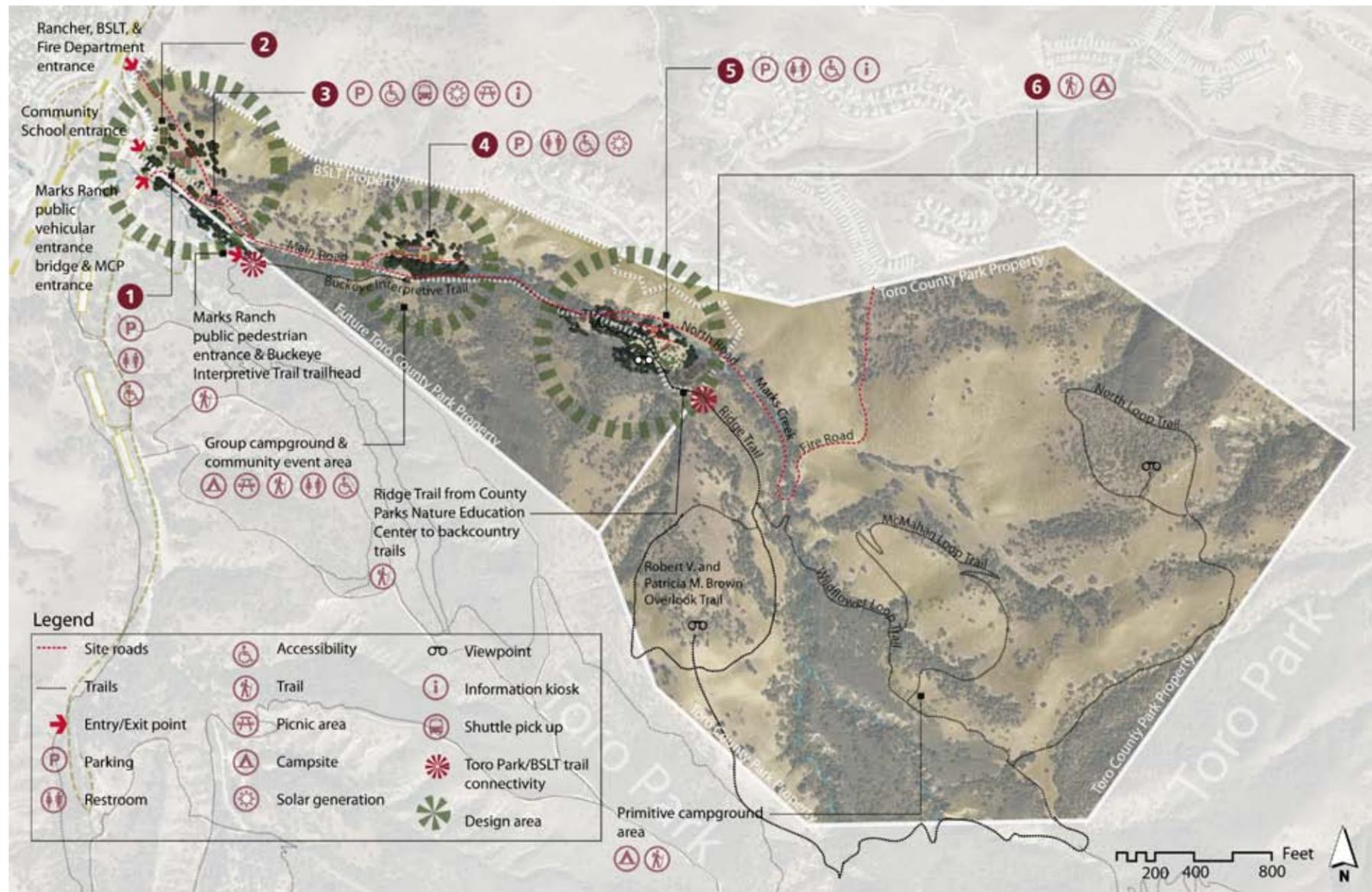


Marks Ranch Vision Plan



LEGEND

1 Community School

2 Nature-based Education Program

North acreage of the Community School campus contains an educational garden, orchard, apiary, hen house, greenhouse, toolshed, compost area and shaded gathering space.

3 Marks Ranch Vehicular Entrance, Solar Parking & Shuttle Pickup Area

Entrance from Toro County Park via the Oak Grove parking area features a vehicular bridge crossing over Marks Creek. A solar parking area accommodates 25 cars with two ADA spots and a covered sitting area for shuttle pickup. Picnic areas are located near the new parking lot to mirror existing picnic areas in Toro County Park. A small information kiosk provides visitors with Marks Ranch site information.

4 Equine Center

5 History District

Existing structures built by the Marks family define this central area. Restored Hacienda and gardens provide office and event space; the former barn is remodeled

as community art studio; the egg pond is converted to an interpretive plaza; and a restored egg incubation structure recall the site's agricultural past. Future County Parks Nature Education Center is located in a historic structure west of the Hacienda. Hacienda includes rainwater catchment system for adjacent garden.

6 Upland Backcountry

The upland backcountry area of Marks Ranch/Toro County Park will be used mainly for cattle grazing and passive recreation. Four new trails are added to the site for improved connection, access to primitive camping, grasslands and oak woodlands. The North Loop trail offers northeast and western views into the Salinas Valley, the Gabilan and Santa Cruz mountains and the Monterey Bay National Marine Sanctuary. The proposed fire road would allow fire truck access into the Las Palmas development at the north end of the site, and into parts of the backcountry.

The Marks Ranch Vision Plan was prepared to explore opportunities for future low impact development of nature education and recreational amenities at Marks Ranch, an 816-acre property near Salinas, California that has been grazed by domestic livestock for over 100 years. An integral piece of a threatened wildlife corridor, Marks Ranch encompasses acres of critical wildlife and vegetation resources in an area of Central California with increasing habitat fragmentation and decreasing open space available to nearby urban residents. Marks Ranch Vision Plan offers a set of recommendations and conceptual designs that address the challenge of balancing the property's current agricultural land use with new solutions that maximize the site's ecological health, its critical function as part of a wildlife corridor, and its positive impact on surrounding communities.



Sense of Place

Weathered (Cor-ten) steel should be used extensively in identifying signage, gates and bridges. The steel resembles the old ranch equipment found on site and would not require the upkeep of wood. Cutting the letters into the signage has been proven to reduce graffiti and the cost of removing it.

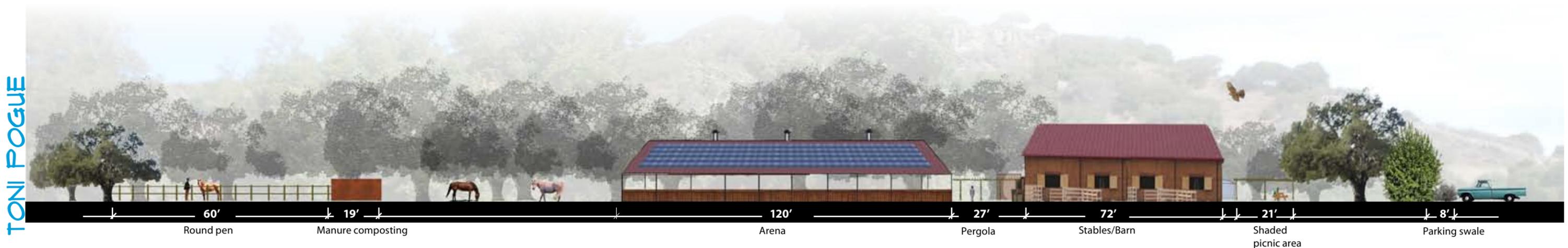
The signature “M” on the original Marks Ranch gate can be used on most signage to distinguish the ranch from Toro County Park, the Community School or other adjacent facilities. Encountering the weathered steel signage throughout the ranch would help to establish a separate sense of place.

Equine Center

A horse facility for equine assisted therapy includes a 1,200 square foot caretaker quarters, round pen, arena with solar arrays, eight-horse stable with adjacent horse washing area, composting toilets, parking with treatment swale, pasture space, and patio with overhead shade structure. Stable and arena include rainwater catchment system.



Section B-B', West to East View of Equine Center



Multi-use Entry Strategies



LEGEND

- ① Solar Parking and Shuttle Pick-up area
- ② Community School Campus
- ③ Vehicular bridge
- ④ Oak Grove parking area

VEHICULAR BRIDGE CONNECTING TORO COUNTY PARK TO MARKS RANCH

The proposed vehicular bridge (number 3 on site plan at left) links Oak Grove parking lot in Toro County Park (number 4) to a proposed parking lot and shuttle pick-up area in Marks Ranch (number 1).



Community School

An educational campus featuring passive solar construction, rainwater catchment system, native and drought-tolerant landscaping, permeable parking area with treatment swale, and multi-sport court.



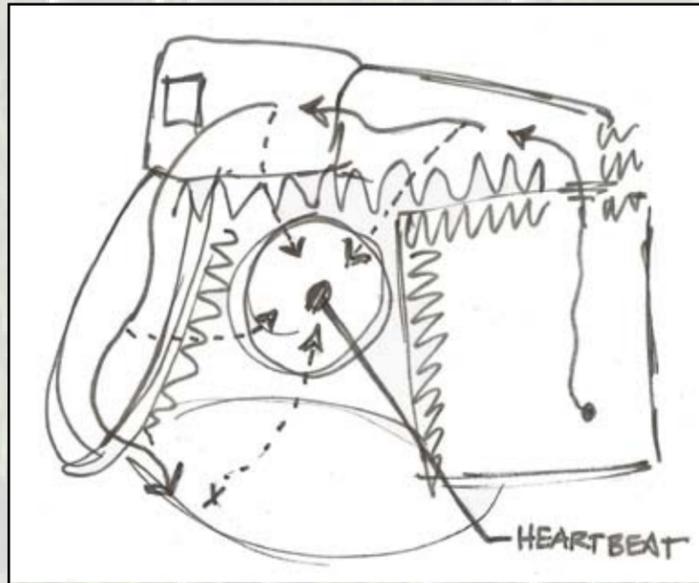
Section C - C', Northwest to Southeast View of Community School and Garden



* School Buildings modeled after Marin Country Day School, by EHDD Architecture.

DISCOVERY AND SOUND

CONCEPTUAL DESIGN



Initial concept drawing

DISCOVERY and **SOUND** shape the areas in this small canyon in the foothills of Los Padres forest. Large bamboo plantings provide shade, define areas, and make wonderful sounds in the wind. The bamboo, thick and about twenty feet tall, lends an air of mystery to the space, and prevents the user from easily seeing what lies ahead. Discovery of a winding path, a reflective pool and seating area, and a "wind stream" occur simply by turning a corner. Explorers who travel off the beaten path will discover a kiva, the heartbeat of the space, with built in djembes and bells hanging, seemingly from the bamboo.

THE REFLECTING POOL

THE STREAM

THE KIVA

THE MEADOW



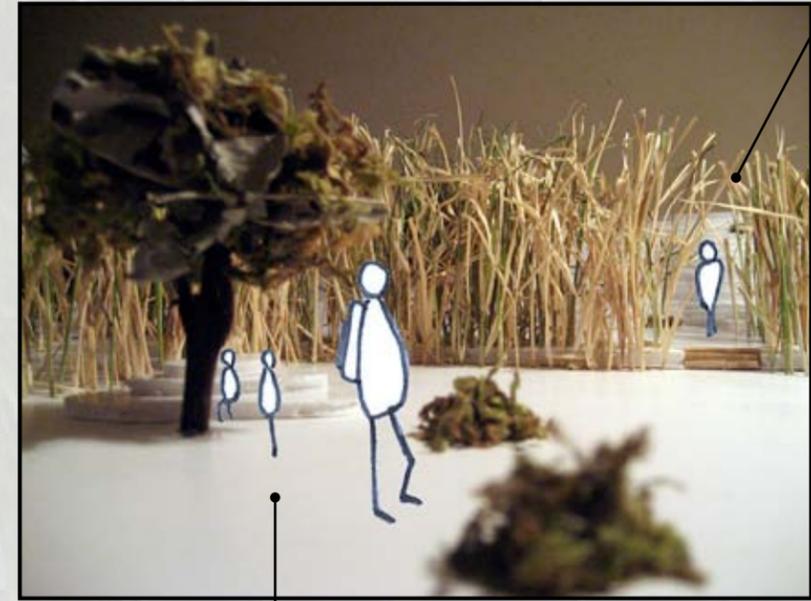
THE STREAM.

Nassella pulchra, purple needlegrass, fills the "stream bed" area. Grasses are used instead of water for two reasons; the element of discovery, or surprise, continues into this space, and the grasses make a relaxing sound in the wind.



THE MEADOW.

The entry to the park is a flat meadow, enriched with southern California natives such as *Lupinus albifrons*, *Miulus longiflorus*, and *Eschscholzia californica*.



The narrow steps can be seen from anywhere in the meadow, beckoning the visitor in to explore.



THE KIVA.

Explorers can slip through one of a few breaks in the bamboo from any other space to reach the kiva, but if they don't find it by the end of their journey, the kiva is waiting as the visitor rounds the corner from the wind stream. Built-in djembes make a drum circle possible at any time, and several bells hung on structures wait in the kiva for those who can find them.



THE REFLECTING POOL.

The Japanese maple, *Acer palmatum*, stands beside the reflecting pool, a bright specimen tree in a space with very little other color to compete with. The visitor encounters the deep blue reflecting pool and the deep red tree after leaving an area dominated by greens and browns, another discovery along this path.

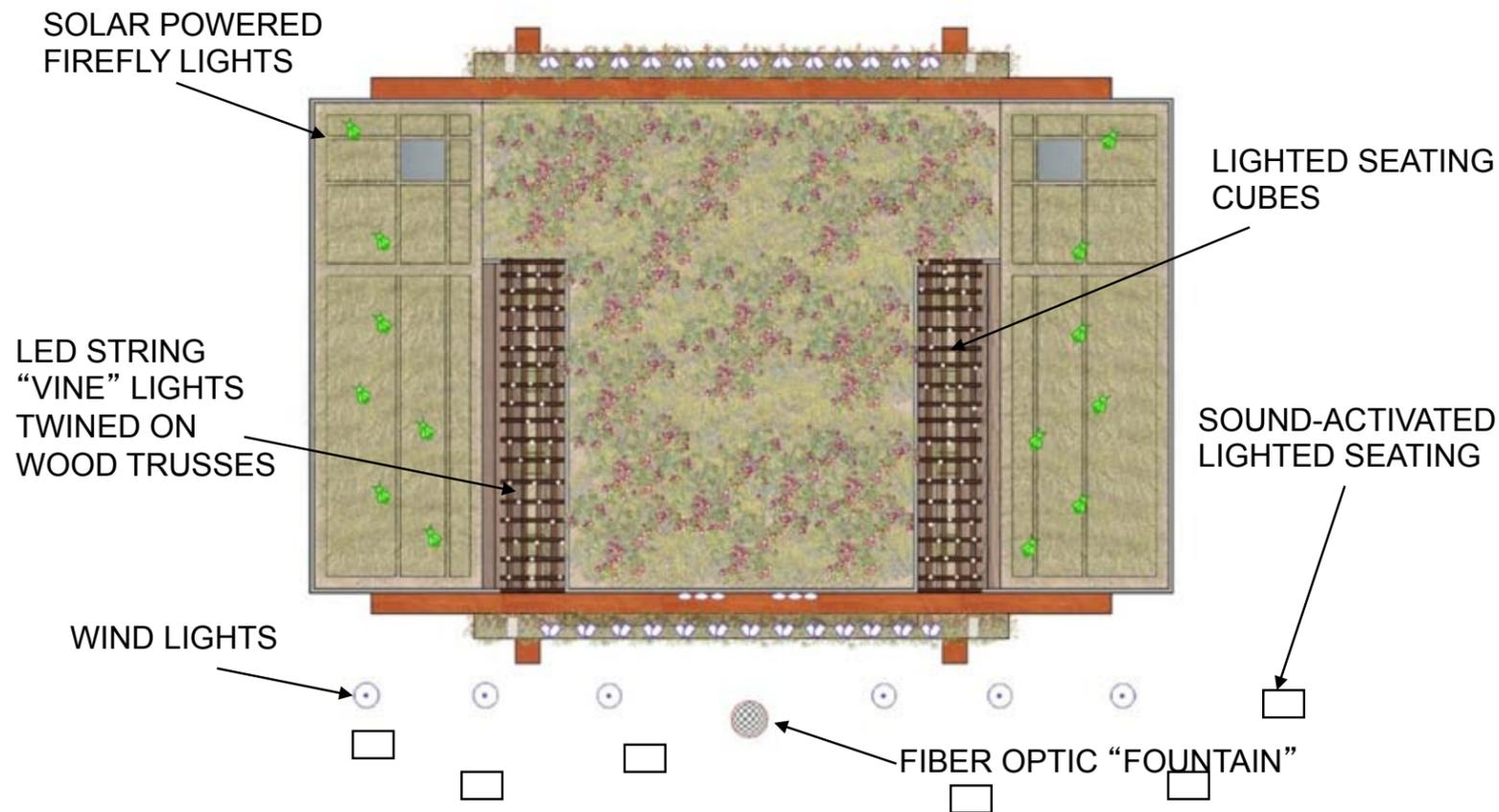


RE + VISION gTECH

EMERGING TECHNOLOGY CENTER

The decommissioned Tustin Marine Corps Air Station (MCAS) is a swath of open space in an almost completely built up Orange County. Military operations left the site with soil and water contamination. Using advanced technology, our group of three designed a green business center, which included a hotel and conference center, college campus and office space. The buildings and grounds double as demonstration areas in the use of sustainable lighting, green roofs, and living digestive machines. A linear park treats contamination.

LIGHTING DEMONSTRATION AREA: HOTEL PLAN VIEW

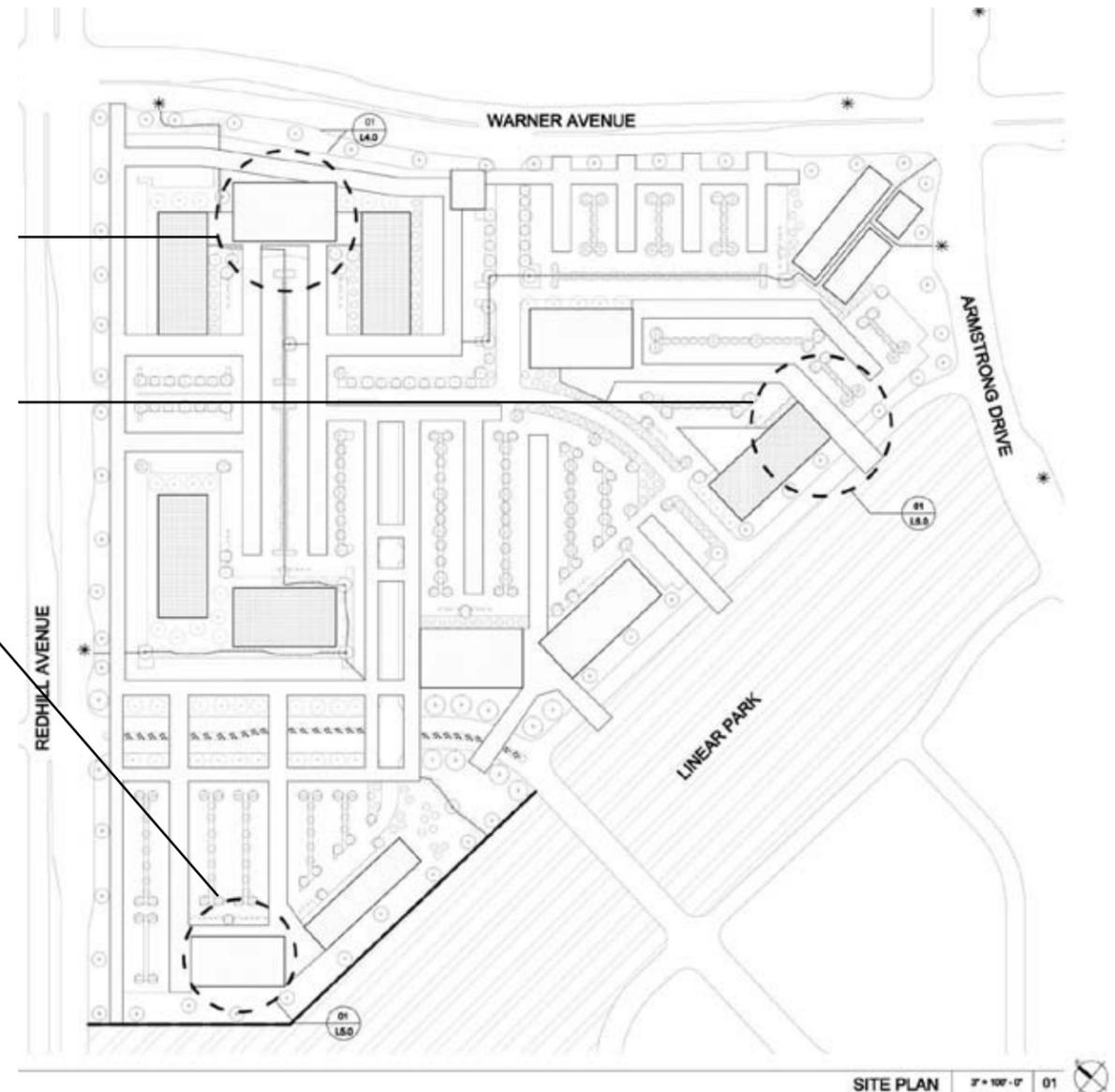


SITE PLAN

Hotel Green Roof & Lighting Demonstration

Living Machine & Living System Demonstration

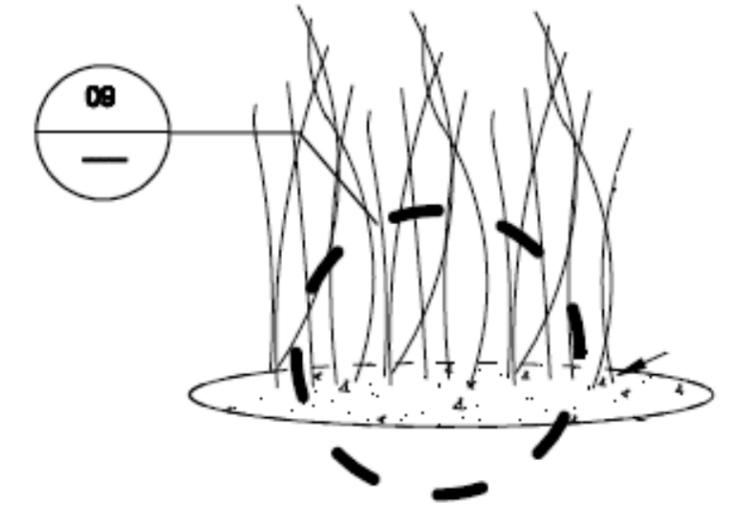
Kitchen Showroom Demonstration



LIGHTING DEMONSTRATION AREA: HOTEL SECTION VIEW

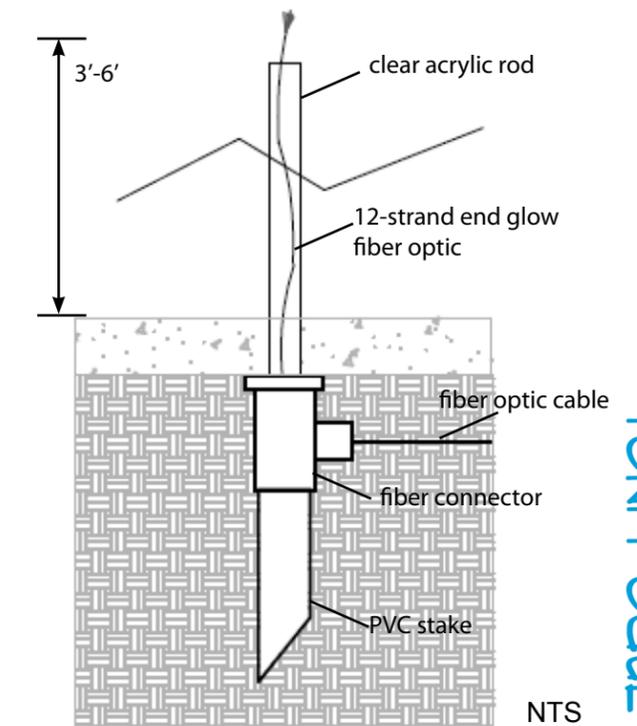
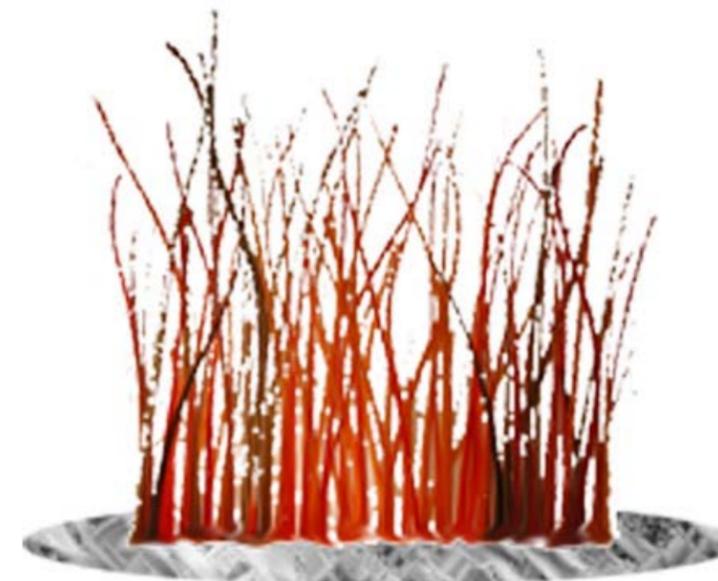


FIBER OPTIC FOUNTAIN DETAIL



- 1. Solar powered firefly lights
- 2. LED strings
- 3. Lighted seated cubes

- 4. Sound-controlled lighted seating
- 5. Wind powered lights
- 6. Fiber optic "fountain"



FANTASY FOOTBALL: OFF THE GRID SPORTS & ENTERTAINMENT

SUSTAINABLE MASTER PLAN DESIGN

SITE PLAN



- NORTH SITE**
 EXPANDED WETLAND
 STADIUM OFFICES/MEDICAL
 TEAM PARKING
 RETAIL/RESTAURANT/OFFICE
 CONNECTOR TRAIL SYSTEM
 STADIUM
 PRACTICE FIELDS
 NEW METRO STOP

- CENTRAL SITE**
 5 STORY PARKING GARAGE WITH
 ROOFTOP PARK
 PARK (TYP)
 RETAIL/RESTAURANT/OFFICE
 MOVIE/LIVE THEATER
 CONNECTOR TRAIL SYSTEM
 PEDESTRIAN BRIDGES (TYP)

- SOUTH SITE**
 CONSTRUCTED WETLAND AND
 DETENTION POND
 PARKING LOT WITH SOLAR PANELS
 10,000 GALLON RECLAIMED WATER
 TANK
 DETENTION AREAS (TYP)
 SWALE (TYP)
 WIND TURBINES
 DIAMOND BAR CREEK
 RIPARIAN TRAIL

- HABITATS**
- RIVERSIDIAN SAGE SCRUB
 - BIOFUEL DESIGNATED AREA
 - RIPARIAN
 - PURPLE NEEDLEGRASS
 - LINEAR BUFFER PARK

TRANSPORTATION



- Freeways
- Primary Roads, Secondary Roads & Tributary Roads
- Metrolink Route & Metrolink Stations
- Bus Routes & Bus Stops
- Dedicated Bicycle Lanes
- Pedestrian Bridges, Pathways & Trails

The 57/60 freeway interchange is already a traffic bottleneck, and increases of 25,000-75,000 people per event at the stadium will have a significant negative impact.

Improvements to the interchange and additional freeway onramps are badly needed. A new Metro stop has been added right at the mouth of the stadium to encourage ridership. Pedestrian bridges and access and dedicated bicycle lanes, as well as on site bike lockers, will provide many transportation alternatives.

Numerous shaded pedestrian bridges and paths connect all parts of the site; nature trails also connect the adjacent Diamond Bar neighborhood to the site.

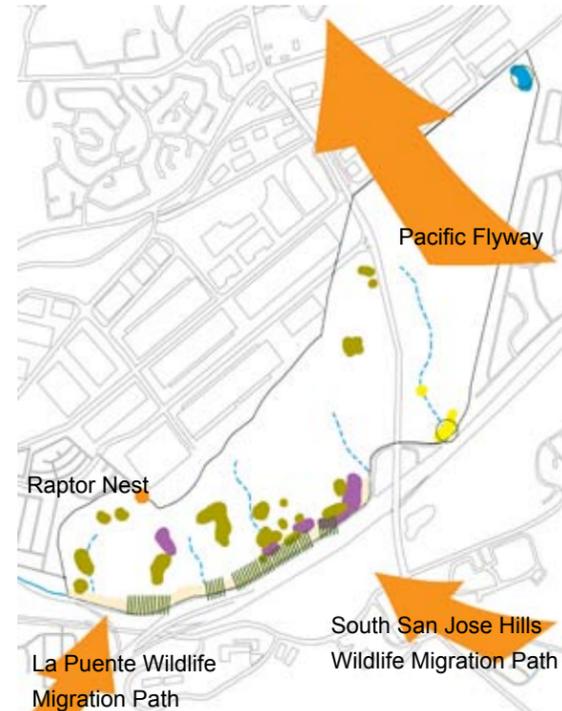
Getting There and Back. Increases in traffic are the most significant impact of this project. The original project removed bicycle lanes on 10 busy streets. Fantasy Football adds bus lines and stops, a new metro stop, and grade-differentiated pedestrian and bicycle lanes.

NATURAL PROCESSES

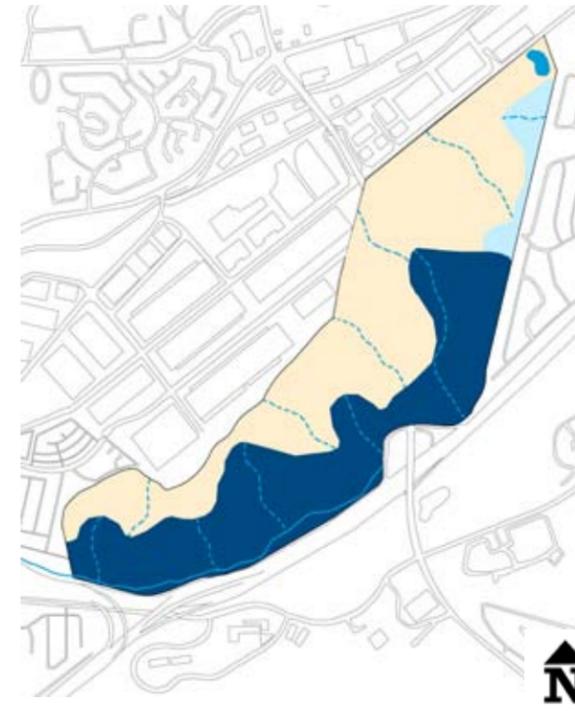
GEOLOGICAL



BIOLOGICAL



SUB-WATERSHEDS & RUNOFF



- Potential Landslide Area
- Colluvium: Sedimentation & Weathering of Alluvium
- Alluvium: Composite of Clay, Silt & Sand
- Puente Formation: Parent Material, Sedimentary Rock
- Compacted Fill: Mostly Alluvium

- Disturbed Riparian Area
- Mule Fat Scrub
- Purple Needlegrass Grassland
- Wetlands
- Remnant Riversidian Sage Scrub

- 258 Acres, 389 cfs: Drains to San Jose Creek Tributary
- 276 Acres, 542 cfs: Drains to Diamond Bar Creek
- 82 Acres, 251 cfs: Drains to San Jose Creek via Storm Drains
- Diamond Bar Creek with Perennial Creeks & Wetlands

Soils are diverse throughout the site, with several areas of development concern because of landslide proclivity and soils difficult to build upon. Furthermore, the site was used for unmanaged grazing for 150 years and most soil is highly compacted. Hilly topography invites frequent windy conditions.

Biological resources are small in area but diverse and plentiful in the areas of both resident and migrant bird populations. Small areas of riparian vegetation, purple needlegrass, and sage scrub habitats also exist. Fish still swim in Diamond Bar Creek in the southwest portion of the site, despite disturbances.

Water exists on the site underground in the form of perched water. San Jose Creek runs on the southeastern side of the site, which is threatened by development. Diamond Bar creek is culverted underground where the CalTrans easement exists, hampering future efforts to restore the riparian area.

Pre-Design Analysis. Methodology began with a thorough investigation of natural processes on the site such as soil and liquefaction conditions, flora and fauna (both on site and migratory), and location of sub-watersheds and runoff.

FOOTPRINT

In one of the last undeveloped spots in eastern Los Angeles County...

PROPOSED MAJESTIC REALTY DESIGN



mass: **60%** void: **40%**

estimated grading:

13.53million cubic yards

PROPOSED SUSTAINABLE DESIGN



mass: **30%** void: **70%**

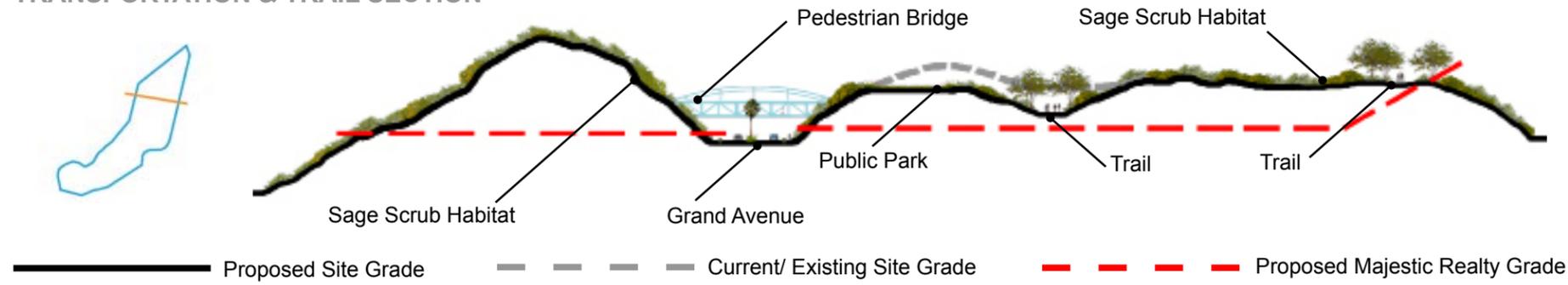
estimated grading:

5.41million cubic yards

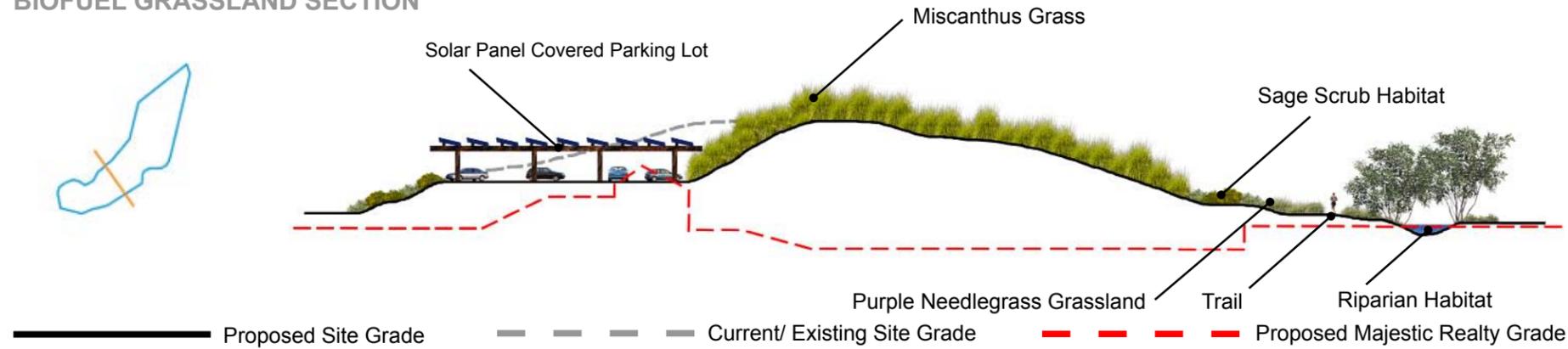
Distribution of Space in Development. The use of mass/void diagrams clearly shows the impact the original proposal, by Majestic Realty, will have. Clustering structures and going vertical instead of horizontal greatly reduces environmental impact.

GRADING

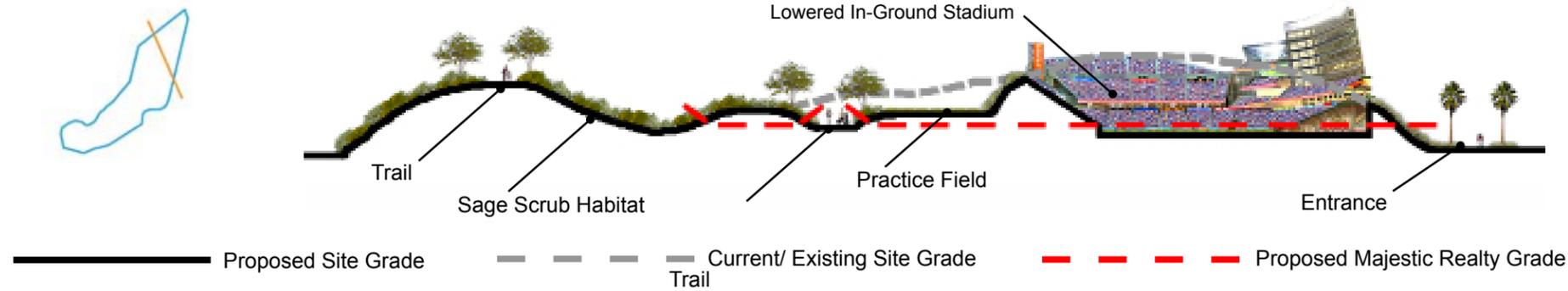
TRANSPORTATION & TRAIL SECTION



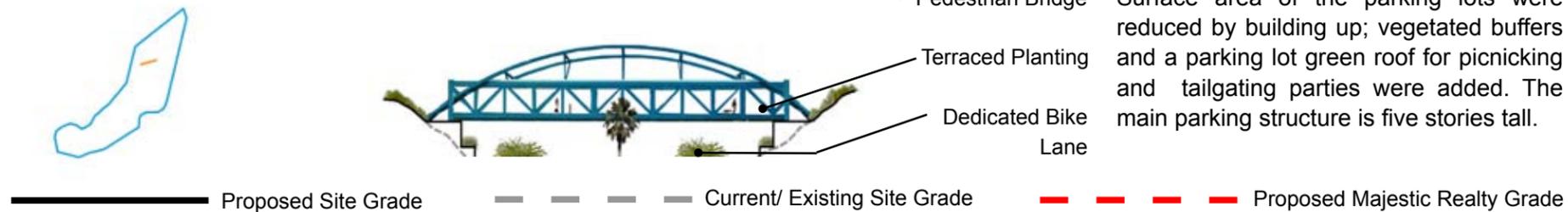
BIOFUEL GRASSLAND SECTION



STADIUM & SPORTS COMPLEX SECTION



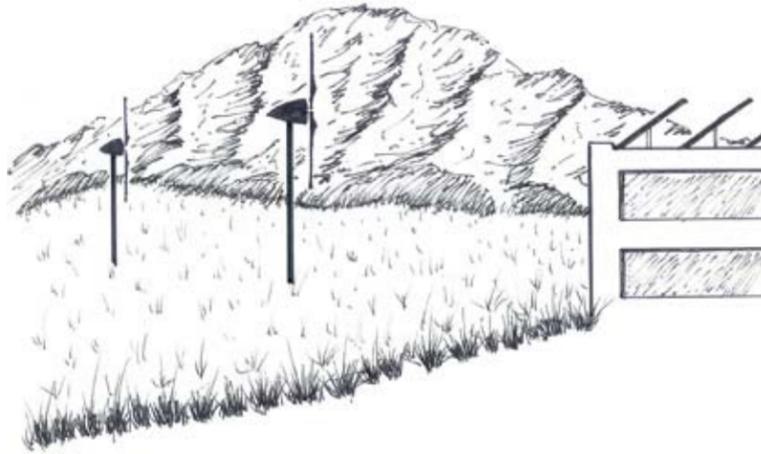
GRAND AVENUE SECTION



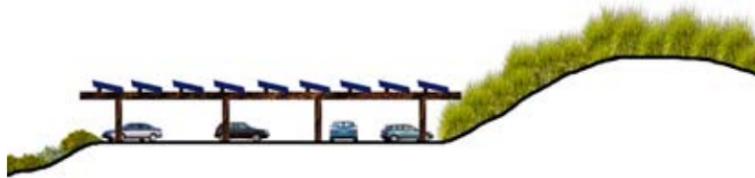
The Difference Grading Makes. The sections above show existing and proposed grading plans. Necessary grading is possible to accomplish without destroying the existing hilly terrain; the Fantasy Football project estimates 60% less grading than Majestic Realty's.

ENERGY

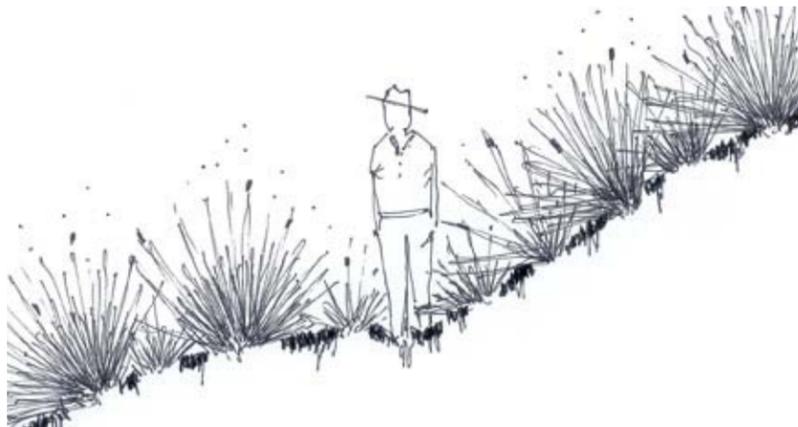
WIND TURBINE PERSPECTIVE



SOLAR PANEL PARKING LOT SECTION



BIOFUEL GRASSLAND PERSPECTIVE

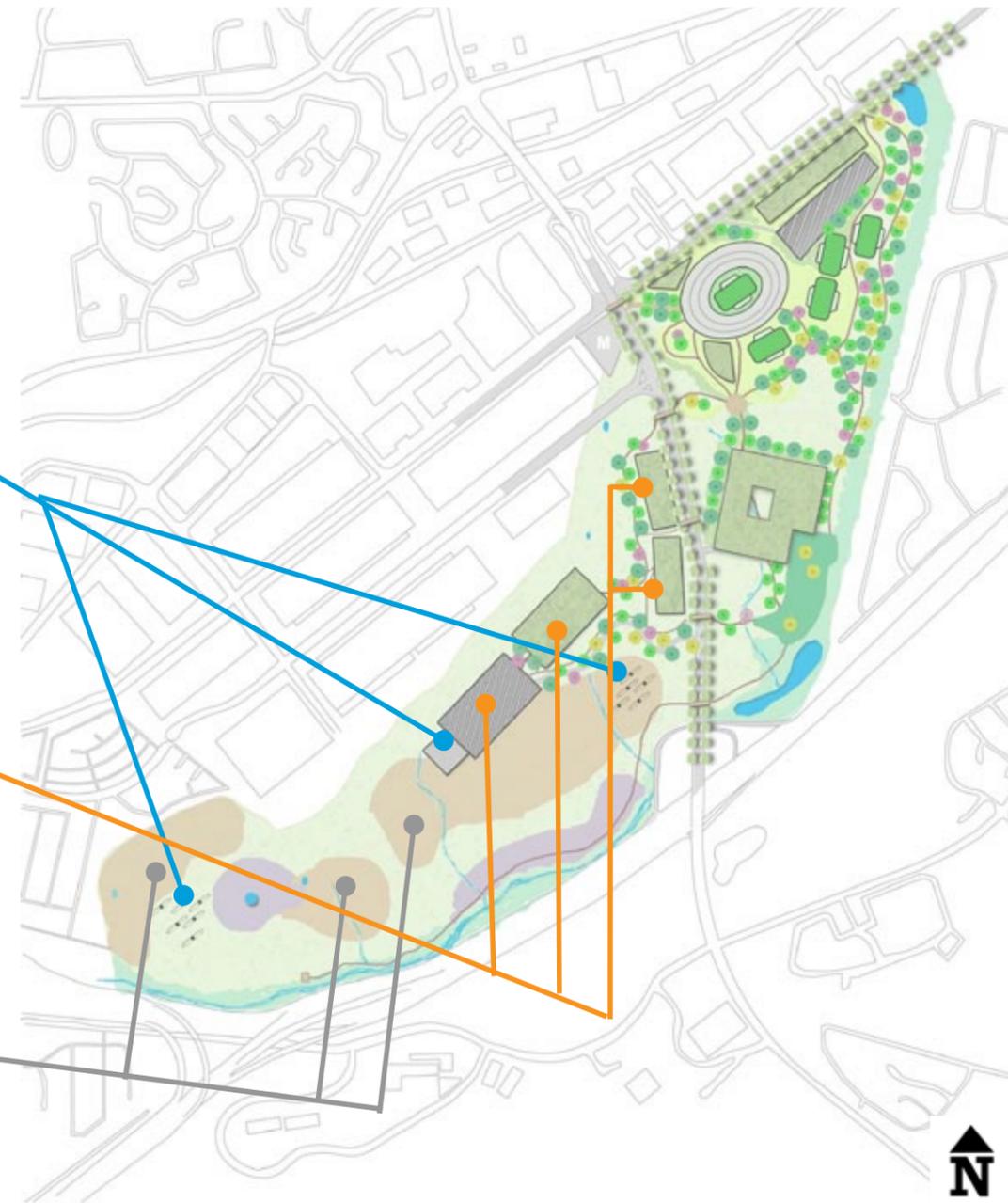


ENERGY SITE PLAN

Wind: 10 bird-friendly turbines generate 40,000 mBtu per year.

Solar: Panels scattered throughout the site generate 9,125 mBtu per year.

Biofuels: Concentrated areas of Miscanthus grass generate 2,063 mBtu per year.



Of the many renewable energy technologies on site, wind is by far the most efficient, followed by solar and then biofuels. The stadium, related structures and facilities are estimated to use approximately 32,000 mBtu per year; initial calculations show an energy surplus of 19,143 mBtus a year. These can be used to power the theaters, offices, restaurants and retail, or given back to the local power grid.

Energy Research. The Fantasy Football project is anything but energy depleting—it can generate all the energy it needs for the NFL stadium on site. Employing several energy strategies, and working with land and site conditions makes this possible.

LAGUNA BEACH: WHERE THE STREETS END

ANITA STREET

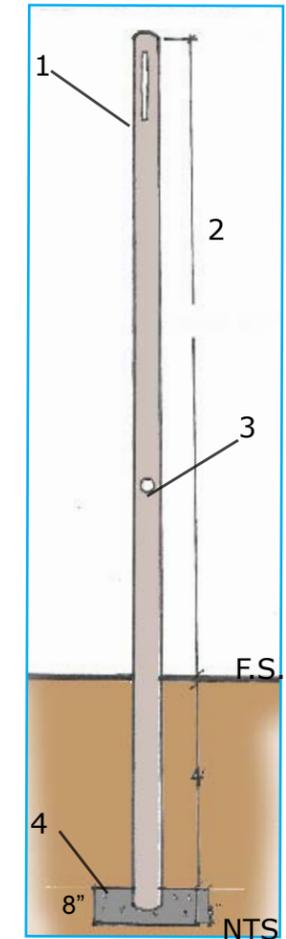


SECTION A-A': ANITA STREET



This simple wind organ, designed by artist Doug Hollis, uses aluminum pipes placed at different angles to create haunting, beautiful tones.

WIND ORGAN DETAIL



WIND ORGAN DETAIL

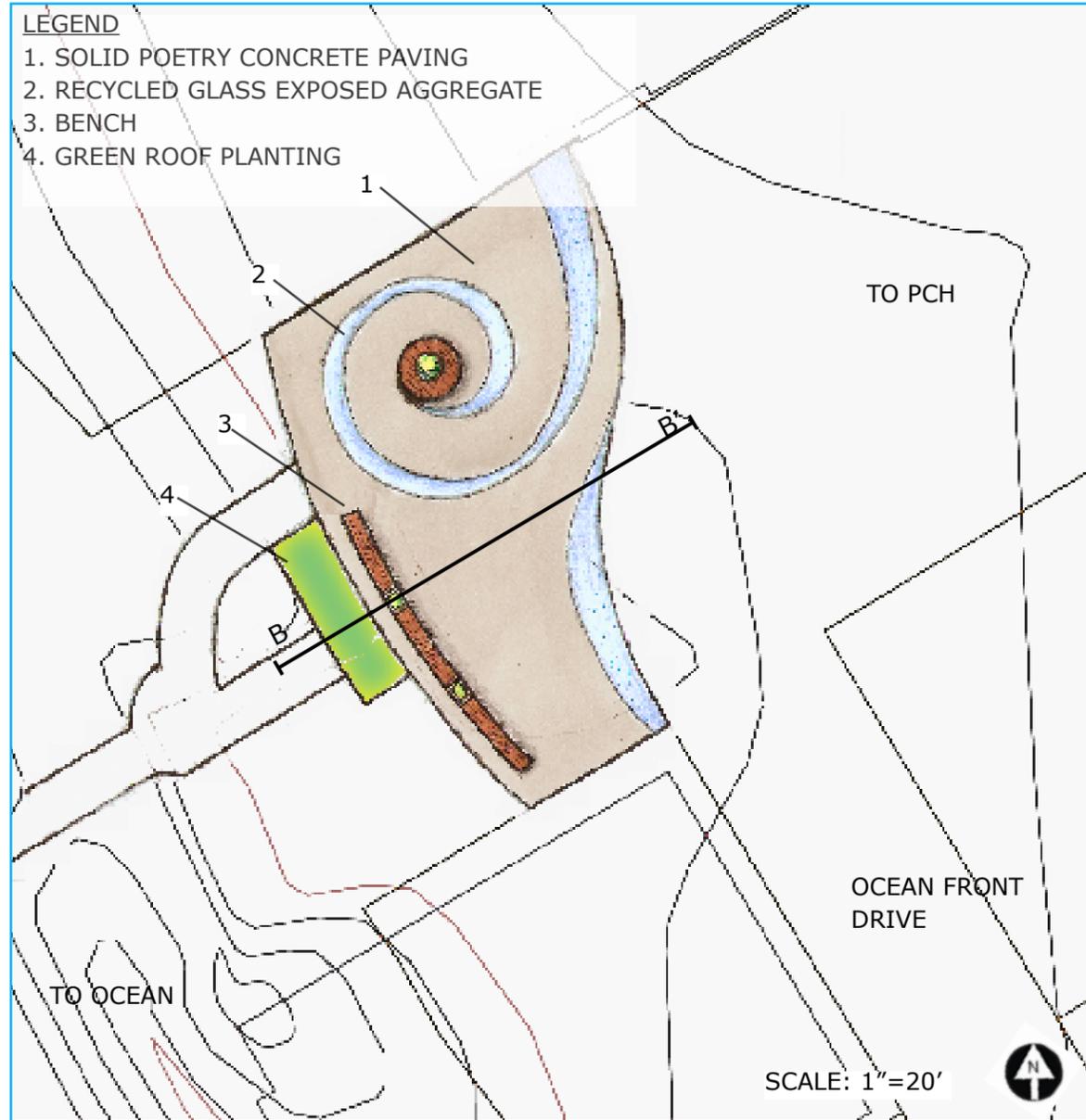
1. ALUMINUM PIPE, 4"-6" DIA.
2. RESONATING SLOT (VARIES 12'-18')
3. PITCH HOLE (SEE NOTE)
4. CONCRETE FOOTER POURED IN PLACE

NOTE: ARTIST TO PRE-CUT SLOTS AND HOLES. PIPES WILL BE DELIVERED WITH DETAILED INSTRUCTIONS FOR INSTALLATION.



Laguna Beach has a direct geographic connection to ocean breezes and, of course, the water. Expressing the wind and humidity/fog visually helps residents and visitors to connect the land with the coast and the ocean. The idea of a cul-de-sac becomes obvious as a human construct when energies are allowed to flow more freely and naturally between city and ocean. Wind organs and moisture-sensitive sidewalks enhance one's experience of the weather that normally flies under human radar.

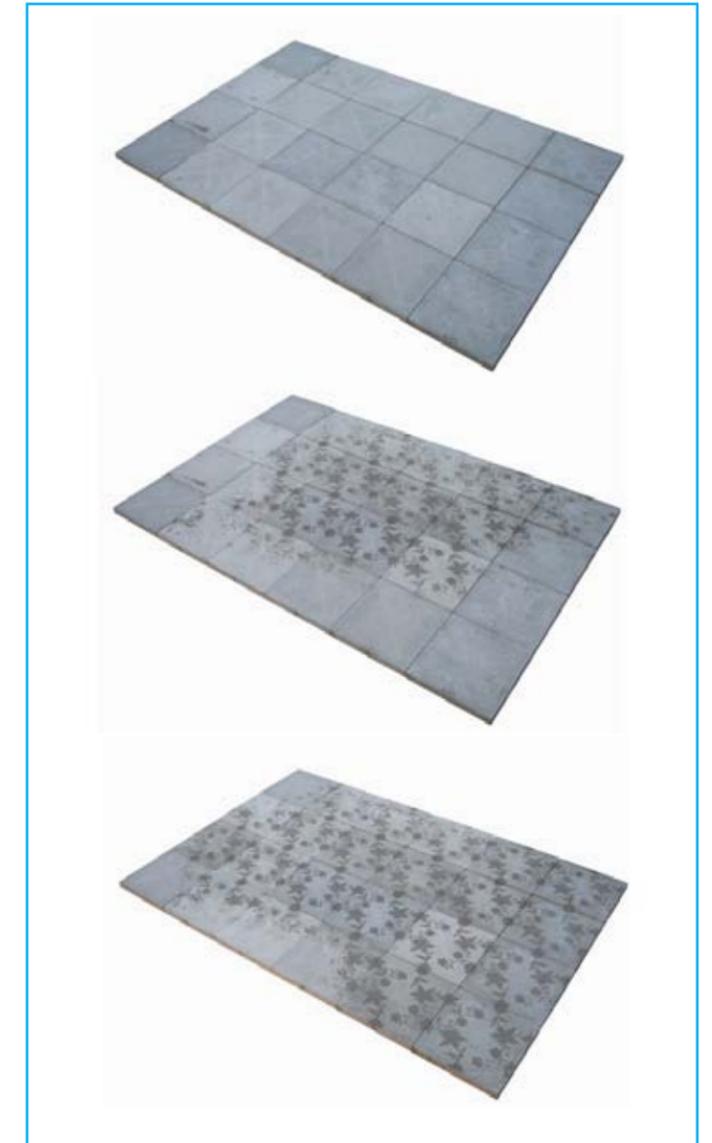
BROOKS STREET



SECTION B-B': BROOKS STREET



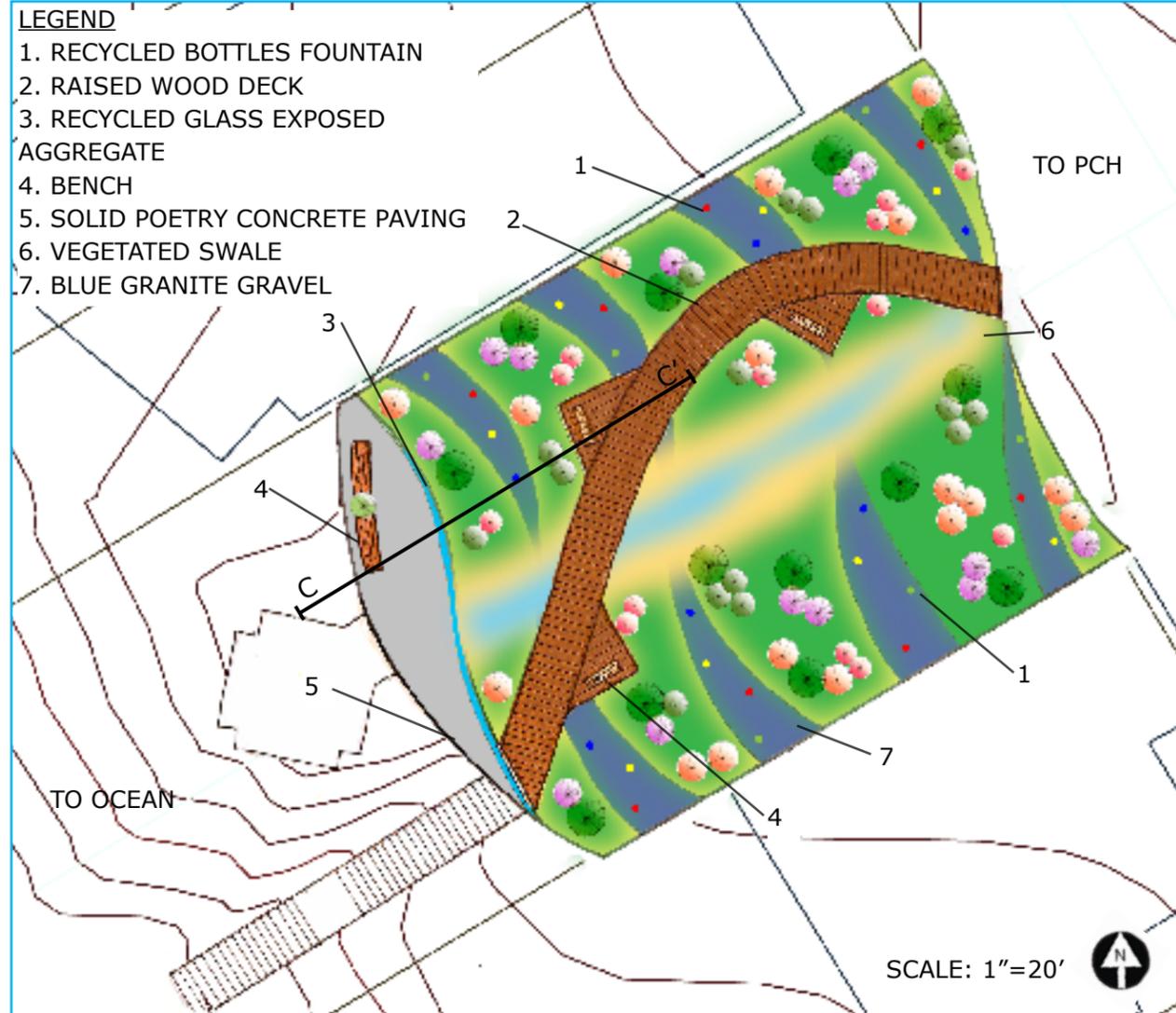
SOLID POETRY DETAIL



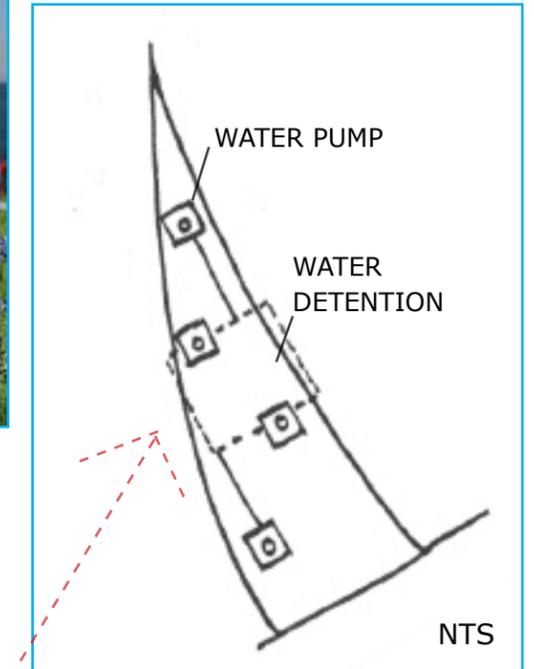
Molenschot & Happle's **Solid Poetry** slabs contain a pattern that emerges when they come into contact with water, fog or humidity.

VOLATILE « » FLUID

OAK STREET

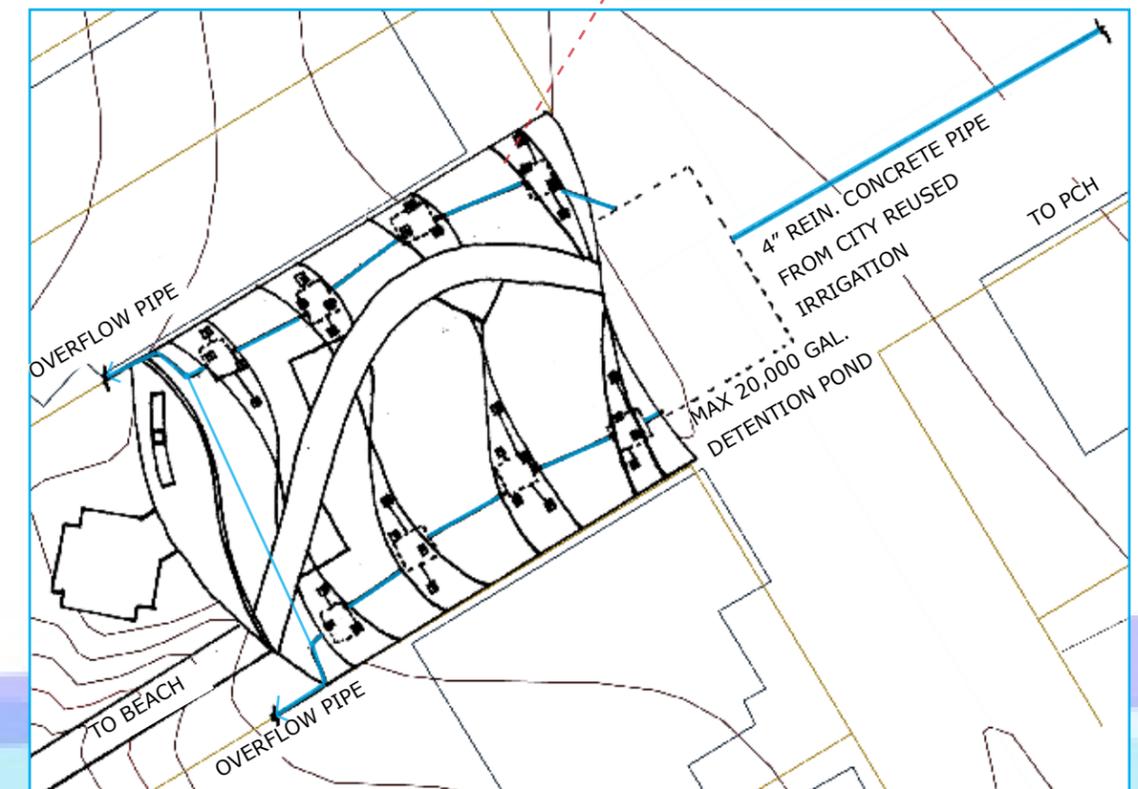


WATER PUMP DETAIL

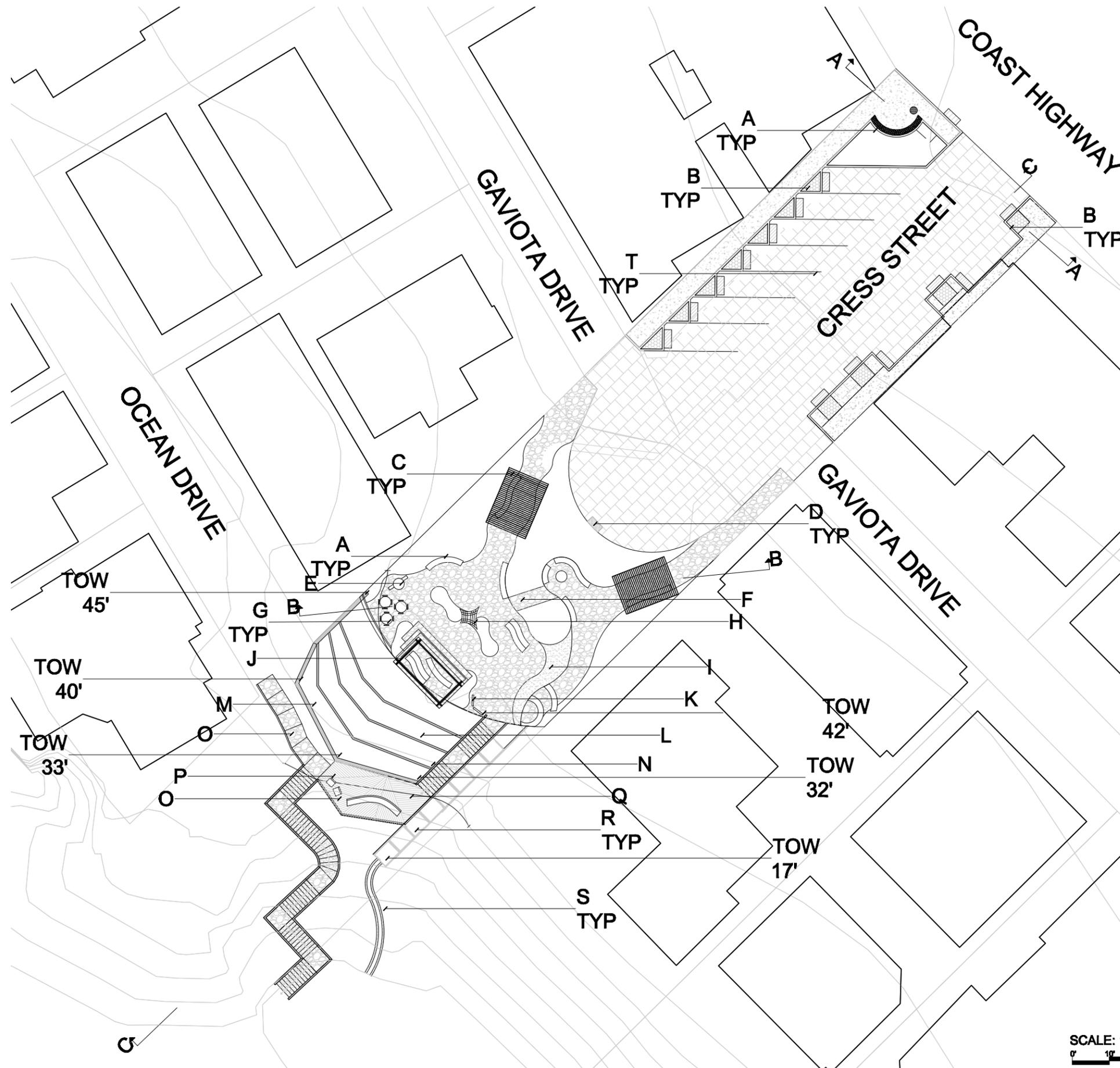


Using a material commonly found as beach litter, these fountains are built of old two-liter plastic bottles. Water gurgles up the pipe inside at ten minute intervals, adding sound and color to the streets.

SECTION C-C': OAK STREET



OVERALL MATERIALS
PLAN, STREETSCAPE
CONSTRUCTION
PROJECT.



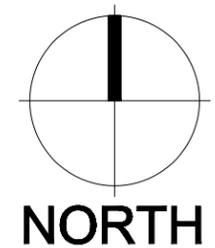
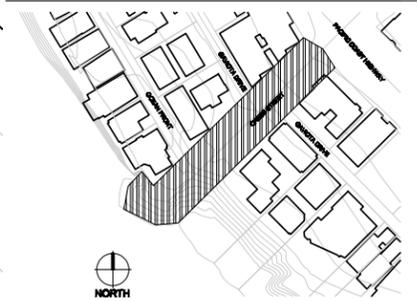
MATERIALS KEYNOTE

KEYNOTE	DESCRIPTION
A	CUSTOM BENCH
B	TREE GRATE
C	OVERHEAD STRUCTURE
D	AREA DRAIN
E	CLOCK (EX)
F	SANDSTONE BRIDGE
G	TABLE & CHAIRS
H	SCULPTURE-LOCAL ARTIST WORK
I	INDICATES SUBGRADE SWALE
J	VIEW FRAME STRUCTURE
K	SIGNAGE
L	TERRACE
M	RETAINING WALL
N	CHEEK WALL W/ HAND RAIL
O	RAILING LIMITS ACCESS TO BLUFF
P	CUSTOM CHAIR
Q	DECK
R	WATER CHANNEL

MATERIALS LEGEND

KEY NOTE	DESCRIPTION
[Pattern]	SANDSTONE
[Pattern]	TUMBLER BEACH GLASS AGGREGATE
[Pattern]	TREE GRATE
[Pattern]	IMPERVIOUS COBBLESTONE
[Pattern]	TREX DECKING
[Pattern]	MED. BRUSHED CONCRETE
[Pattern]	GROUND COVER
[Pattern]	SALT TOLERANT VINE
[Pattern]	UNI-BLOCK RETAINING WALL

SITE MAP



SCALE: 1"= 10'-0"