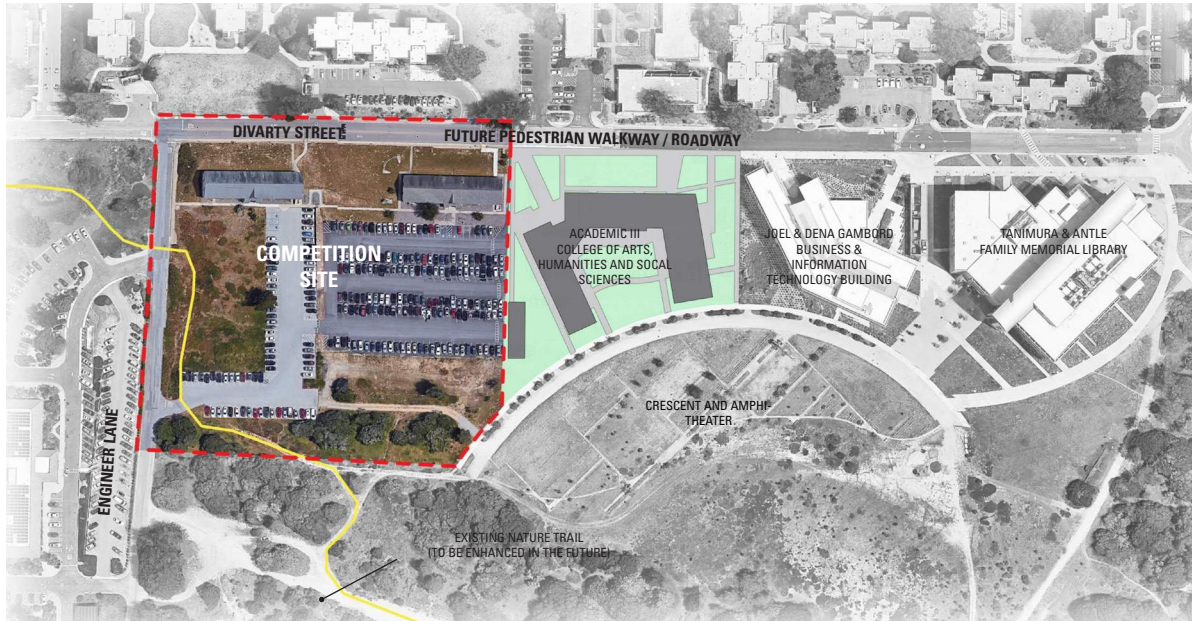
6. Campus Identity

Our concept supports the family of other iconic structures that align themselves along the future pedestrian-focused Divarty Street.



SITE CONTEXT

The project site is located at the corner of Divarty Street and Engineer Lane. The VA facility (not part of the campus, proper) is on the site immediately adjacent to the west, and the new Academic III building (under construction) occupies the site to the east. As noted on the Master Plan, Divarty Street will eventually be converted to a pedestrian walkway. The site slopes from southeast to northwest almost 30 feet in height.



Our proposed new design will:

- Engage the pedestrian street to the north.
- Play a significant role in shaping the ground plane defining the future axis terminating at the entry to the new Academic III building.
- Connect with the nature trail (to be enhanced), to the west and south, as well as the existing Crescent and Amphitheater, and the Southern Oak Woodland.

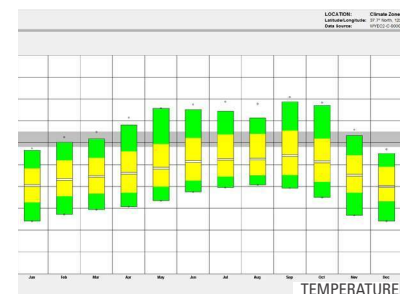
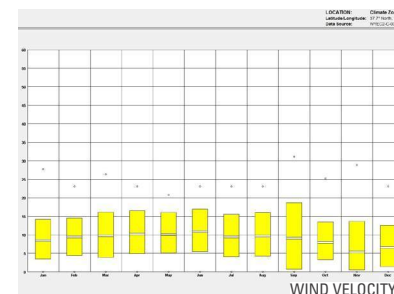
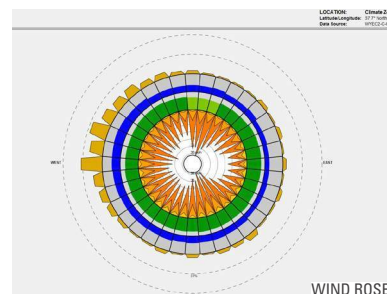
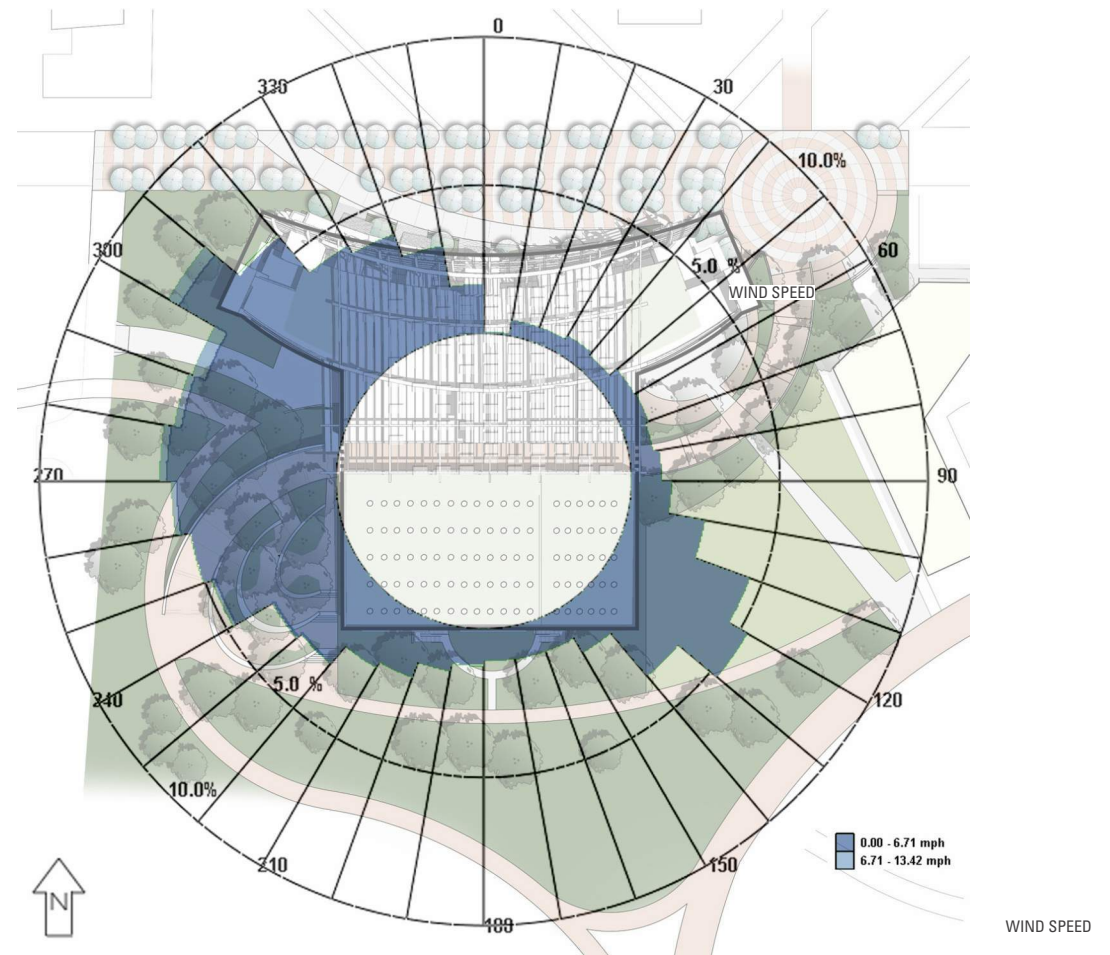
CLIMATE DATA

Wind

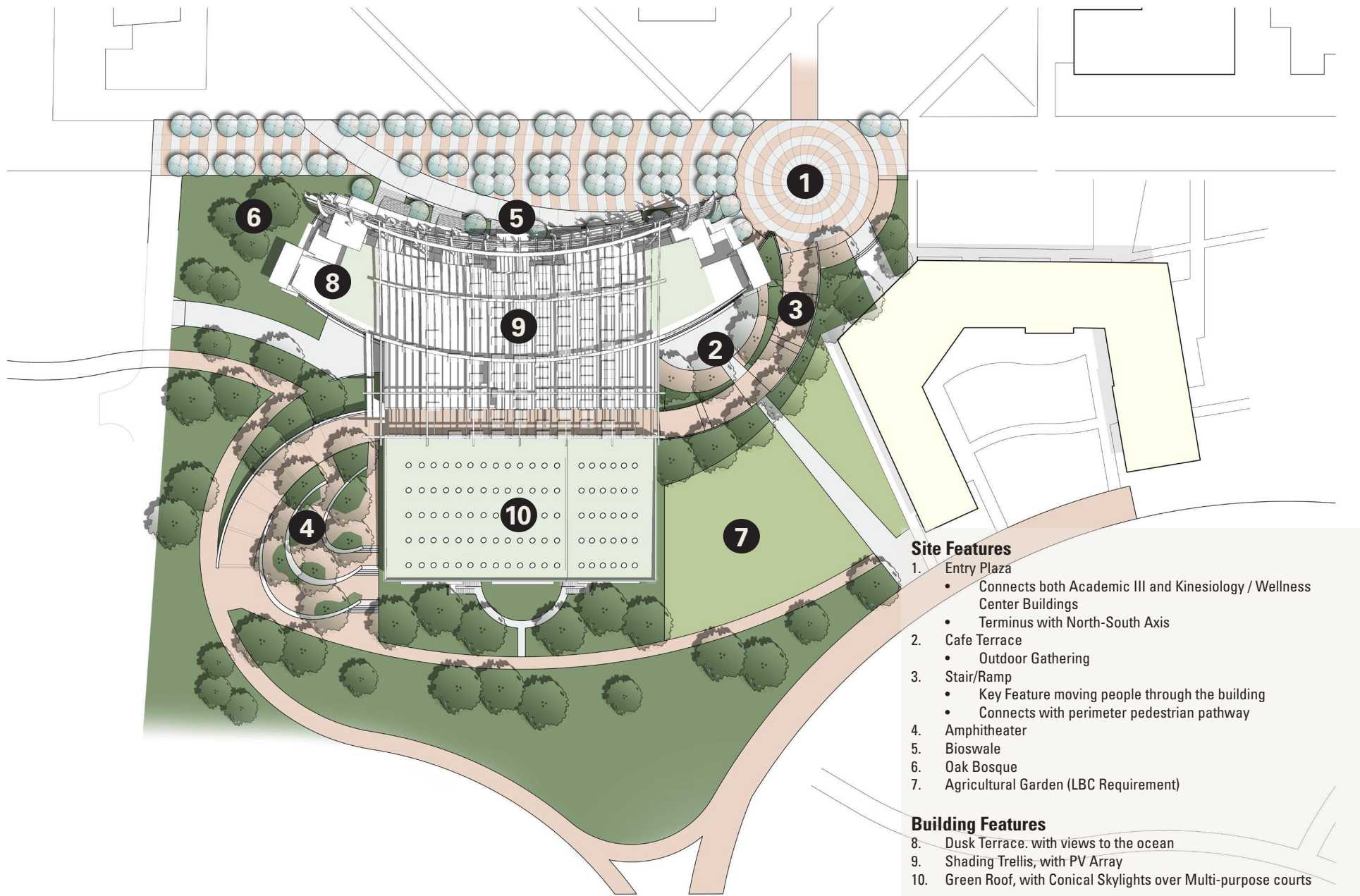
The building orientation was set to take advantage of the winds coming primarily coming from the North and West. This wind speed and consistency contributed to the decision to capture this through wind sails and micro-turbines along the north facade, to contribute to on-site power co-generation.

Temperature

The temperate climate of the region is well-suited for natural ventilation year-round. The building has been designed to be comfortable for more than 40% of the occupied hours solely through the use of natural ventilation.



SITE PLAN



2

DESIGN DIAGRAMS



THE BIG IDEA

NAVAE VITAE = To Give Activity to Life

This project is based on one of the key concepts of Kinesiology: The balance between the Agonist and the Antagonist. One creates the movement, the other the counter movement. One the balance, the other the imbalance, working together synergistically in tension and release, a contest of action. At multiple scales and modalities of locomotion energy is consumed in balance with energy generated. The building conspires with its occupants and celebrates its surroundings, finding an equity in its use of natural resources and harmony in its social responses to the needs of the occupants and community it serves.

First Form: **The Agonist**

The building's northern element is a dynamic and kinetic component facing Divarty St. to the north. The curved screen of the Agonist is lifted off the ground so that all the activity within is on display – cardio, weightlifting, dancing, and social engagement – opening directly to an outdoor gathering area as an extension of the pedestrian street. The screen is kinetic in nature; in constant movement. This movement reflects the actions of a machine created for optimizing the conversion of climatic opportunities into renewable resources that offset the buildings demand for energy, water, light, and heat. It reminds its occupants and its campus neighbors of the incredible wealth of natural capital that forms their local ecosystem and the shared responsibility to manage and protect its precious existence.

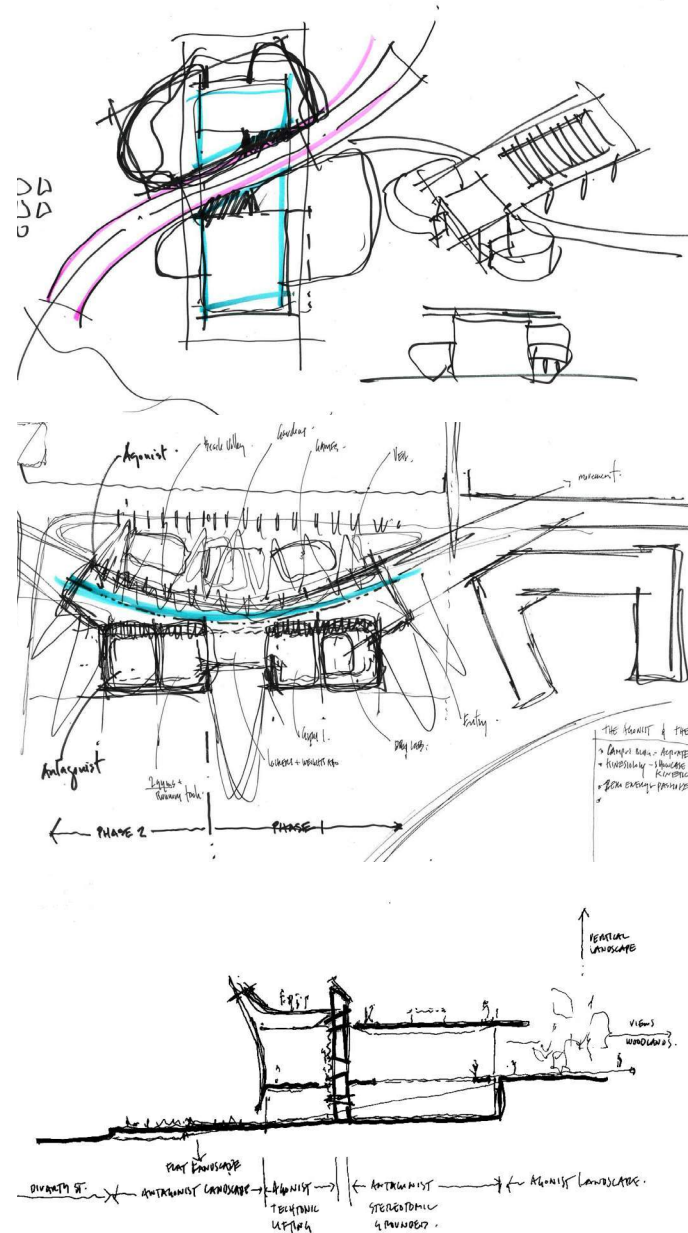
Second Form: **The Antagonist**

The more rigid and 'grounded' mass is composed of a simple rectilinear box housing the multi-purpose gymnasium. Because of the sloping site, the gymnasium spaces will be partially buried into the ground along the east, west and south facades, helping reduce the apparent volume of the building and the heating and cooling loads, and making it feel grounded in the earth itself. This volume of space utilizes several passive strategies to increase the comfort of the spaces within, and helping to reduce the heating loads.



THE CHARRETTE

Prior to determining the Big Idea for the project, the team gathered together to brainstorm different approaches to the site, massing arrangement and position of the various building elements. The idea of a creative tension between curved, active spaces and static, grounded spaces began to emerge. The existing sloping grades from south to north provided an opportunity for views into the upper level of the 2-story high spaces of the large multi-purpose gymnasiums from grade. Because the low point of the site was along the northern boundary, a portion of the building facing north could be lifted up, lightening the appearance of the large building as it is viewed from the pedestrian street. Although originally part of an entirely different concept diagram (or *parti*), providing movement through the building was a way of not only encouraging physical activity, but actively demonstrating movement as a part of the building's primary functions - kinesiology and wellness.



THE DESIGN PROCESS

The next step in the process of Design was to model and test some of the concepts that emerged out of the *charrette*.

Scheme One

This option tested the idea of a continuous ramp, connecting the proposed north-south axis (from the master plan) through the building and tying into the campus walking/jogging trail in the southwest corner of the site.

Scheme Two

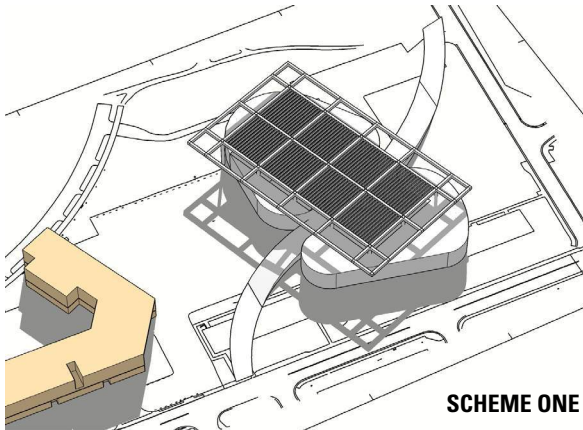
This option investigated the notion of a long bar building fronting Divarty Street, housing everything but the gymnasium in the two-story structure. Phase Two would be an equal size bar along the southern boundary of the site. Between the bar buildings were the three gymnasiums. All of three buildings were tied together by a large trellis.

Scheme Three

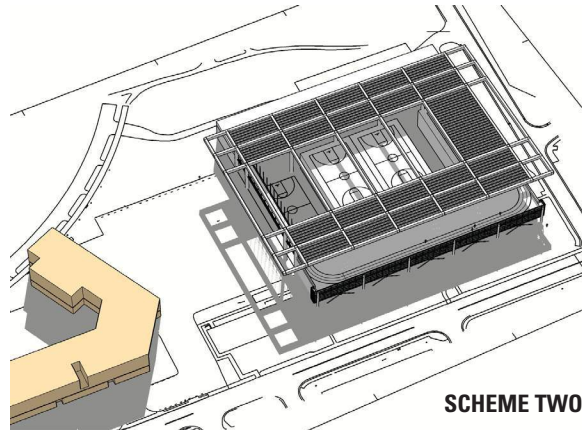
In this scheme the tension between the curved, active program elements (The Agonist) and the static, grounded program pieces (The Antagonist) was studied.

Scheme Four - the Hybrid

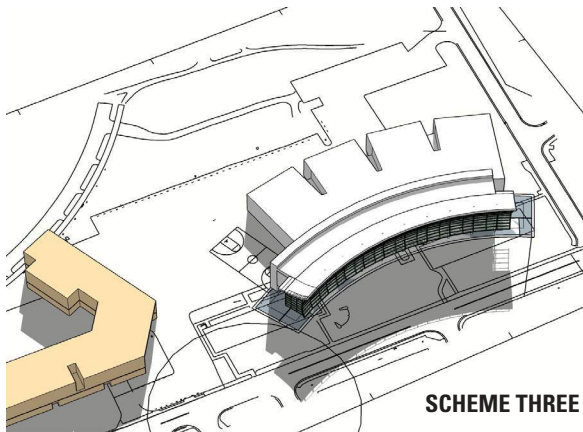
The best expression of the concept - The Agonist and the Antagonist - and the celebration of The Active Life (*Navæ Vitæ*), is evident in the Hybrid Scheme. The tension between the curve and the rectangle is reinforced by the inclusion of the ramp between them. The curved facade suggests movement and latent energy, and is paralleled by the ramp which supports actual movement of people through the building.



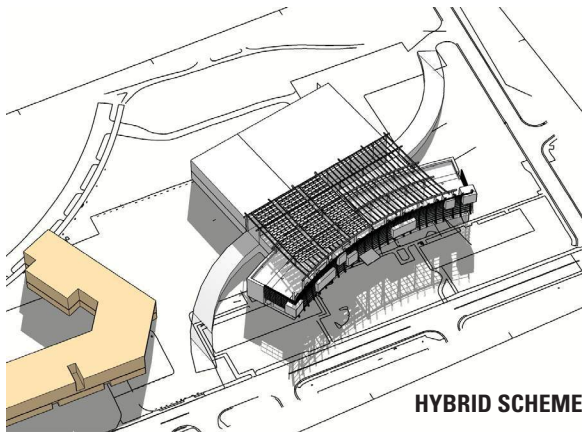
SCHEME ONE



SCHEME TWO



SCHEME THREE



HYBRID SCHEME

MASSING AND FORMS

The final form of the building was informed by the concept of the Agonist and the Antagonist, but also by key massing elements of other schemes that were explored. Phasing and the separation of major building components were analyzed, and organized into three basic parts.

The Rectangle

This component emphasizes a long horizontal bar of the program housing the common support spaces, the workout and locker areas and the offices/lab. The gym links to these areas both internally and through an outdoor corridor. Phase two replicates the long bar on the south side of the site, mirroring phase one. The additional gyms are located next to the original, all under a common roof trellis which formally ties the three separate portions of the building together as one.

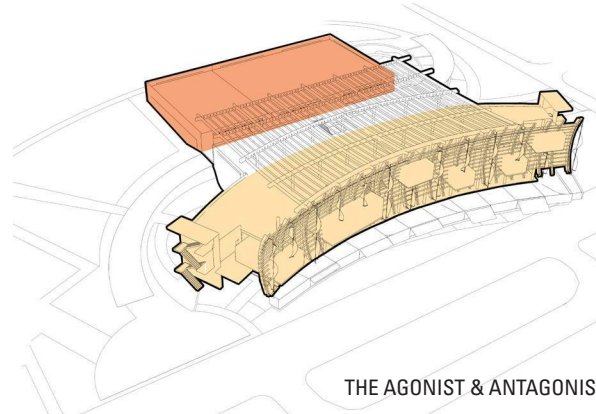
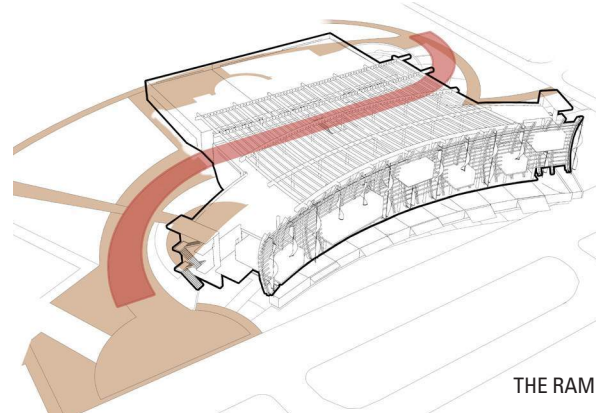
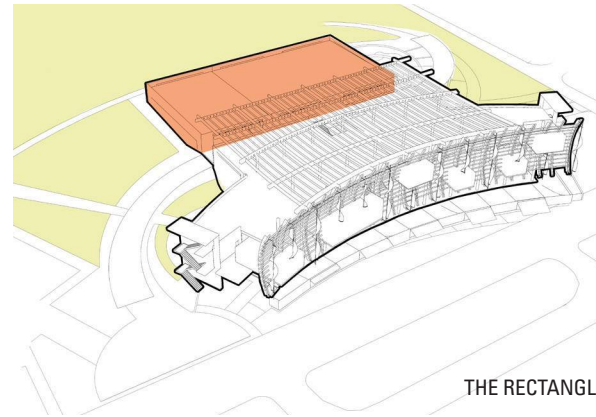
The Ramp

Phase one and phase two are separated by a sloping ramp beginning at the entry plaza for the Academic III building, continuing up and through the building at the second level and transitioning back to grade on the opposite side of the site where it connects to the campus perimeter walking path. It also connects to a roof-top trellis for additional social and activity spaces.

The Agonist & Antagonist

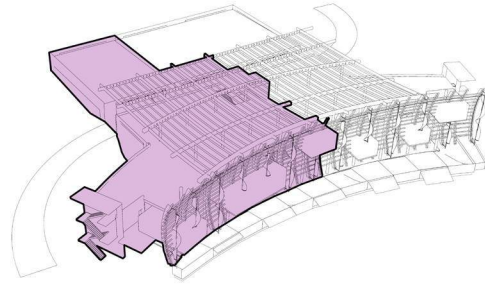
This idea contrasts two forms in tension with one another - a curved, kinetic space full of light and activity, against a grounded, and more stable square form housing the gyms, offices, and support spaces.

The resultant scheme combines the grace and fluidity of the Ramp, with the strong conceptual language of the Agonist & Antagonist idea, and the added amenity of the roof trellis of the Rectangle.

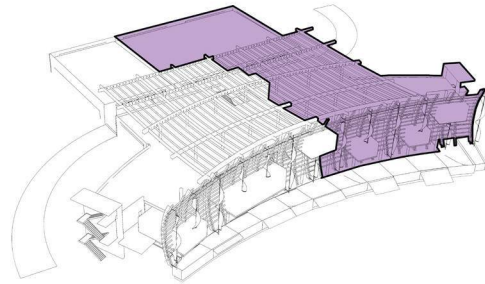


PHASING: MASS

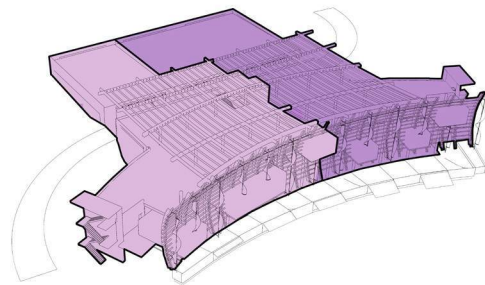
Great care and attention was given to the Phasing of this project, so that each phase would look whole and complete in and of itself. While the final images show the full build-out, these diagrams demonstrate how the massing of the phases would be organized.



PHASE ONE



PHASE TWO



PHASE ONE AND TWO

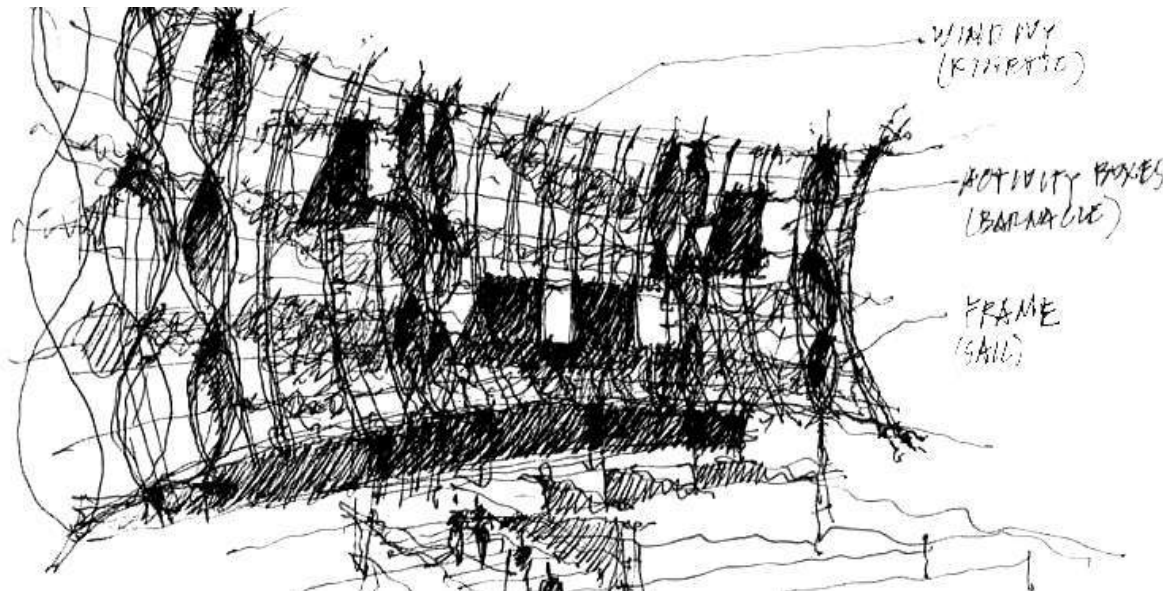
The interior spaces flow easily from one phase to the other. A couple of examples are:

1. The Cardio and Weights area on the Ground floor for Phase One, becomes Cardio on one side of the main entry and Weights on the other side of the main entry for Phase Two.
2. The combined office areas and Kinesiology Lab in Phase One, is transformed into Office and Support spaces on one side of the main stair, and the entire Kinesiology department on the other side of the main stair, for Phase Two.
3. The Men's and Women's Locker area for Phase One would be minimally renovated to be the Men's Lockers on one side of the main circulation and Women's Lockers on the other side of the main circulation path for Phase Two.

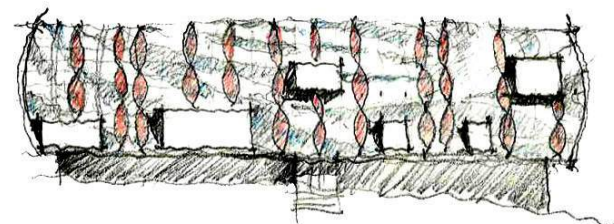
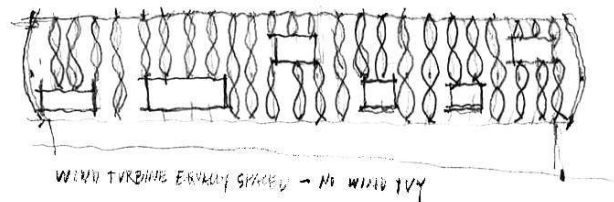
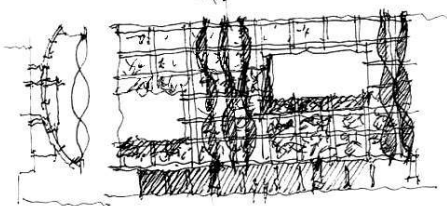
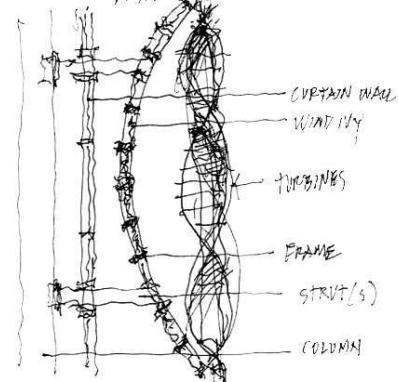
PERSPECTIVE VIEW



CONCEPT DEVELOPMENT



IDEAS: CONNECT CLIMATES TO NATURE
 KINETIC MOVEMENT CAPTURES ENERGY
 SUSTAINABLE SIDE STREET



As the overall form of the building was being finalized, individual components were studied in more detail. The north facade of the building, facing the (future) pedestrian street should be suggestive of movement and energy. This led to a study of shading devices to protect the facade from direct sunlight during the longer days of the year.

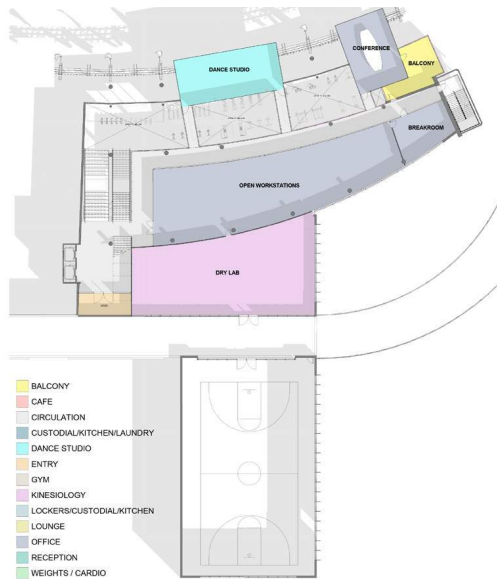
Large Wind Turbines

By adding to the function of these shading devices the ability to capture wind (which primarily comes from the west and the north), the shading sails are converted from a passive function to an active part of the on site energy co-generation system, to be used directly in the building.

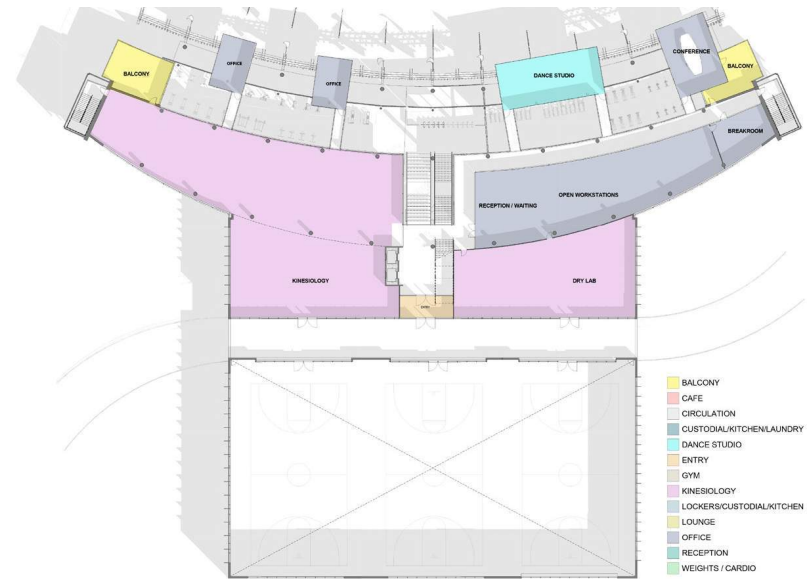
Wind Ivy Micro-Turbines

A secondary system of micro turbines we call "Wind Ivy" climbs the curved wood-framed facade screen to further enhance the energy production of the building. It has the added benefit of also providing shading for the occupants inside. The placement of the Wind Ivy produces a "dappled light" effect, further enhancing a rich tapestry of light and textures within the building. The facade is in constant motion, a rippling movement, as the "ivy" blows in the wind. A visual play that is constantly changing throughout the day and night.

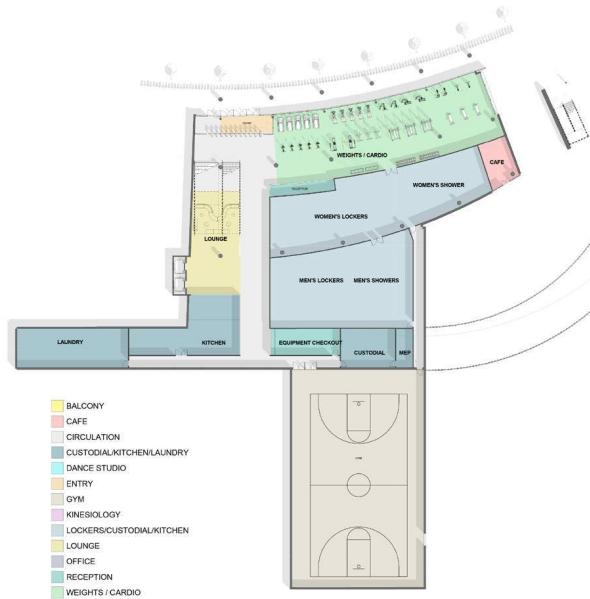
PHASING: PLAN



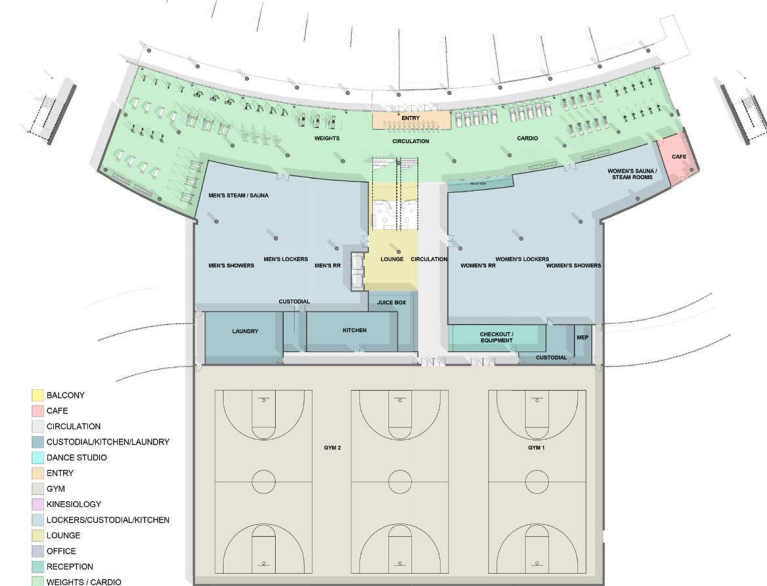
PHASE ONE SECOND FLOOR



PHASE TWO SECOND FLOOR

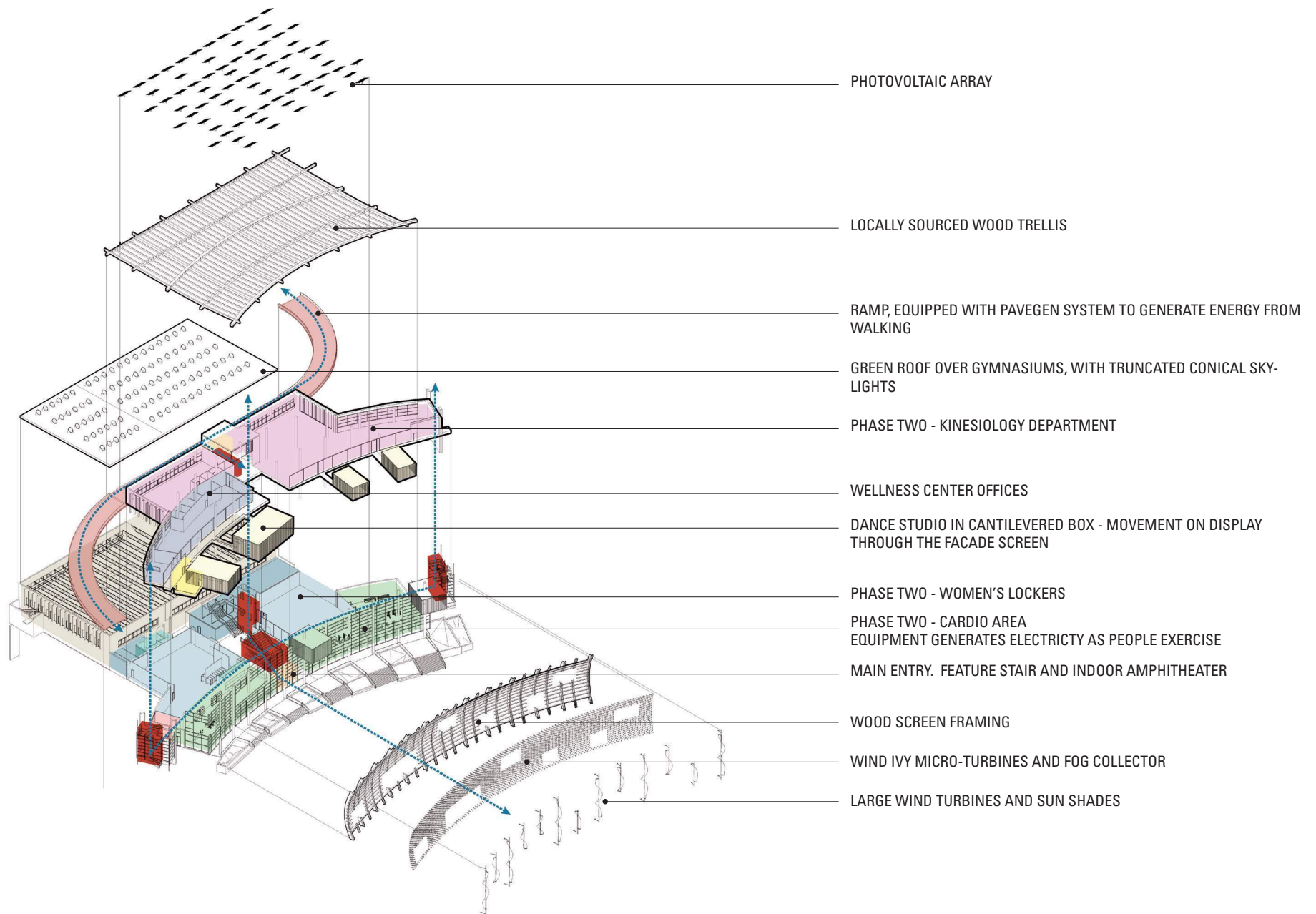


PHASE ONE GROUND FLOOR



PHASE TWO GROUND FLOOR

BUILDING FEATURES



VIEWS AND SOCIAL SPACES

Views

As views to the ocean are highly prized, a large portion of the occupiable roof provides direct views, across a rooftop garden, to the west. In both phases, there is a special meeting/conference room on the northwestern corner of the building as a place to share this view with others.

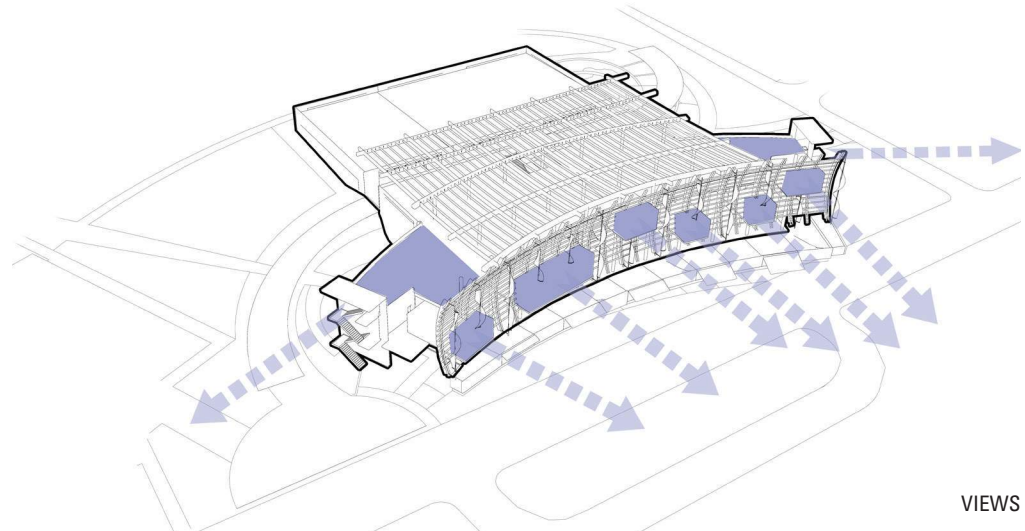
By pushing some of the interior spaces through the screen, views from the special rooms of the dance studio and conference spaces point directly back toward the campus. The concave shape of the northern facade provides multi-directional views from numerous points out toward the water as well as back toward the campus.

Social Spaces - Outdoor

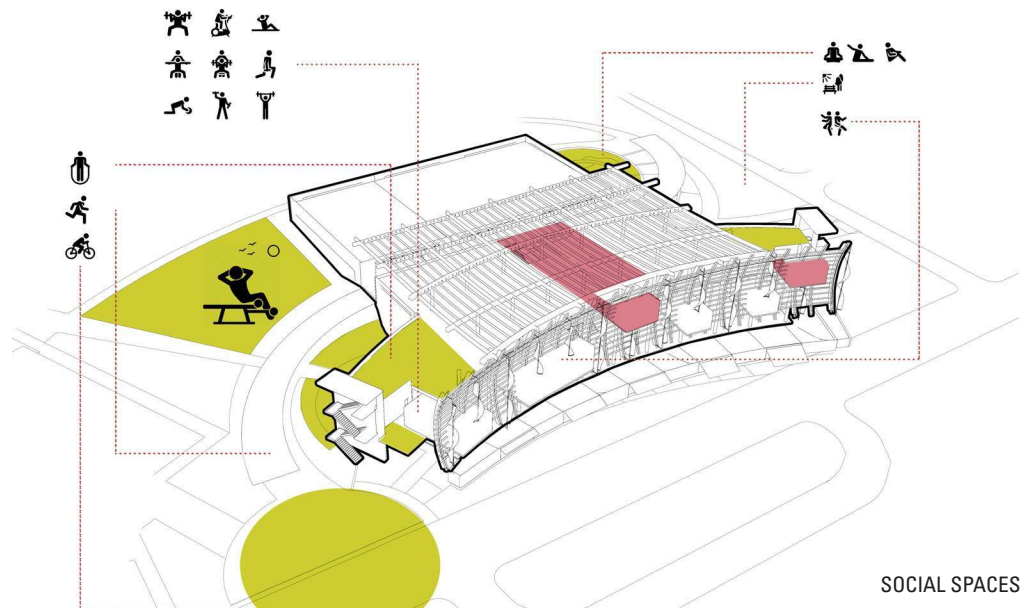
The landscape design supports and encourages social interaction in and around the building. An amphitheater sits nestled on the inside of the southwest curve of the ramp. The curving hardscape along the street provides for informal events and activities, and the cafe terrace to the east provides additional places for students and faculty alike to gather, study, relax and connect with one another.

Social Spaces - Indoor

The primary social spaces inside the building are put on display; specifically, the dance/multi-purpose studio, the conference rooms and meeting spaces. Additionally, the center stair and interior amphitheater are the center hub of social gathering and activity of the entire building.

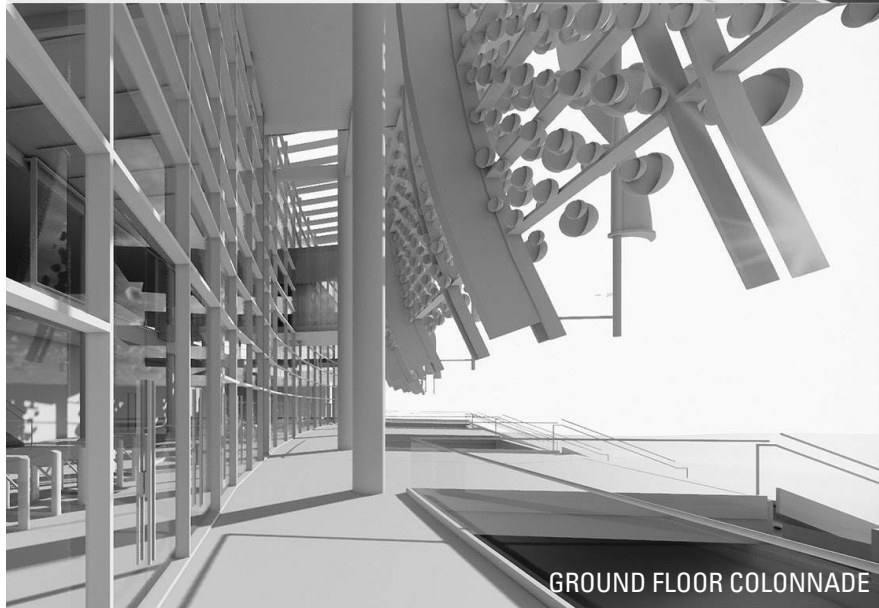


VIEWS



SOCIAL SPACES

INTERIOR VIGNETTES



INTERIOR PERSPECTIVE



AERIAL VIEW



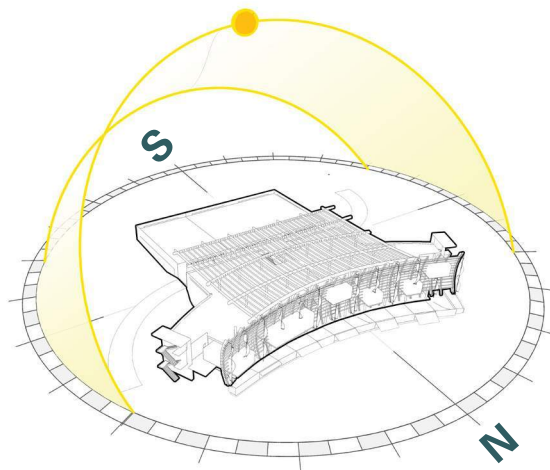
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SUSTAINABILITY



SOLAR ORIENTATION

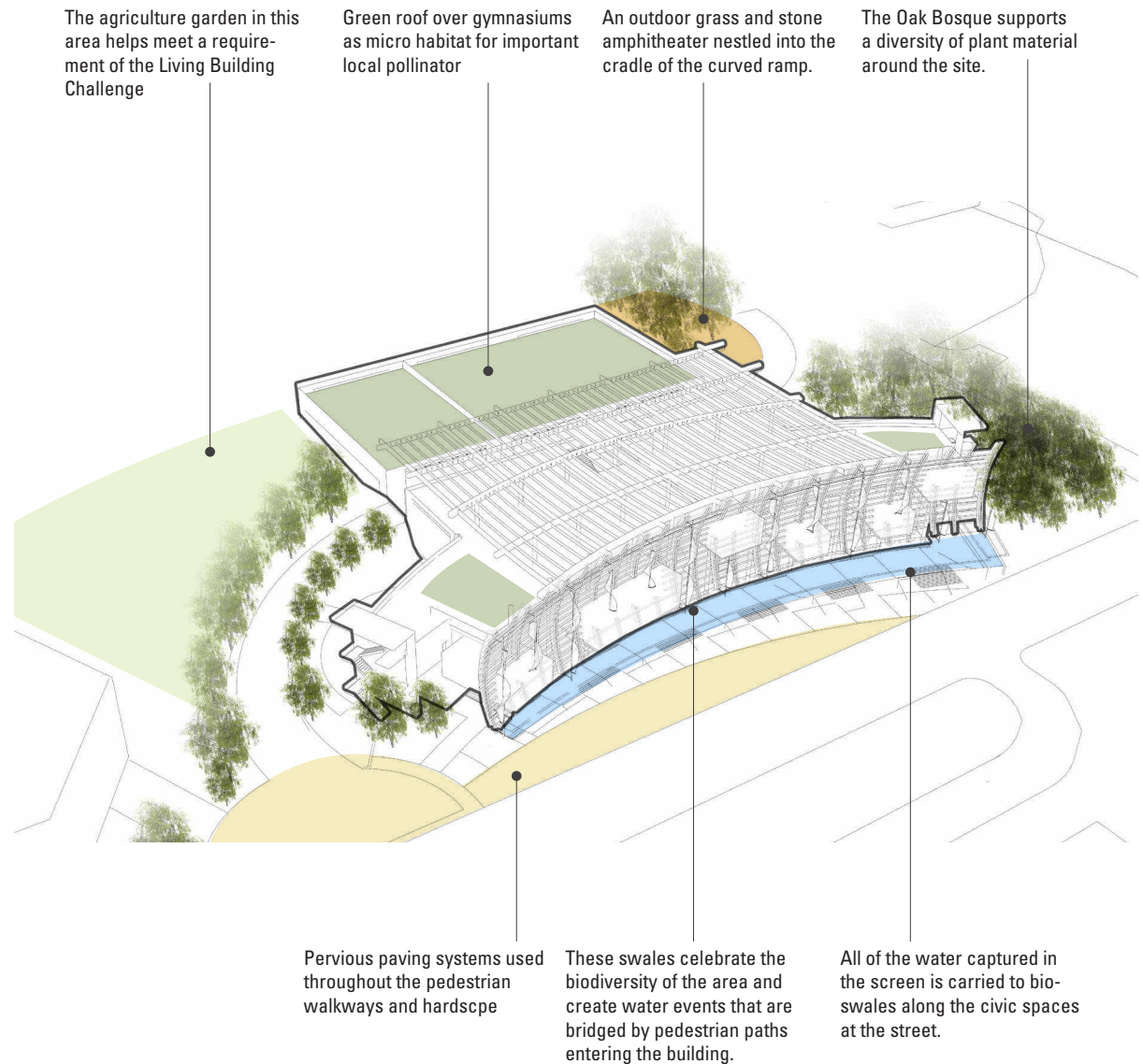
Solar orientation was carefully studied when determining ideal site placement. The goal was to maximize daylight harvesting and reduce glare. North and west facing glass was used to take full advantage of the views to Monterey Bay while the south facing glazing is optimized to reduce glare and heat gains.



VEGETATION

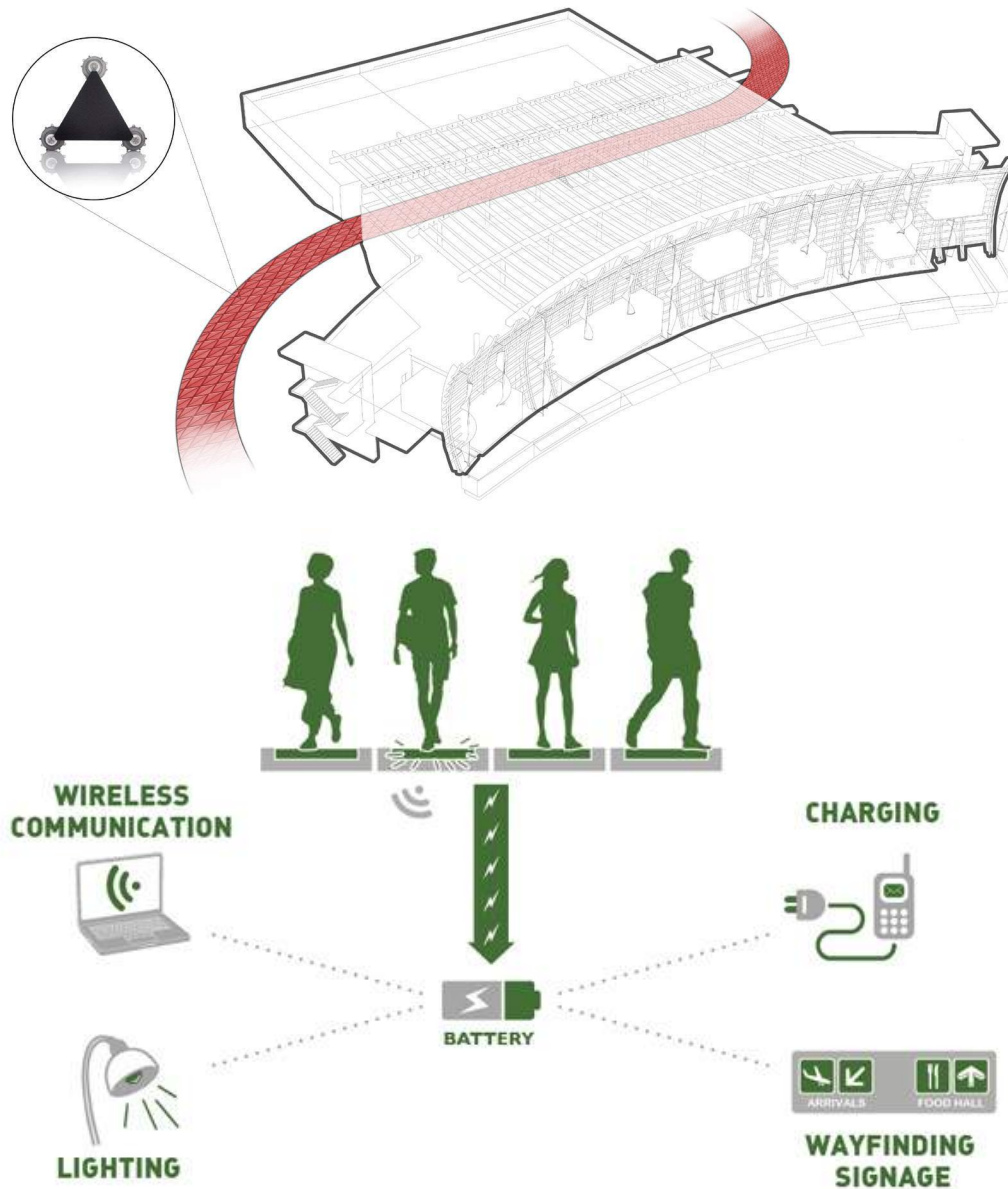
The vegetation for this project will reinforce the concepts of Agonist & Antagonist that support the building's design in several different ways. Along the north façade, as the building's "Agonist" provides the dynamic curve and kinetic elements, the vegetation will serve as the antagonist with shade-loving plant material that keeps the outdoor spaces grounded throughout the year. Almost every exterior surface on the building is designed to capture water. All of the water captured is carried to bio-swales along the civic spaces at the street. These swales celebrate the biodiversity of the area and create water events that are bridged by pedestrian paths entering the building.

Along the south façade, the building's "Antagonist" becomes the background to a vegetation palette that expands with all the available sunlight. Vegetation here will naturally be more diverse, more flowering, more engaging with more scent and texture.



ENERGY OF MOVEMENT

The path through the building is a significant element, tying together the existing quad space, the (future) pedestrian street with the campus' perimeter paths and circulation systems. It is the nature of the ramp to suggest movement and energy, so it was logical to leverage it for on site power co-generation. The Pavegen system is a technology that converts the actual walking and activity surfaces of a building, sidewalk or athletic field into power that can be used for lighting, wifi or general use power.



WATER COLLECTION

The Monterey Bay area sees almost daily precipitation in the form of fog that sweeps the hills in from the Bay. Sited on a similar latitude as Death Valley, the summer months receive almost no precipitation. It was therefore important to us to capture and recycle as much water that touches the building as possible. Several scales of systems are deployed across the building skin, each one optimized to capture water from a specific climate event filtering it into a grey water collection system that will be recycled throughout the MEP systems.

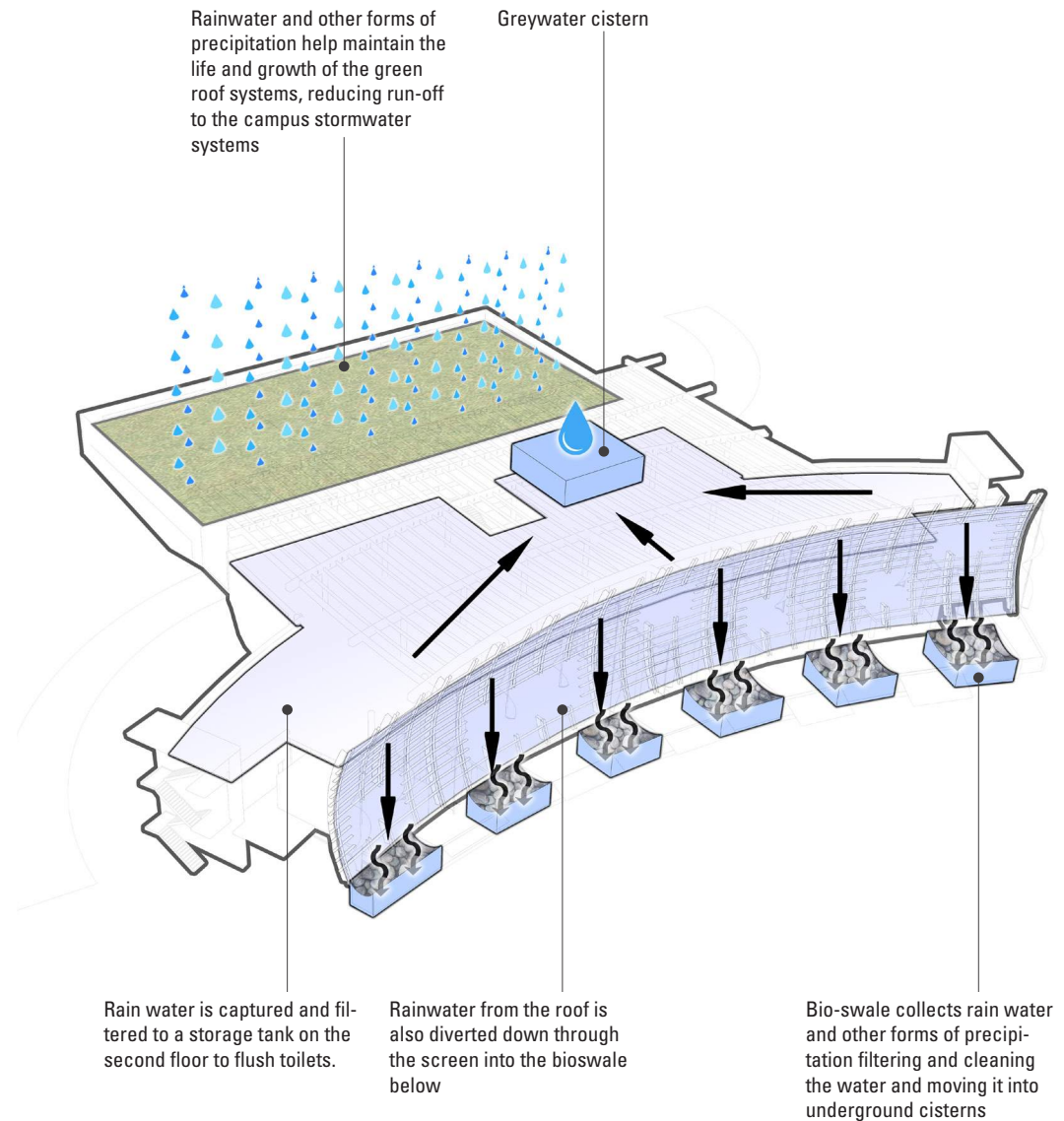
Average Annual Rainfall = 21.1"

Annual Water Collection:

Green roof system at 12" of planting medium = 64,104 Gallons

Regular Roof = 396,871 Gallons

Water collected through condensate from fog on Turbines and Wind Ivy, estimated at 860 Gallons annually.

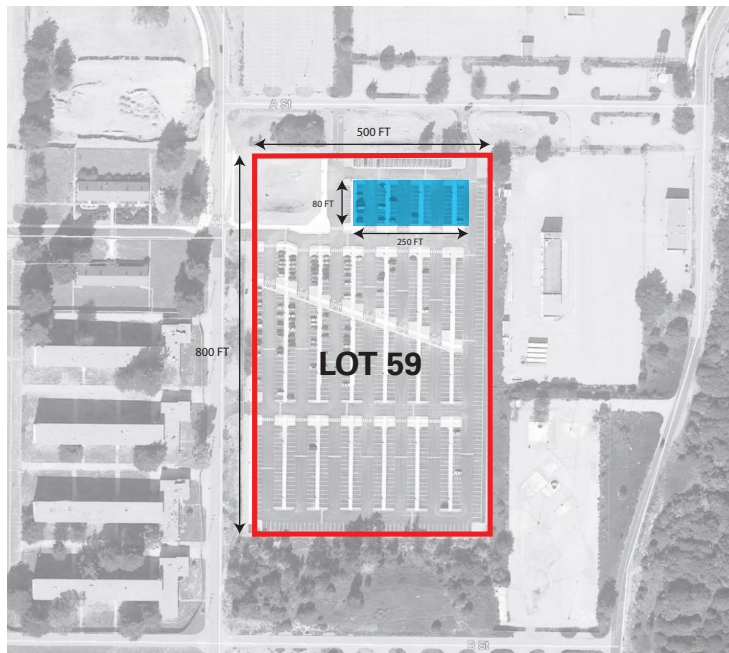
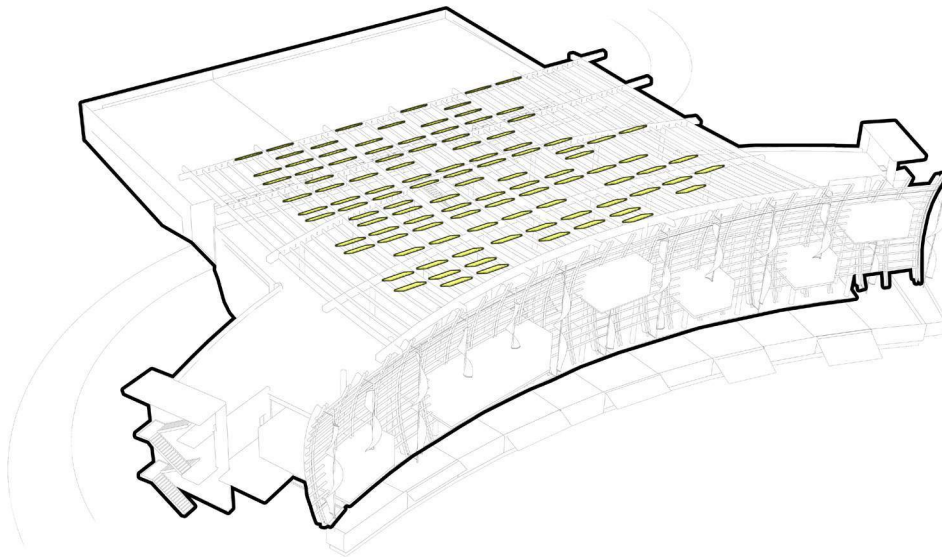


SOLAR PV ARRAY

In the competition brief, it specified to not locate PVs on the building roof. Our team provided an option to locate the photovoltaic array, positioned **above** the roof and attached to the locally-sourced wood trellis. Its 496 bifacial panels can generate 308,500 kWh per year. This gives CSU Monterey Bay the option to power 100% of this building on site, without any additional need to use any of the energy being generated by the PVs on the east parking lot 59. With the other co-generation from the equipment, paven flooring and wind collection, the building is just over **4.0% Net Positive**.

Lot 59

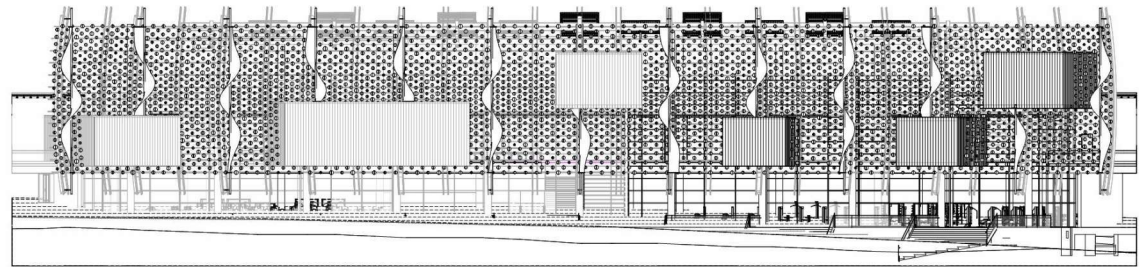
Because of the efficiency of the design of the building, only a very small area of Lot 59 would be required for PVs, should CSUMB elect to not place PVs on the trellis, as our design suggests. It should be noted that the Living Building Challenge requires on site co-generation, to which our design complies.



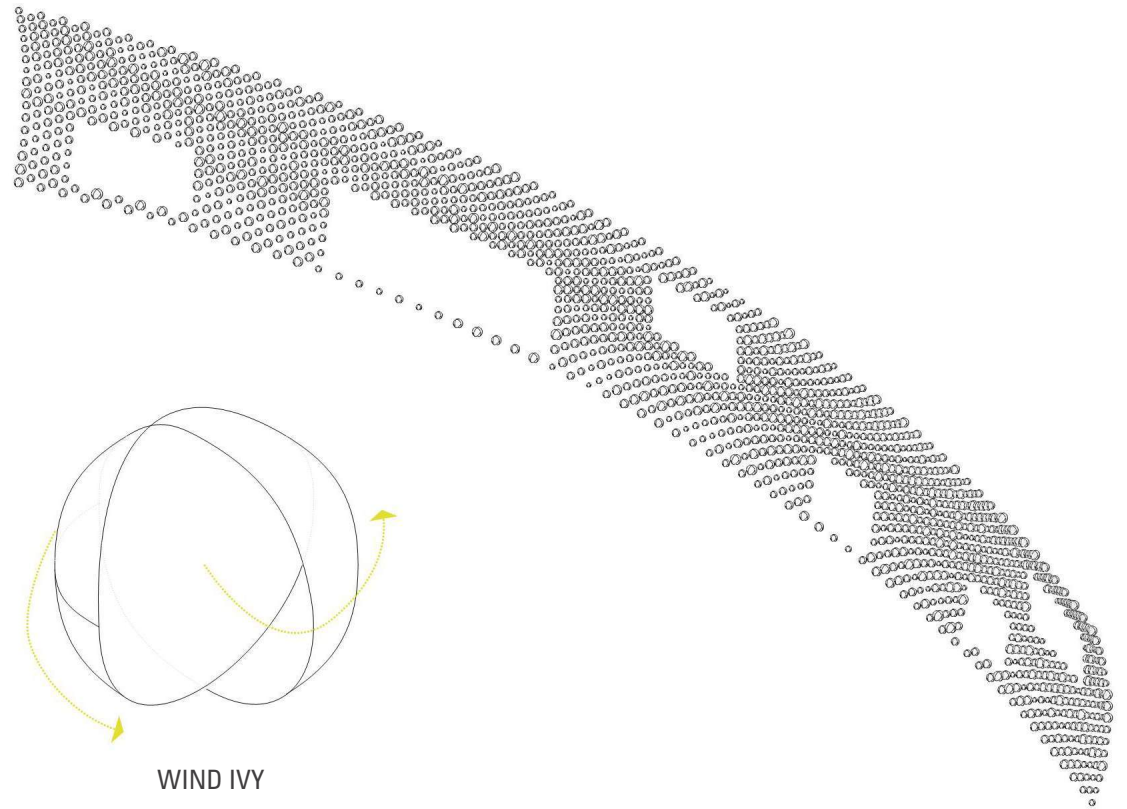
KINETIC SCREEN

The larger wind sails were placed evenly along the curving northern face of the building, to help shade the two-story fitness space behind from glare and heat gain during the low angled sun position during the weeks around the summer solstice. As an additional means of on site energy co-generation, a smaller texture of rotating spheres (mini-turbines) was added withing the curving wood-framed facade to help with additional shading during the harshest times of the afternoon summer sun. This system of small spheres has been named “Wind Ivy.”

This screen also catches the fog as it blows in from the coast capturing the precipitation that condenses on the “ivy” and collecting the heavy water drops channeling them into the bioswale below for filtering and cleaning on its way to storage and building use.



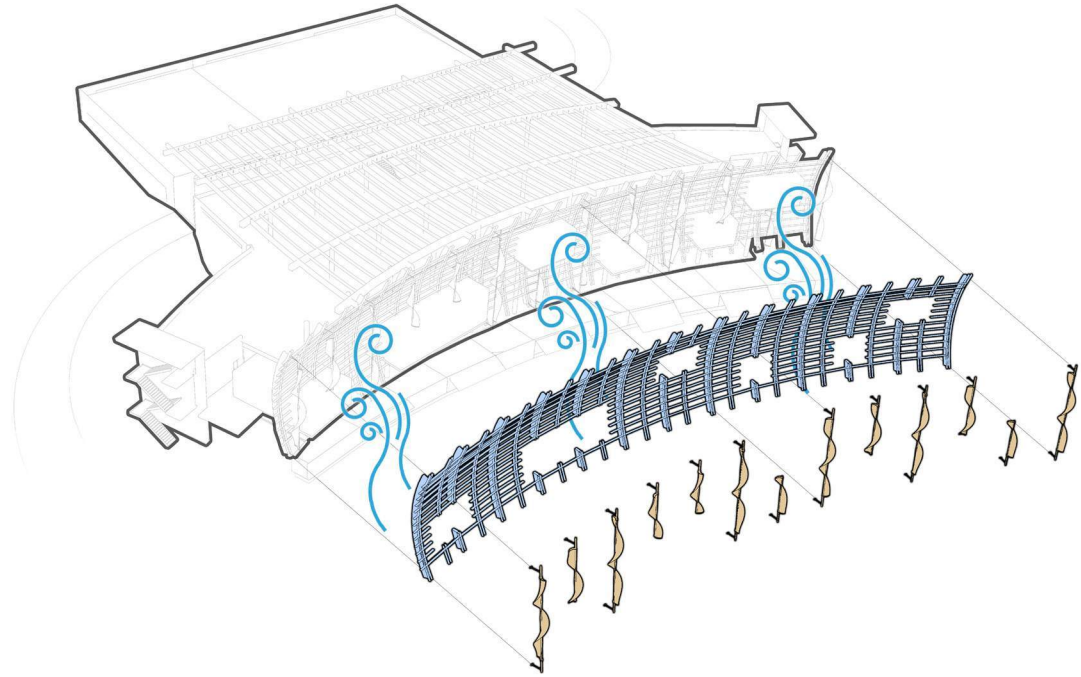
KINETIC SCREEN ELEVATION



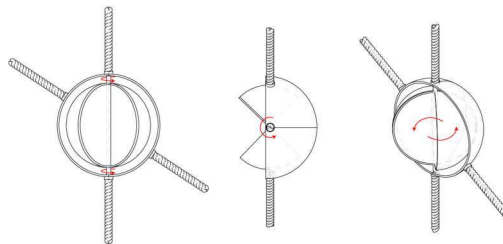
WIND IVY

AIR AND VENTILATION

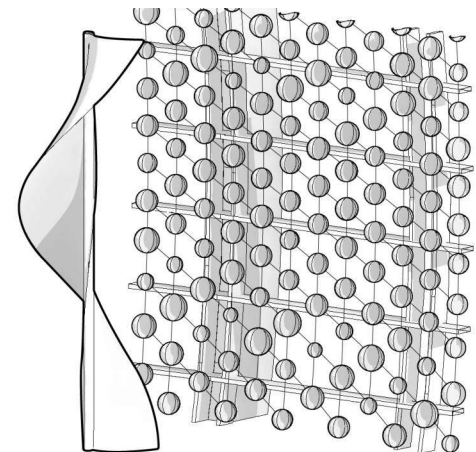
The larger wind sails in combination of the wind ivy micro-turbines support a passive cooling and natural ventilation system for the building. Because of the local climate's temperate weather, natural ventilation can be used for more than 40% of the occupiable hours of the facilities.



WIND TURBINE SYSTEMS



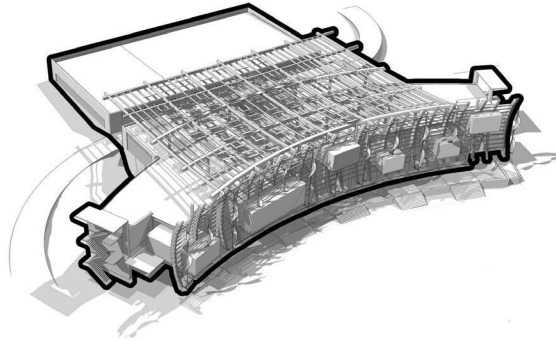
PLAN, SECTION AND ELEVATION
WIND IVY MICRO-TURBINES



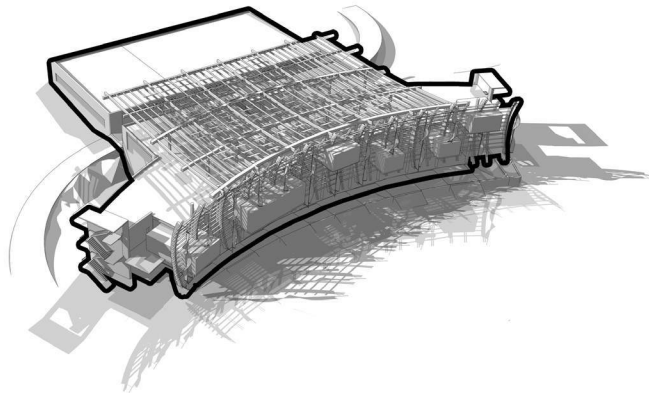
DETAIL OF WINDSAILS AND
WIND IVY MICRO-TURBINES

SHADOW AND WIND

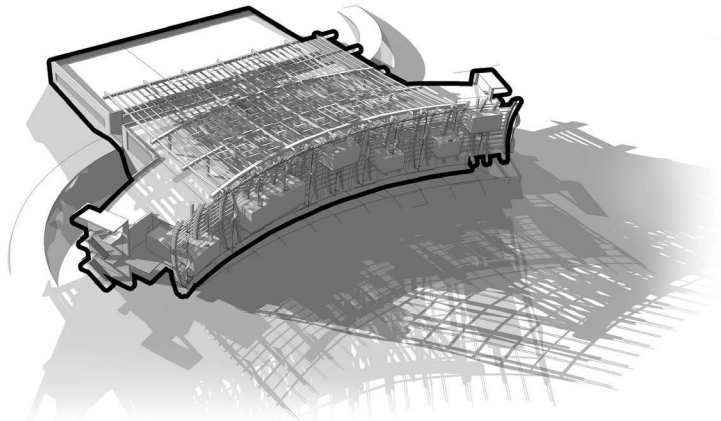
Shading and wind were analyzed for the project to determine where the best locations on the site for “summer places” versus “winter places”. These diagrams show the shading during the hours of 9a, 12n and 3p for each: summer solstice, equinox and winter solstice.



SUMMER SOLSTICE

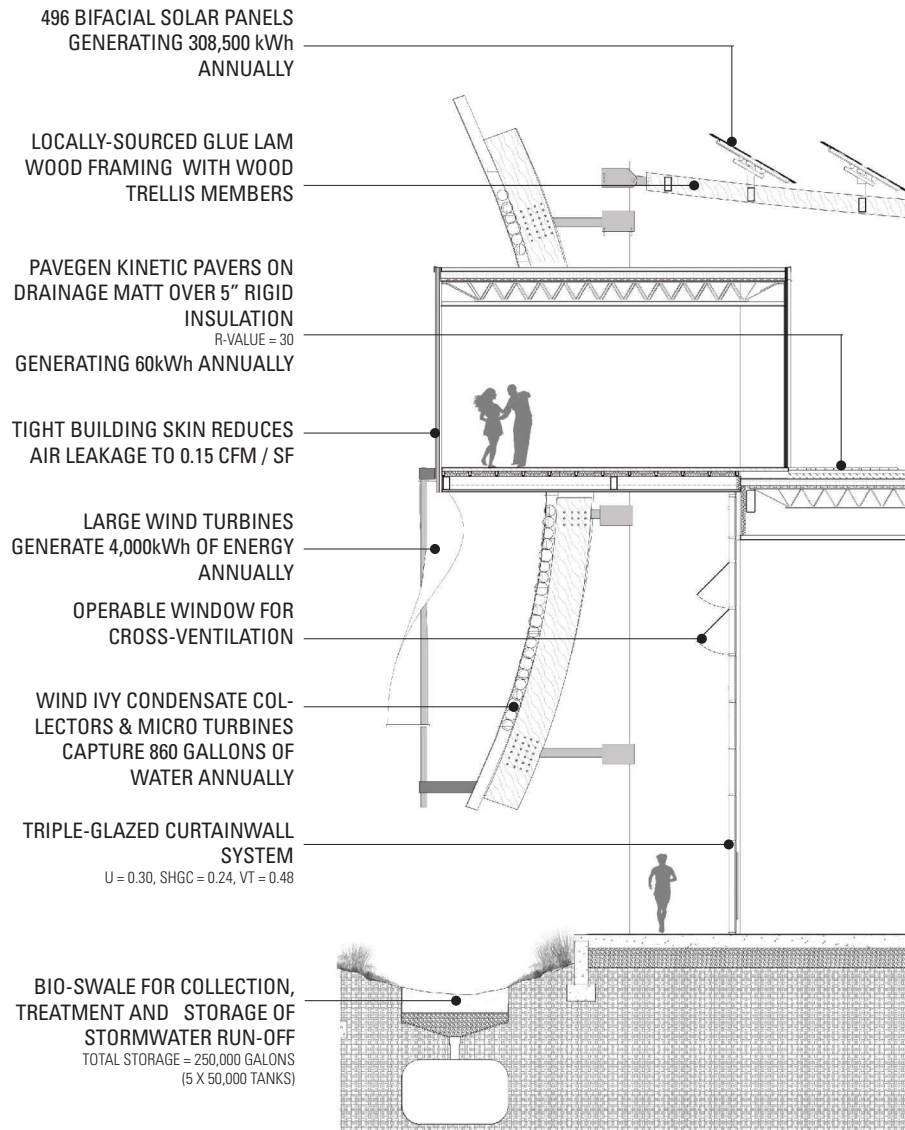


EQUINOX

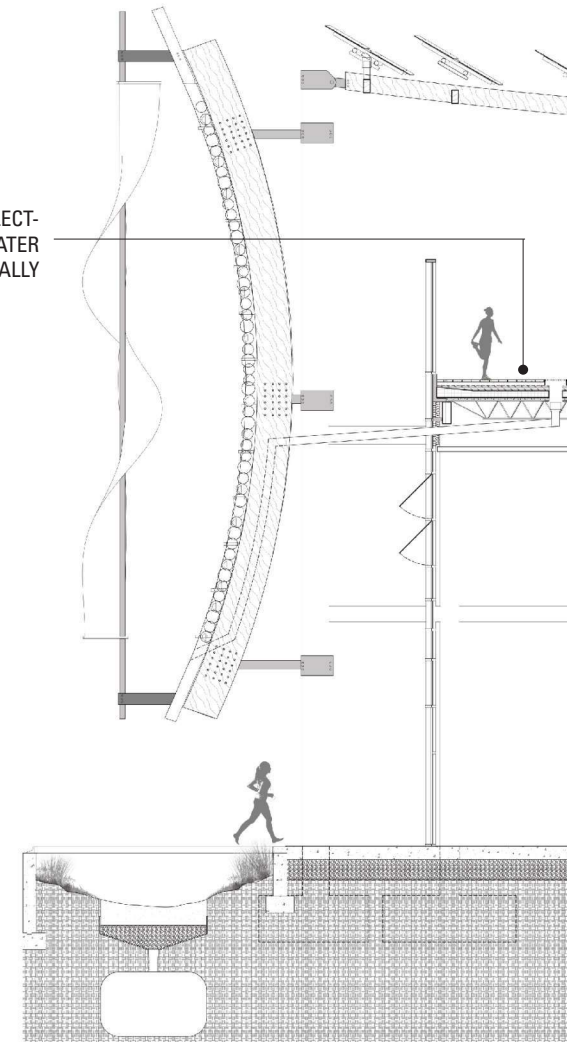


WINTER SOLSTICE

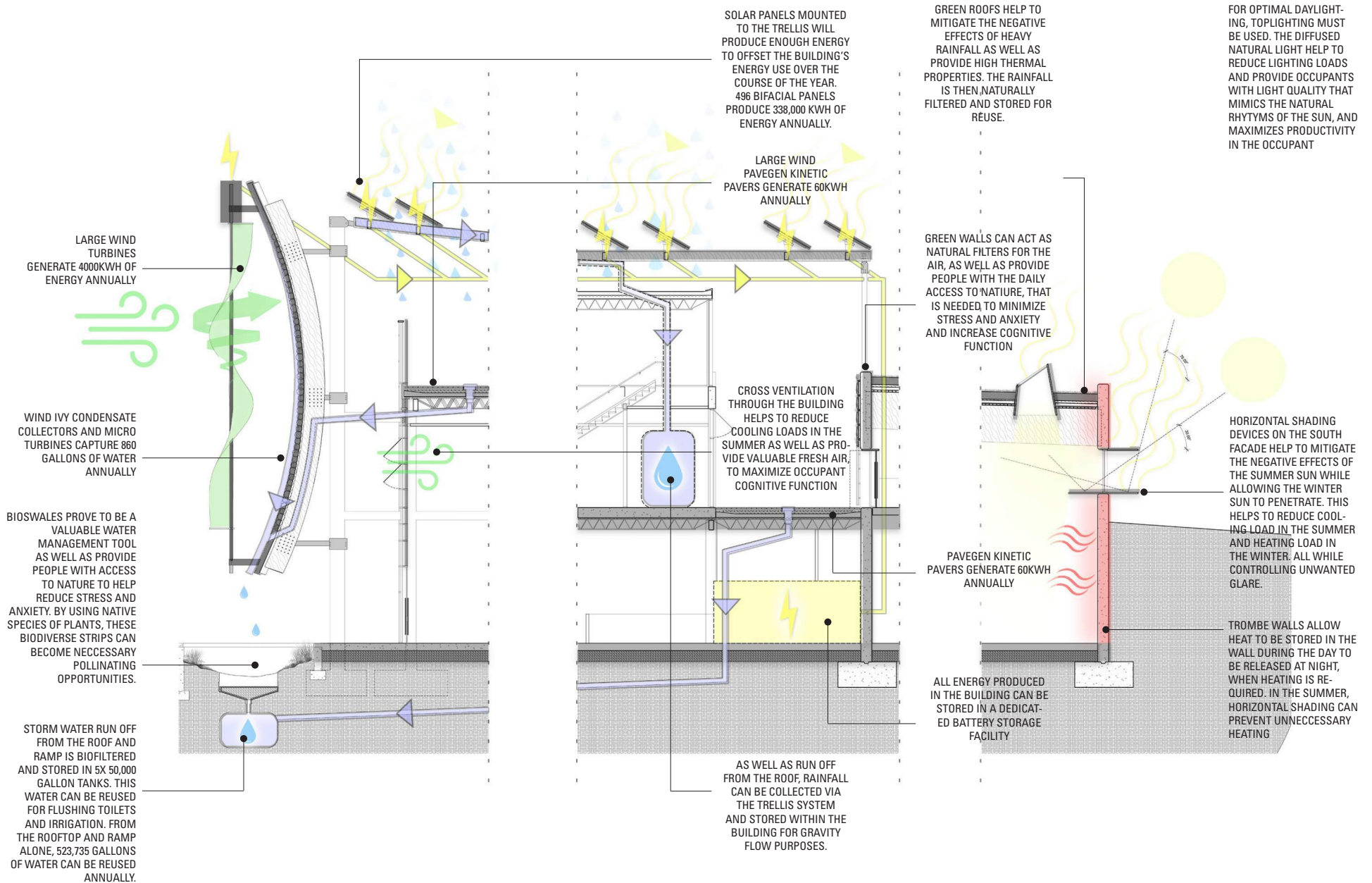
SECTION DETAILS



ROOFTOP AND RAMP COLLECT-
ING 523,735 GALLONS OF WATER
ANNUALLY



SECTION DETAILS



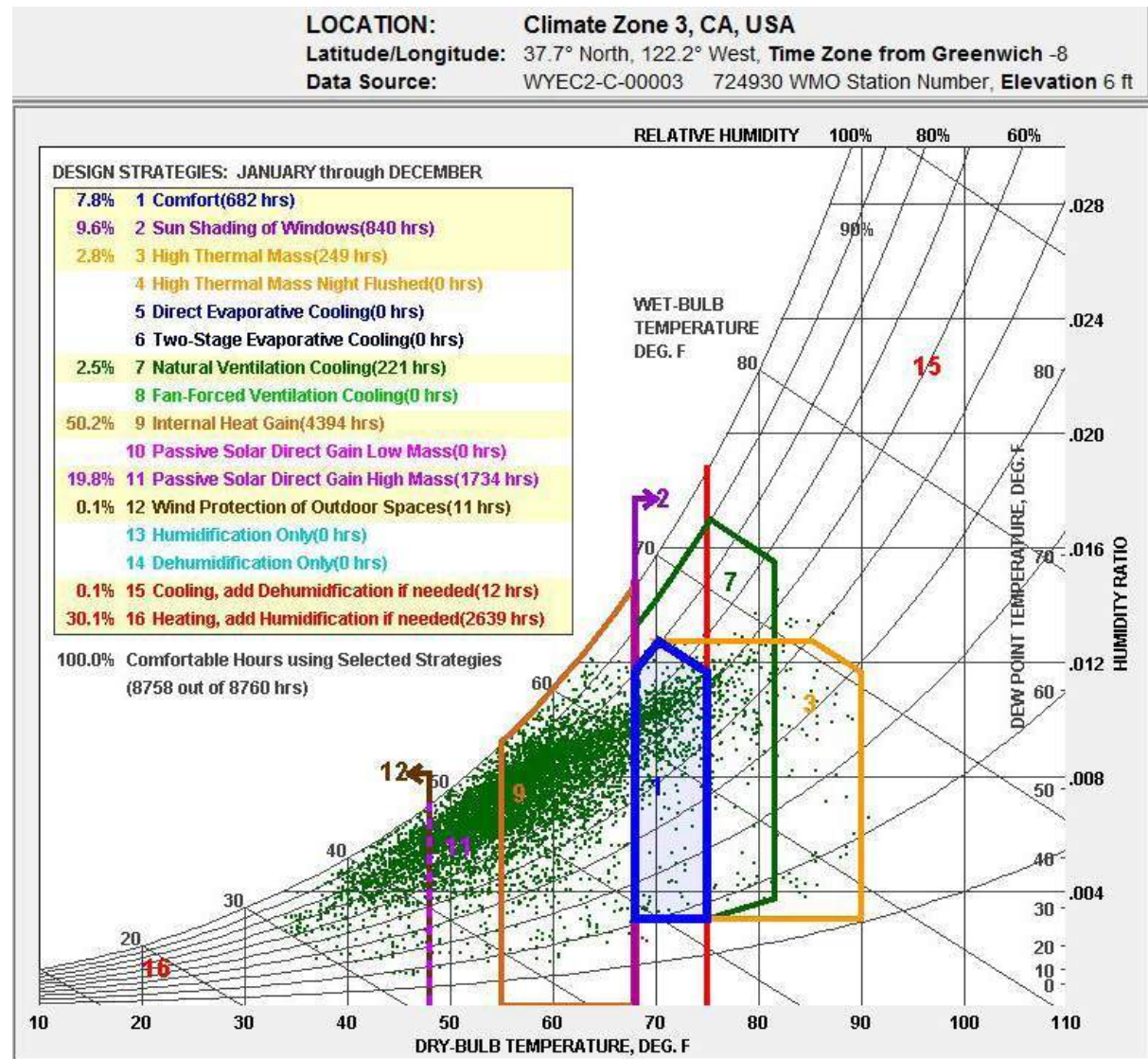
4

CALCULATIONS

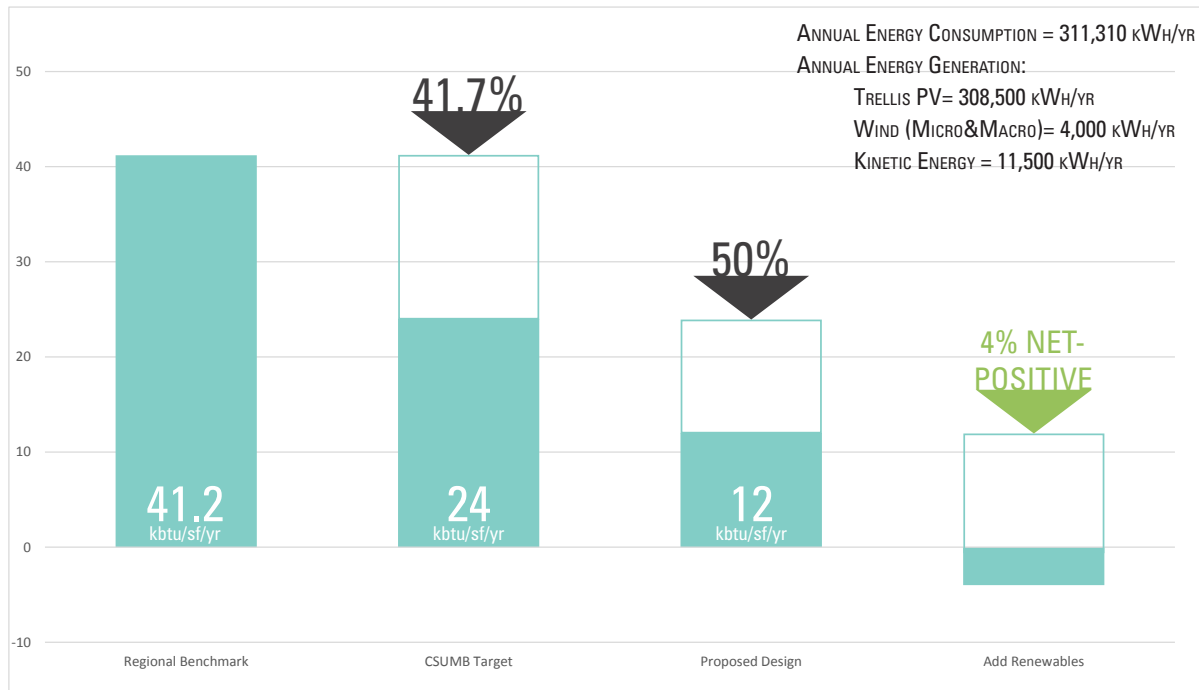


SYSTEM ETHOS

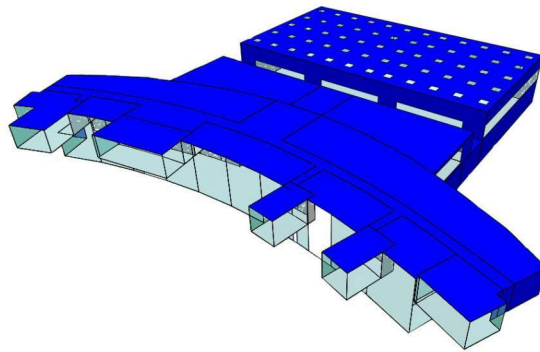
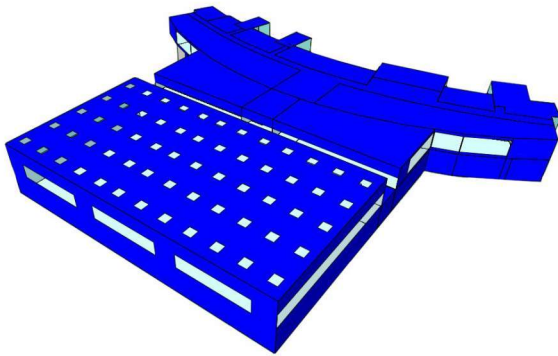
Navae Vitae intends to optimize the collection of renewable resources on site while supporting and enhancing the education and physical activity taking place within. The building becomes an important terminus to the main north-south axis of campus and a gateway to the nature trails that are situated south towards the ocean. The building takes advantage of the opportunities offered by the local climate to collect and produce energy and water, eliminating its carbon footprint and building resiliency within the local community. Rather than one big event, the collection and generation alike are optimized across various scales and modes of activity. Sun and rain are captured across its expanses of rooftops, fog and wind are engaged and celebrated across the front facade which also serves to engage the campus visually with the physical activities within. The building occupants are also part of the energy offset events. The ramp and floor surfaces through the space are set with pavers that produce an electric charge as movement takes place across them. Exercise equipment too creates energy as people workout. Passive cooling through natural ventilation reduces the buildings energy demand. Mass floors and walls collect solar heat and help reduce demand for mechanical heating systems. A balance is met with energy and water use, an architecture at zero.



ENERGY MODEL



An energy modeling was created using IES Virtual Environment to develop and refine the building and its systems in real time as the design developed. Building geometry, envelope constructions, glazing assemblies, and air infiltration were all tuned to the local climate. Heating, active ventilation, and solar thermal collectors were all included. Also modeled were controls for daylight dimming, occupancy-controlled shutoffs, and natural ventilation controls sequences. Year long, hour by hour simulations were run to ensure the design fell within an acceptable comfort range and utilized energy appropriately. The model confirmed that the natural ventilation system would meet the cooling demands of the building for 98.5% of the hours in a year. Using the source-site multiplier of 1.2 for district hot water, the EUI of the design is **12.0 kBTU/SF/yr**, a 50% saving over the CSUMB benchmark of 24 kBTU/SF/yr. Through photovoltaic panels, wind turbines, and kinetic energy the site **generates 104% of the required energy**.



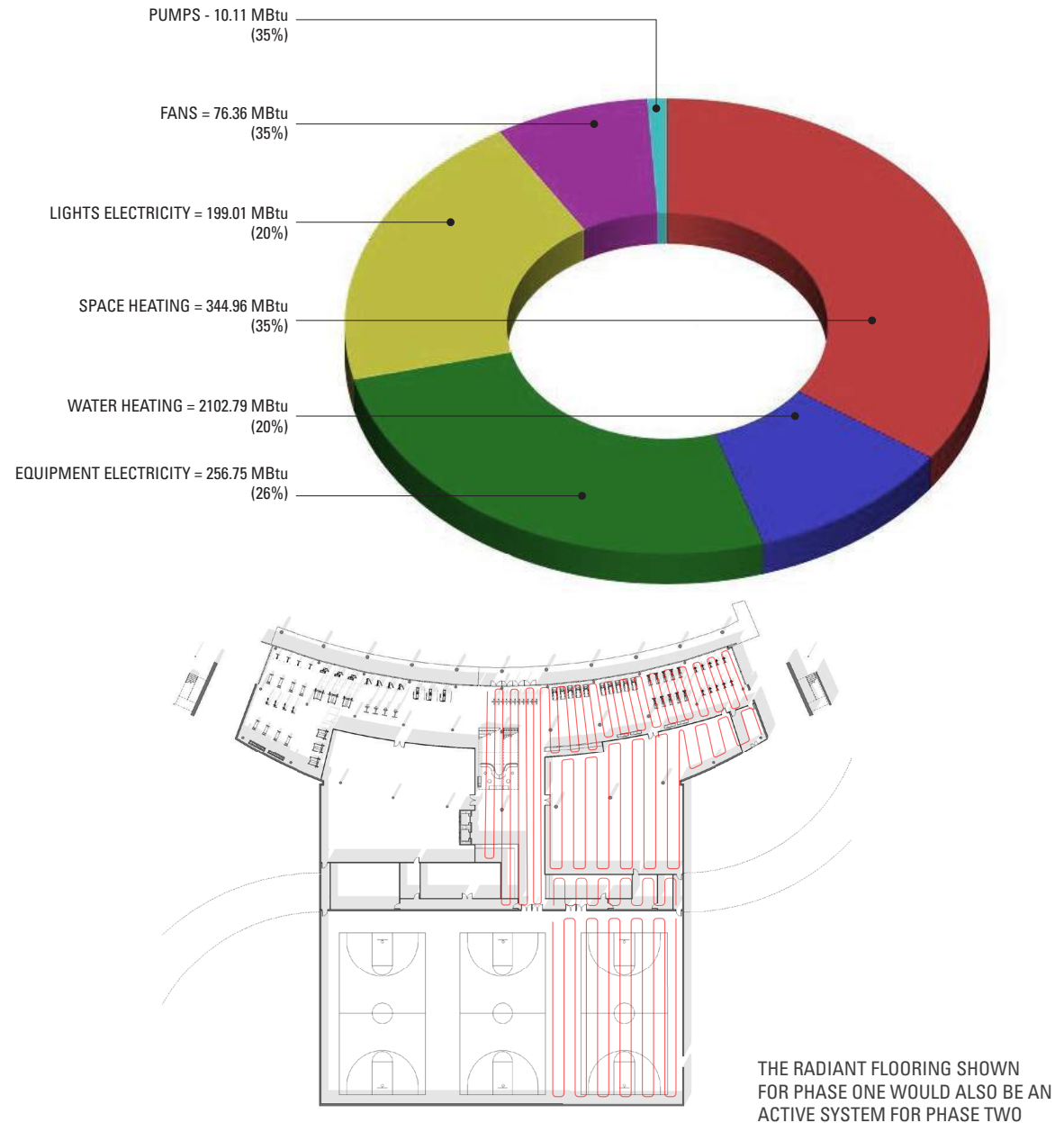
SYSTEMS

Passive

- Daylighting: skylights and windows are prominent in the design and help harvest daylight, reducing the need for electric lights.
- Thermal Mass: green roof and the below grade portion of the gym to stabilize the building temperature and reduce cooling requirements.
- Natural ventilation: used to meet the building's remaining cooling needs

Active

- Lighting: LED lighting throughout with lighting controls that will leverage the daylight entering the space. All fixtures in daylit areas are fully dimmable.
- LPD = 0.42 W / SF
- Equipment: loads are reduced by using cardio equipment that generates energy instead of consuming it. Office and classroom technology will be energy star certified. Occupancy sensors will turn off equipment automatically when the room is empty.
- Heating: when the weather is too cold for natural ventilation, the windows close and hot water from the campus system circulates in the radiant floors. Fresh air enters the building through an enthalpy recovery ventilator with circulation fans.



ENERGY GENERATION

Wind

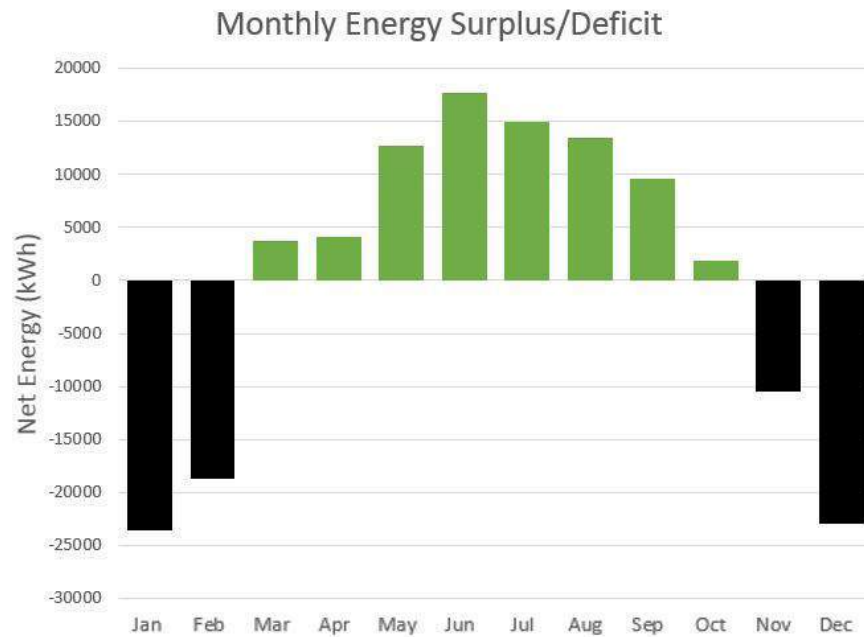
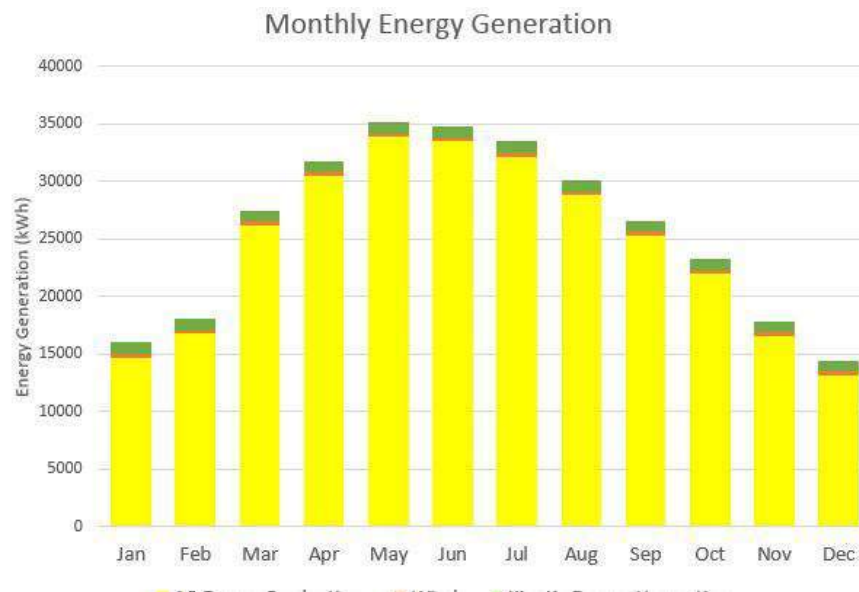
13 large wind sails and an ivy like screen of spinning disks generate 4,000kWh annually. The turbines are bird-safe and a beautiful reminder of the campus commitment to sustainability

Kinetic Energy Harvesting

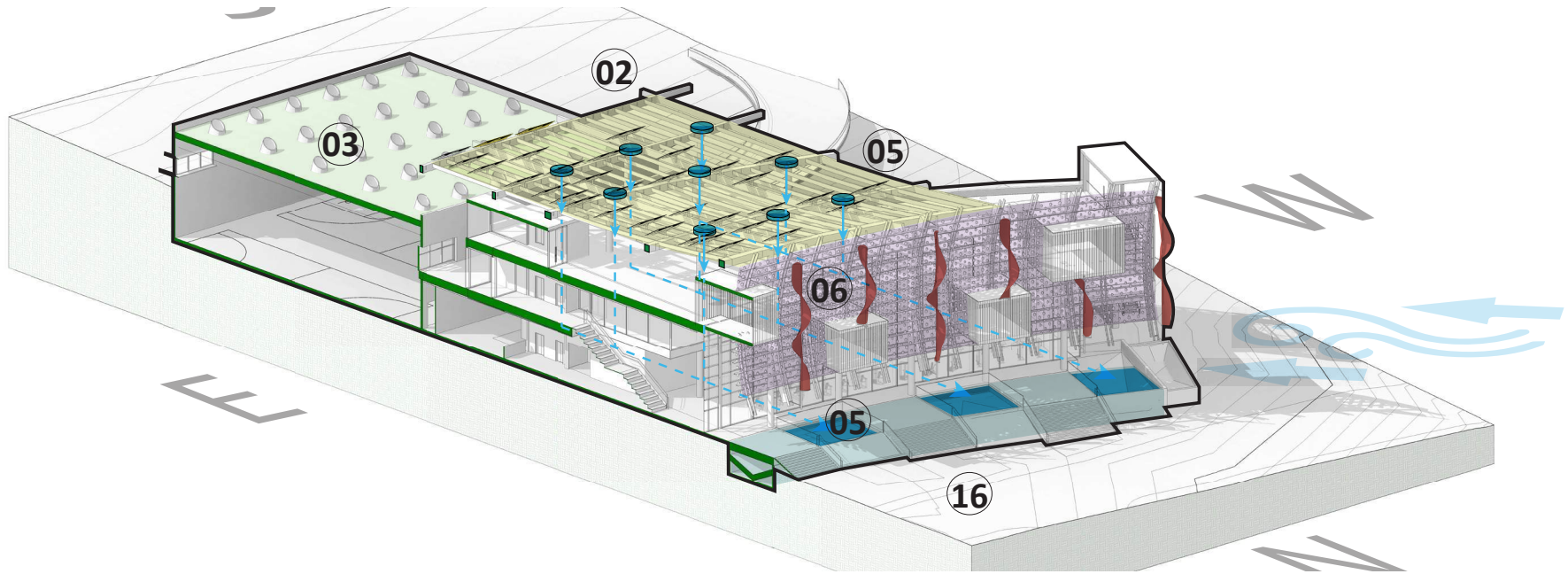
The cardio equipment and the kinetic pavers on the ramp generate energy as they are being used totaling to 11,500kWh annually. The equipment in the building converts kinetic energy to electricity using micro-inverters. Now maintaining a healthy body will create a healthy planet.

Trellis PV

The roof trellis and kinetic facade meet at the north side of the kinesiology building, screening the occupants of the roof deck from the prevailing winds. Clusters of photovoltaic panels on the trellis provide a dappled sunlight and generate 308,500kWh annually. These panels could also be located on parking area 59, if preferred.



LIVING BUILDING CHALLENGE



PLACE Petal

01. Limits to Growth

The site can be classified as “greyfield” since the location could be considered an urban infill or commercial location where under use or outdated (non-retail) uses hamper an otherwise valuable real estate asset.

02. Urban Agriculture

A portion of the site has been dedicated to an agricultural use for the campus.

03. Habitat Exchange

The green roof and the ground park will both be home to native California trees, flowers, and plants that will ensure the presence of native habitats for birds, insects and small animals.

04. Human Powered Living

- Weather-protected bike storage
- Elevated terraces creates motive.
- Rooftop mainly accessible by foot.
- Quality of ramp and stairs promotes their use.

WATER Petal

05. Net Positive Water

Multiple forms of precipitation are captured across the exterior skin of the building and filtered to cistern grey-water storage tanks that are used to offset the needs of the MEP systems throughout the building. Condensation from fog and rooftop rainwater is captured and directed down through the facade structure into the bioswale system which filters and cleans the water for storage and future use. We anticipate the fog and rainwater to be collected annually.

WIND ENERGY COLLECTION

Wind energy is captured primarily from the northwest as it sweeps across the kinetic screen facade. A series of vertical wind sails turn energy turbines that produce roughly 4,000kWh a year of electricity. In addition to catching fog, the screen is made up of windy ivy, small baffled turbines that spin in the wind creating a constant electrical current. This energy helps offset the building demand as it reaches for a zero balance.

ENERGY Petal

06. Net Positive Energy

HOT WATER

Water is primarily heated by the solar hot water system with heat pump hot water cylinders maintaining water temperatures. The solar hot water system drains down overnight to minimize heat loss. For the kitchen only, there is an additional instantaneous gas-fired hot water heater to cater for big events.

HEATING

The building is naturally ventilated and remains comfortable under most conditions in summer without the need for mechanical systems. In winter, the building requires a limited amount of heating, which is provided by energy-efficient split system heat pumps and a heat recovery ventilator. The combined gym space was designed with clerestory windows which will cause minimal heat gains and losses.

LIGHTING

The design of the building makes use of daylight in the gym to provide illumination in daytime conditions. However, there is a need for some artificial lighting during the day and throughout at night. A fully automated lighting control system is provided with daylight dimming, sensors in meeting rooms and other smaller spaces and after-hour sensors in the open plan gym. This ensures energy usage is kept to a minimum. All light fixtures are energy efficient LED's.

LIVING BUILDING CHALLENGE



HEALTH + HAPPINESS petal

07. Civilized Environment

The occupants enjoy the clean air, daylighting, and a deep connection with nature provided by the sweeping views of the campus and ocean beyond. The users get fresh air and exercise by walking through the building via the elevated ramp. Biophilic elements are integrated in the design making the building an extension and a translation of the natural environment. The massing of the building is long and narrow, curving to create a space to act as the symbolic end to the pedestrian street.

08. Healthy Interior Environment

This building incorporates natural materials in its design. These material make a connection to the adjacent natural spaces, connecting the building with its setting. The building also uses color to reinforce a connection to nature through use of accent walls, natural materials and biophilic representations throughout. A healthy interior is accomplished through passive ventilation and daylighting. The green roof serves a method of purification and heat absorber that adds comfort to the interior spaces below.

09. Biophilic Environment

The project seeks to create deeper mind-body connections by employing biophilic strategies throughout the project.

MATERIALS petal

11. Embodied Carbon Footprint

In order to achieve a true zero carbon building, the design will not only operate at net zero energy every year but will also offset the environmental cost of construction and materials. During the construction of the recreation center, a number of carbon offsets through Sterling Planet will be bought to support a Landfill Gas to Energy project.

13. Living Economy Sourcing

Whenever possible, natural materials from the US Southeast (wood, uncoated metals) will be selected to reinforce a sense of place and biophilic goals. Products will be locally sourced (500 km radius for dense materials) and the vast majority of materials, like wood, siding, zinc shingles, drywall, lighting, mechanical systems, appliances, and finishes will all be US-made.

14. Embodied Carbon Footprint

Materials that are deemed unsuitable for re-use or optimization on the project will be recycled to the furthest extent possible. Overall, we anticipate that more than 95% of the construction waste will be recycled.

EQUITY petal

15. Human Scale/Human places

Effortless accessibility for all was a guiding design principle from the start for the Recreation Center. All spaces within the Center meet the latest federal regulations for accessibility. The permeable paved path that leads to the building transforms into a paved path that ramps back to grade and the exercise path that encircles the University.

16. Universal Access to Nature+Place

The building is placed on a rolling natural site surrounded by an active natural environment. Views to the outdoors from every significant space provides that visual connection to nature, while numerous doorways and pathways allow for easy and universal access to Nature and Place.

BEAUTY petal

19. Beauty+Spirit

The iconic ramping through the building provides a space for exercise, meditation and reflection in an environment that stems from the very place where humans have derived their concept of beauty: NATURE

20. Inspiration+Education

The Recreation Center intends to be an educational and technological platform for all participants and visitors to better learn and act in responsible ways in accordance with nature and the environment. The result is an exceptionally informed and inspired constituency that values people and nature as one living, connected system.



NAVAE VITAE

SUPPLEMENTAL PACKAGE