Monterey Bay National Marine Sanctuary Exploration Center Update

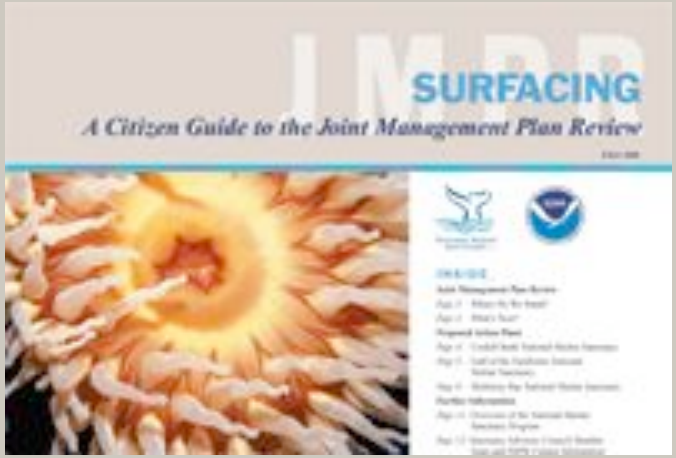
Monterey & Gulf of the Farallones Joint Advisory Council Meeting 2.12.09

Monterey Bay National Marine Sanctuary Exploration Center

National Marine Sanctuaries

Action Plan:

Take Science to the Public



"There is a lack of public awareness (of the resource issues) and threats to our local oceans. Individuals need to be understanding of resource issues in the sanctuary and in the creation of an informed and scientific-talk list of the public."

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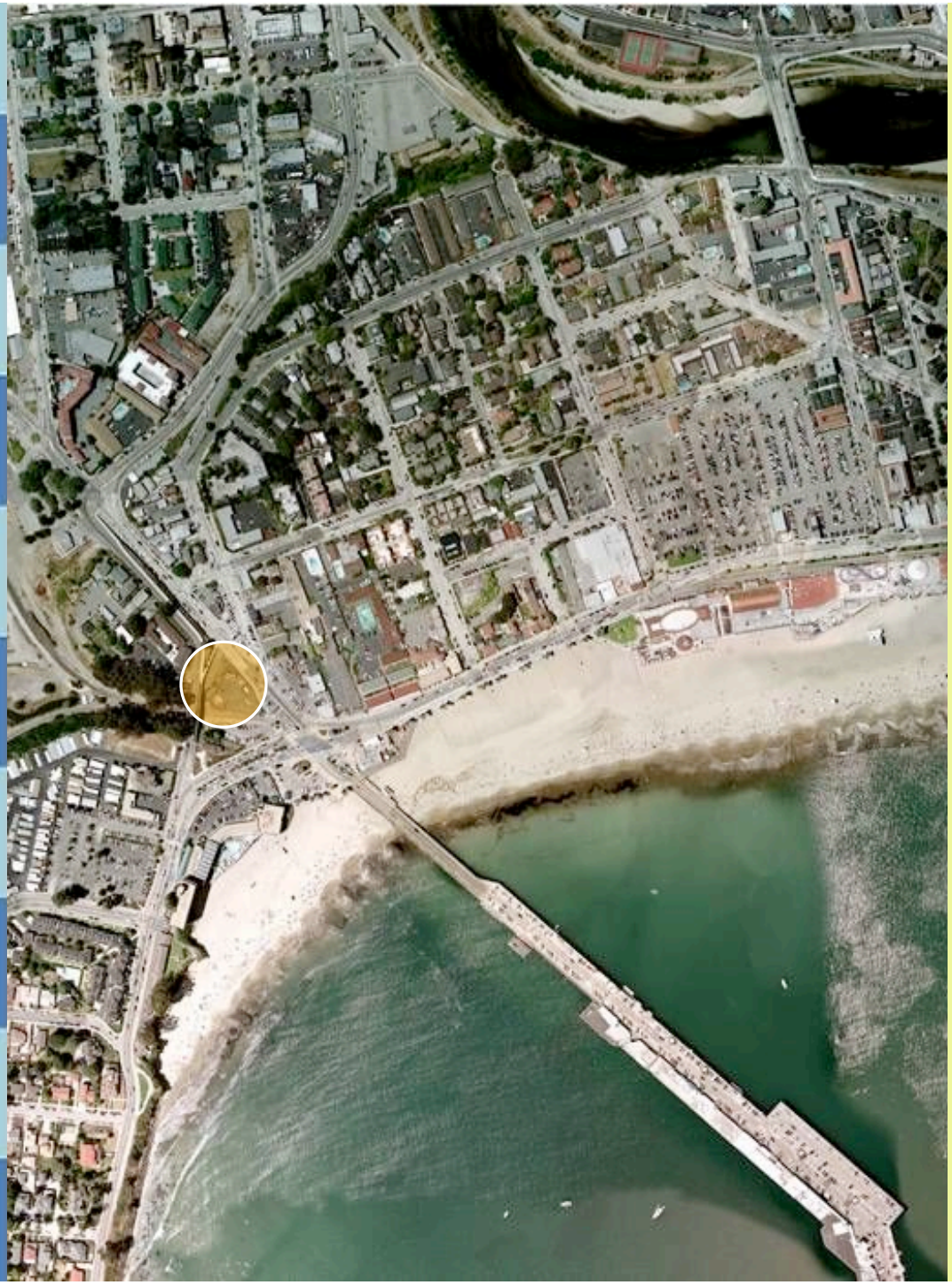
Santa Cruz Beach Boardwalk Location



Estimated 3-4 million visitors annually

The breakdown of visitors based on surveys for 2007 (Statistics courtesy of Seaside Company) :

40% = San Francisco Bay Area
(1/3rd go to the Monterey Bay Aquarium)
18% = Local Market
15% = Central Valley
10% = Other Northern California
12% = Foreign travelers or out-of-state
5% = Southern California

Demographics=
56% Caucasian
26% Latino
8% Asian
6% African American
4% Other

THOMAS HACKER
ARCHITECTS INC.

The visitor center will be an architecturally distinct two story, 10,600 square foot US Green Building Leaders in Energy and Environmental Design (LEED) building overlooking the ocean.

National Marine Sanctuaries

National Marine Sanctuaries

Exploration Center Goals

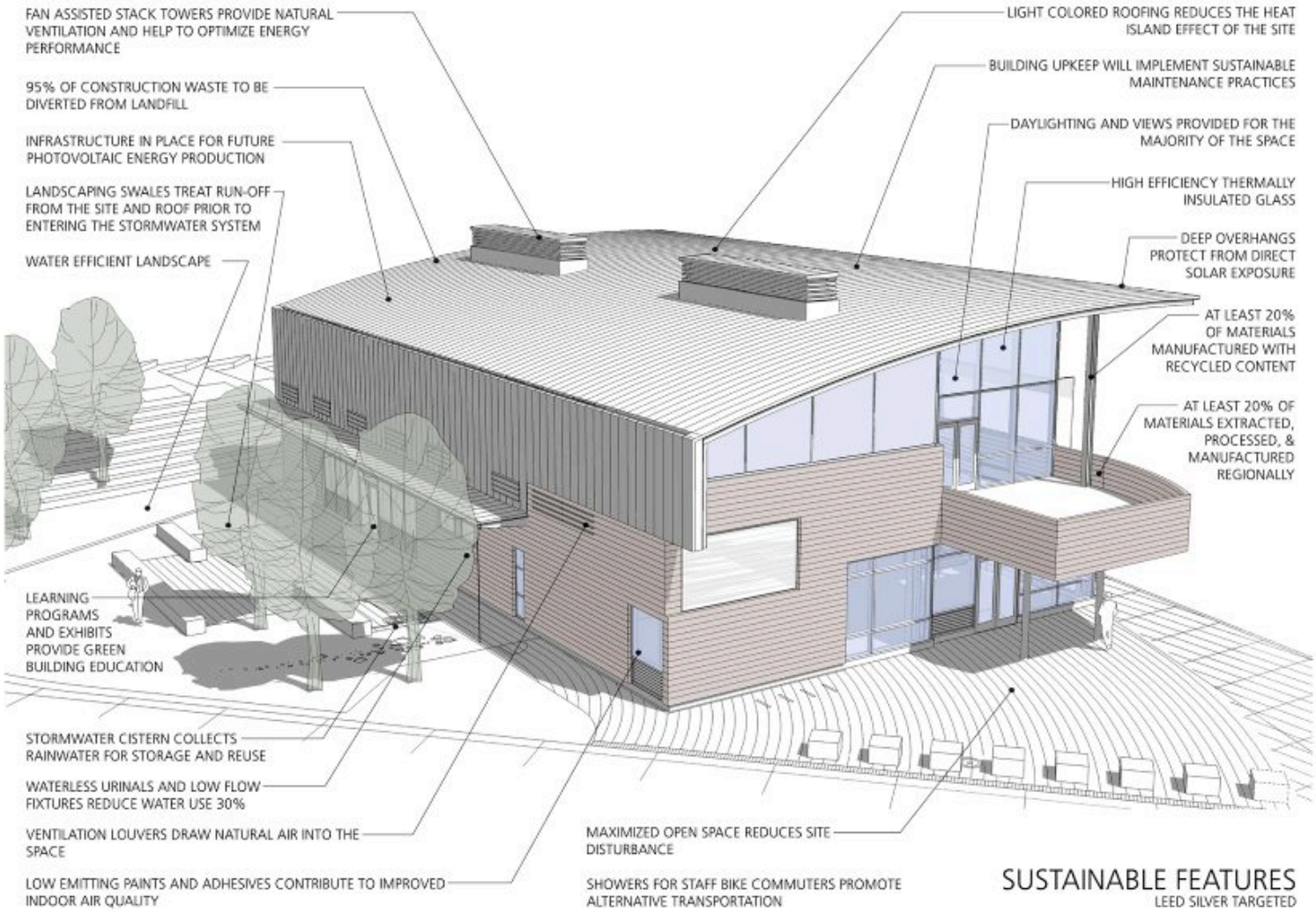
•Establish the City of **Santa Cruz as a gateway to the MBNMS** providing orientation for visitors.

•Raise the **awareness of the Sanctuary's presence**.

•**Involve and educate visitors** about the sanctuary's unique and fascinating coastal and marine natural resources.

•Instill in visitors a **sense of personal stewardship** with regard to the sanctuary and an understanding of how to help protect it.

•Construct an **environmentally sensitive building** that will demonstrate the advantages of sustainability.



SUSTAINABLE FEATURES

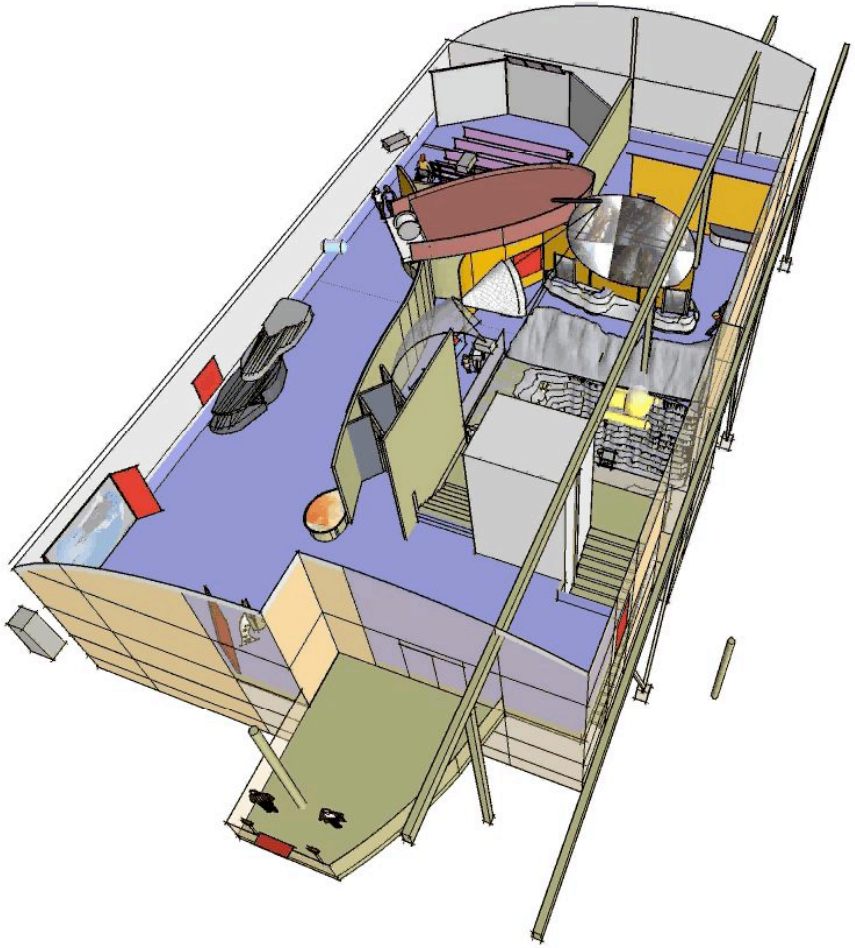
LEED SILVER TARGETED

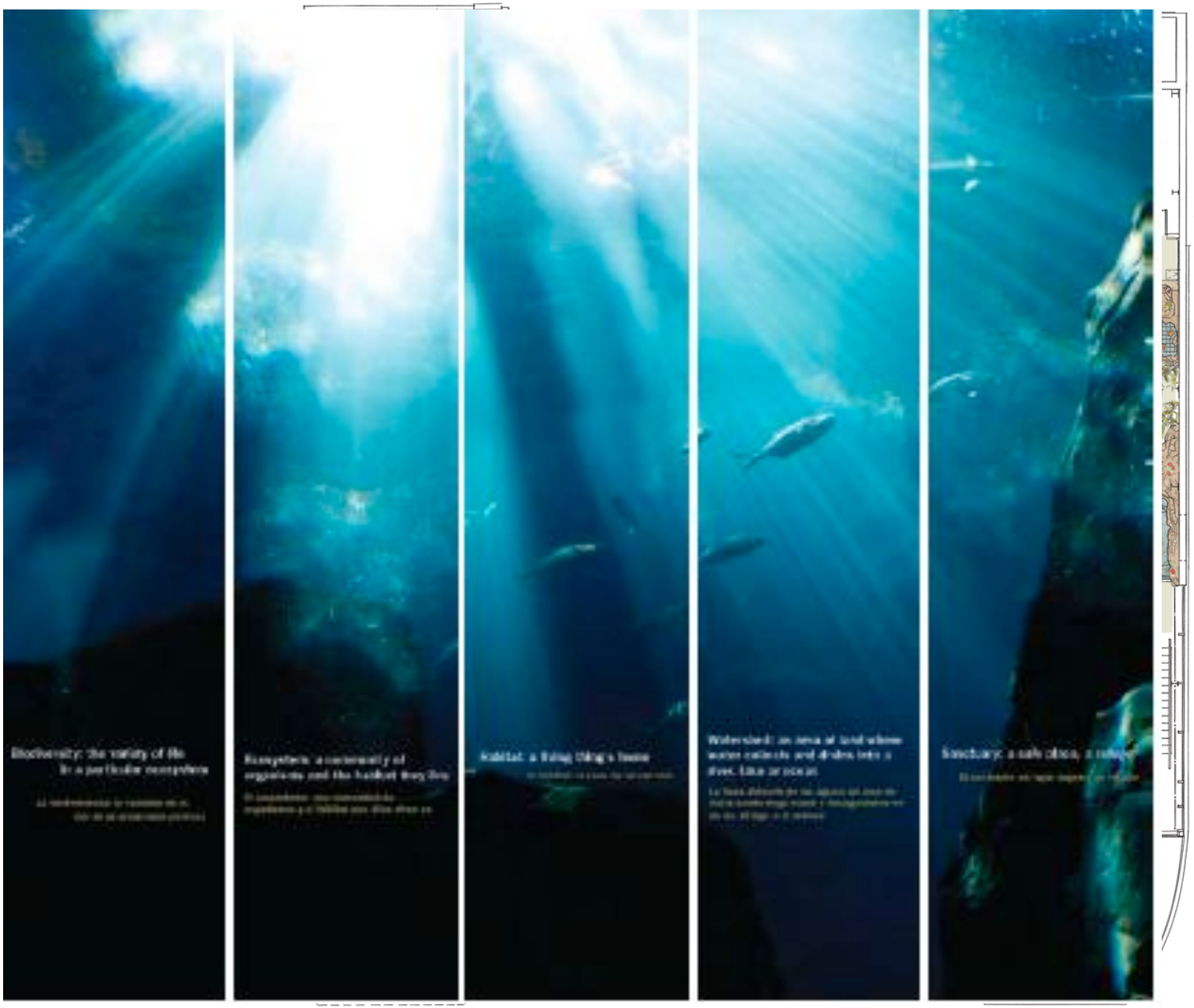
LEED

LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN

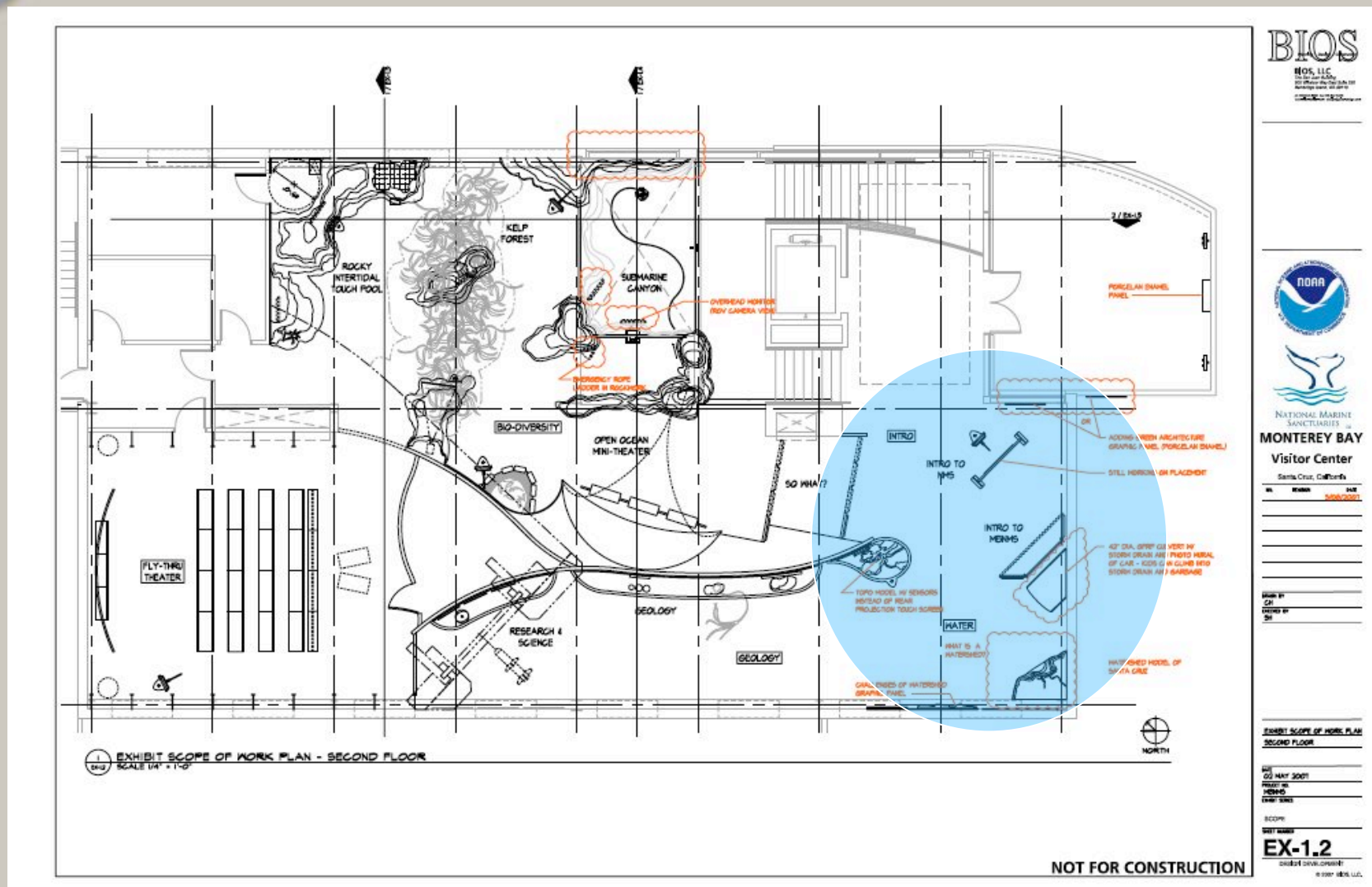
Program Elements

Resource Protection

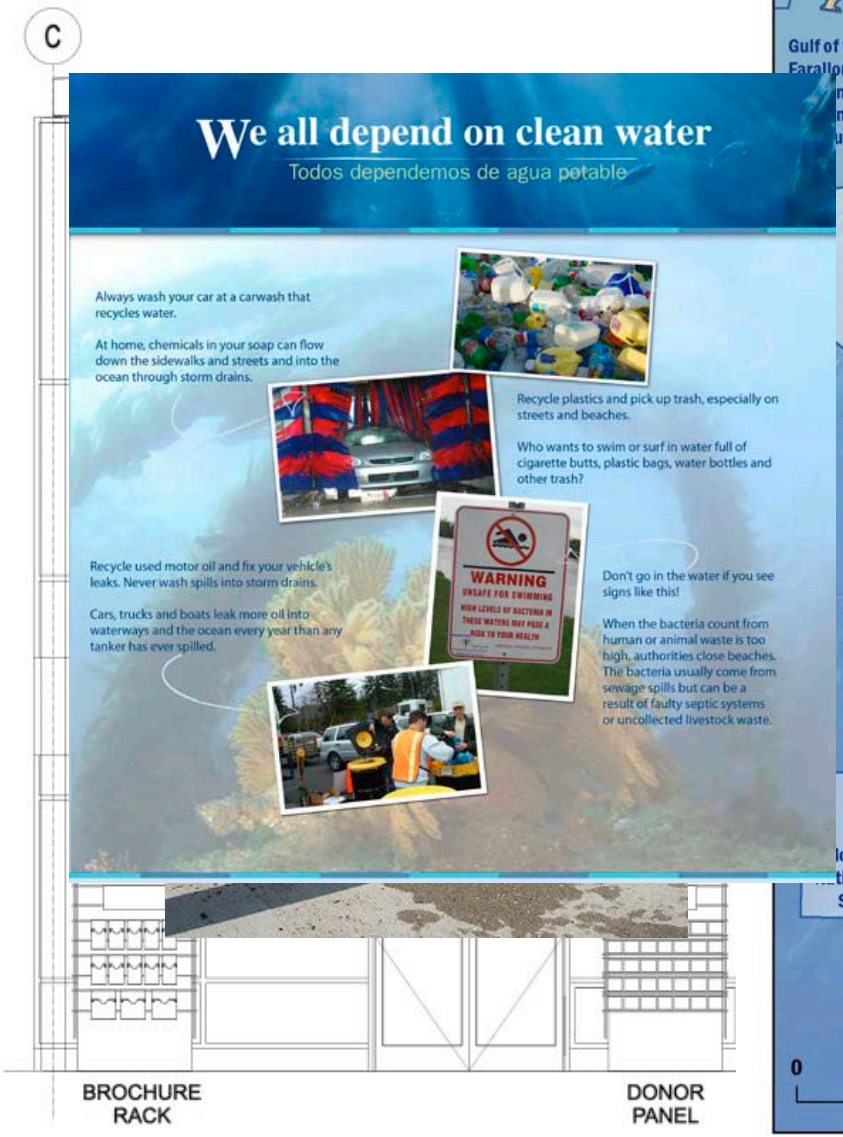


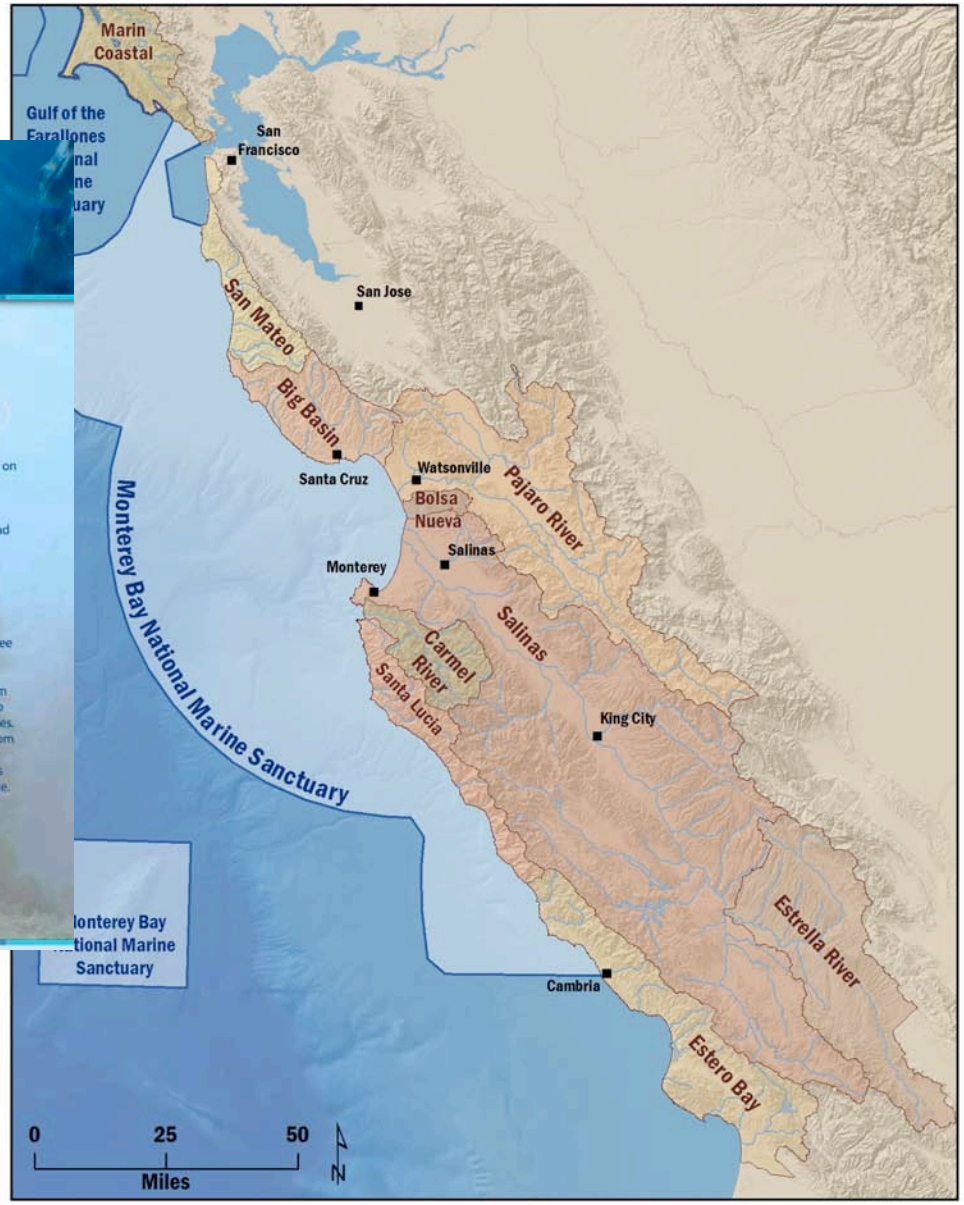


National Marine Sanctuaries

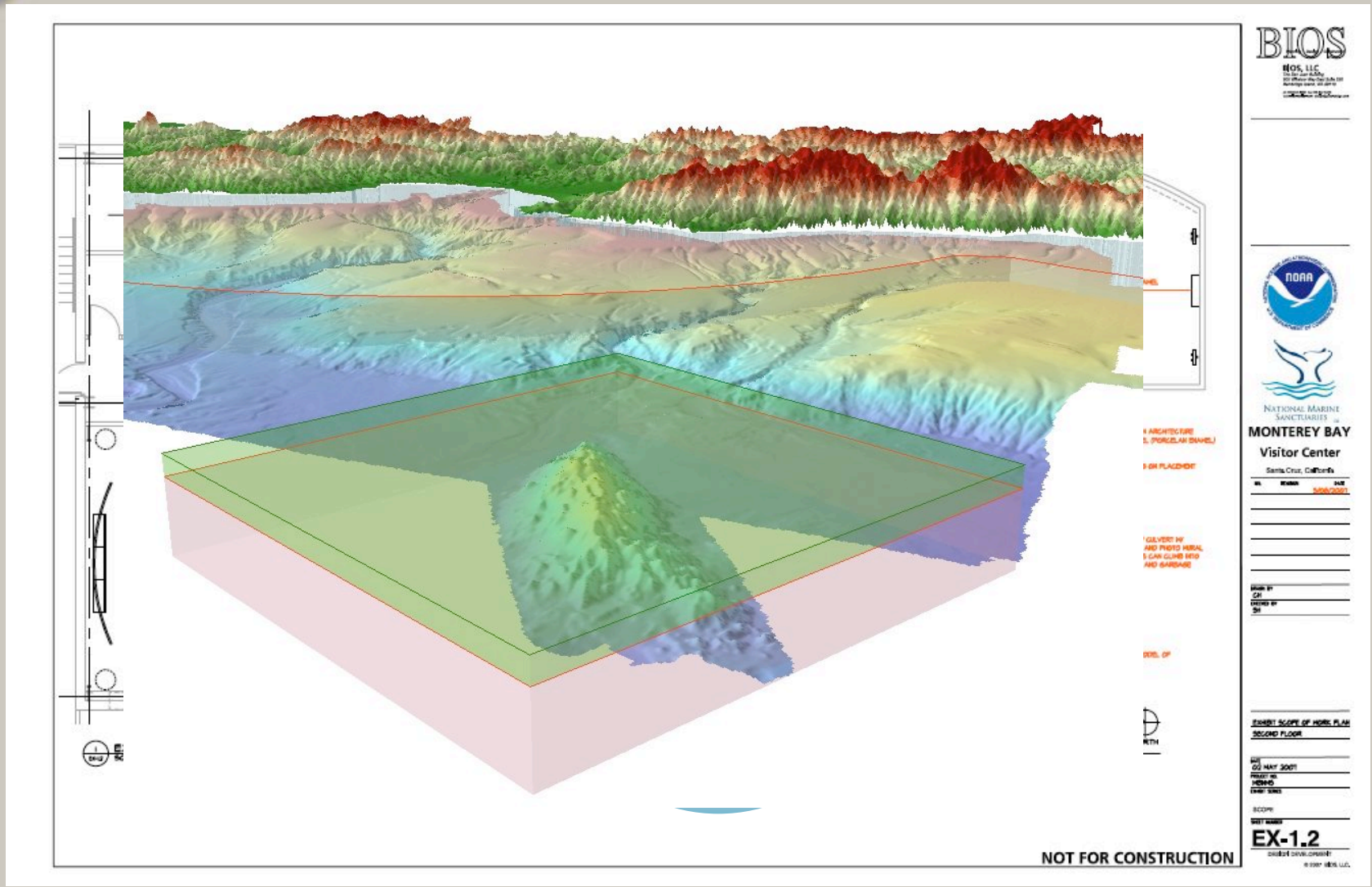

BIOS
BIOS, LLC
NATIONAL MARINE SANCTUARIES
MONTEREY BAY
Visitor Center
Santa Cruz, California
KELP FOREST
ROCKY INTERTIDAL TOUCH POOL
SUBMARINE CANYON
OVERHEAD MONITOR (ROV CAMERA VIEW)
EMERGENCY ROPE LADDER IN ROCKWORK
PORCELAN ENAMEL PANEL
BIO-DIVERSITY
OPEN OCEAN MINI-THEATER
INTRO
INTRO TO NMS
INTRO TO MBNMS
SO WHAT?
FLY-THRU THEATER
RESEARCH & SCIENCE
GEOLOGY
GEOLOGY
WATER
WHAT IS A WATERSHED?
TOPO MODEL W/ SENSORS INSTEAD OF REAR PROJECTION TOUCH SCREEN
WATERSHED MODEL OF SANTA CRUZ
NORTH
EXHIBIT SCOPE OF WORK PLAN - SECOND FLOOR
SCALE 1/4" = 1'-0"
EXHIBIT SCOPE OF WORK PLAN
SECOND FLOOR
02 MAY 2001
EX-1.2
NOT FOR CONSTRUCTION

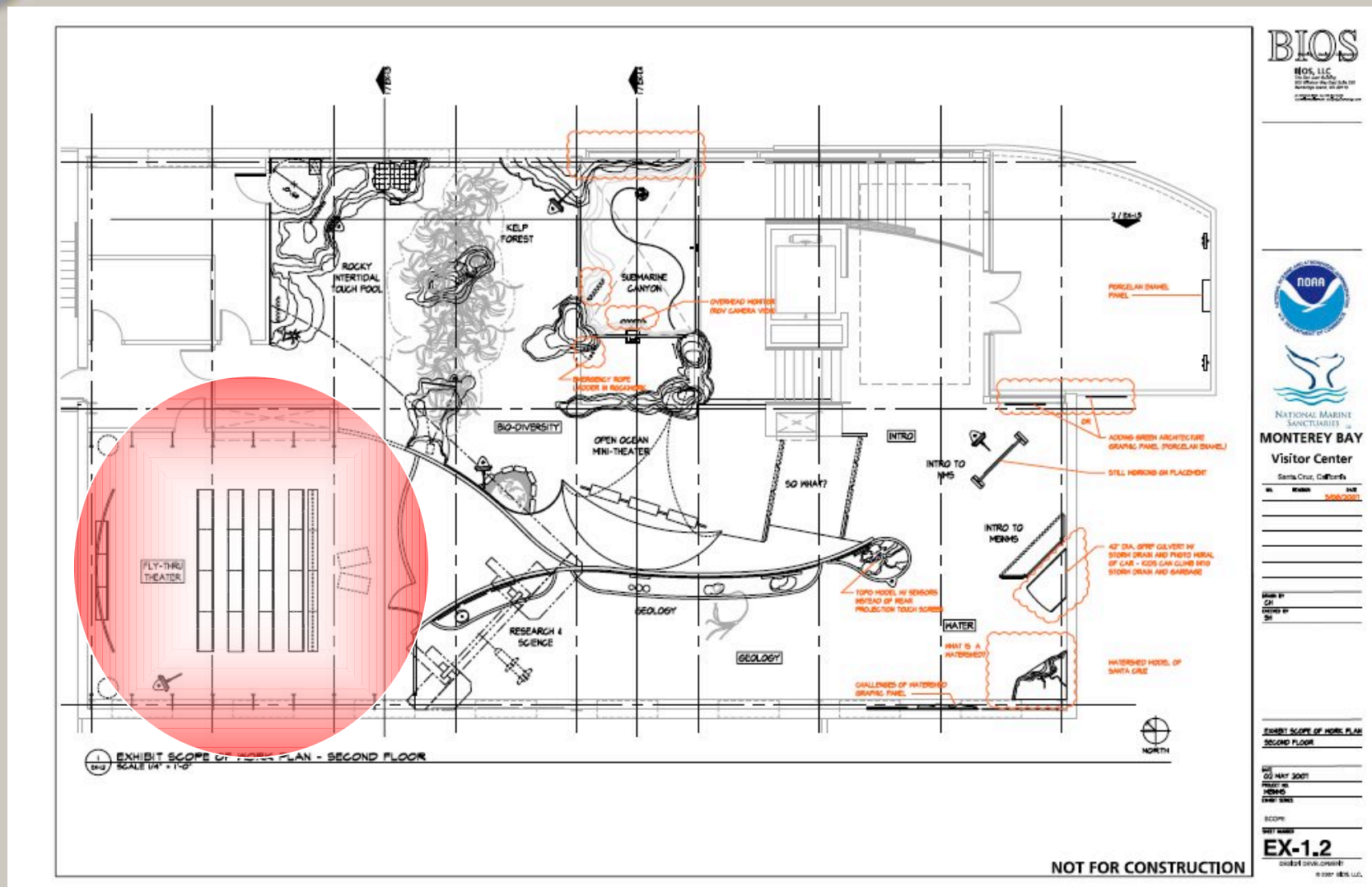
Water Quality =





The Sanctuary is anything but flat!

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PORCELAN ENAMEL PANEL
BIO-DIVERSITY
OPEN OCEAN MINI-THEATER
INTRO
INTRO TO NMS
SO WHAT?
ADDING GREEN ARCHITECTURE GRAPHIC PANEL (PORCELAN ENAMEL)
STILL WORKING ON PLACEMENT
INTRO TO MBNMS
42" DIA. GRIP CULVERT W/ STORM DRAIN AND PHOTO MURAL OF CAR - KIDS CAN CLIMB INTO STORM DRAIN AND GARBAGE
FLY-THRU THEATER
GEOLOGY
RESEARCH & SCIENCE
TOPO MODEL W/ SENSORS INSTEAD OF REAR PROJECTION TOUCH SCREEN
WATER
WHAT IS A WATERSHED?
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CHALLENGES OF WATERSHED GRAPHIC PANEL
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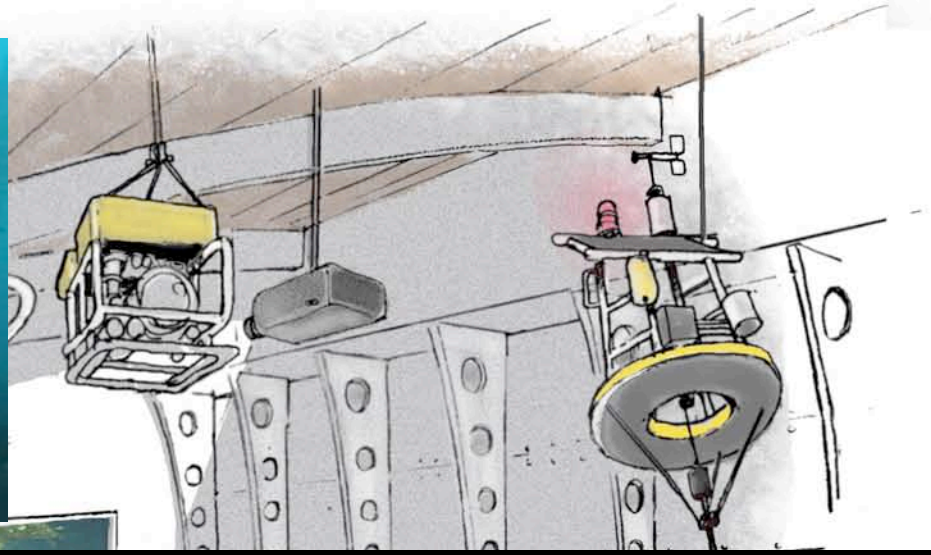
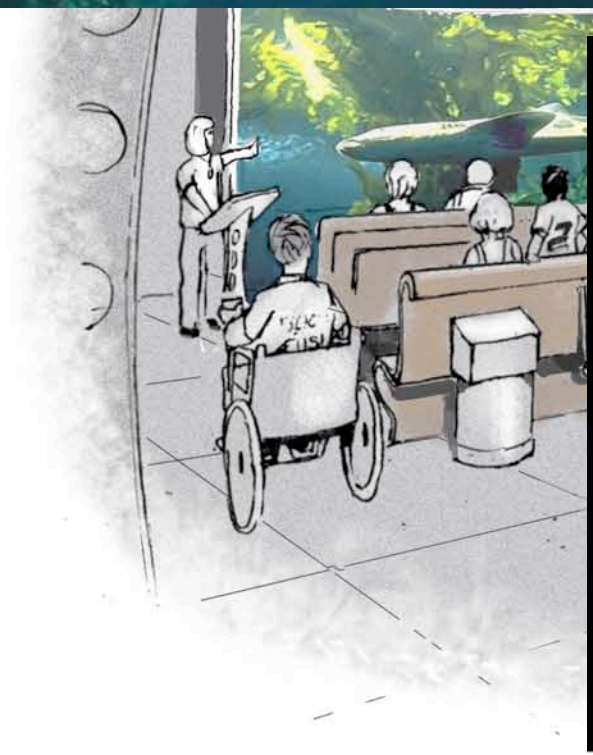
02 MAY 2001
MBNMS
SCOPE
EX-1.2
DESIGN DEVELOPMENT





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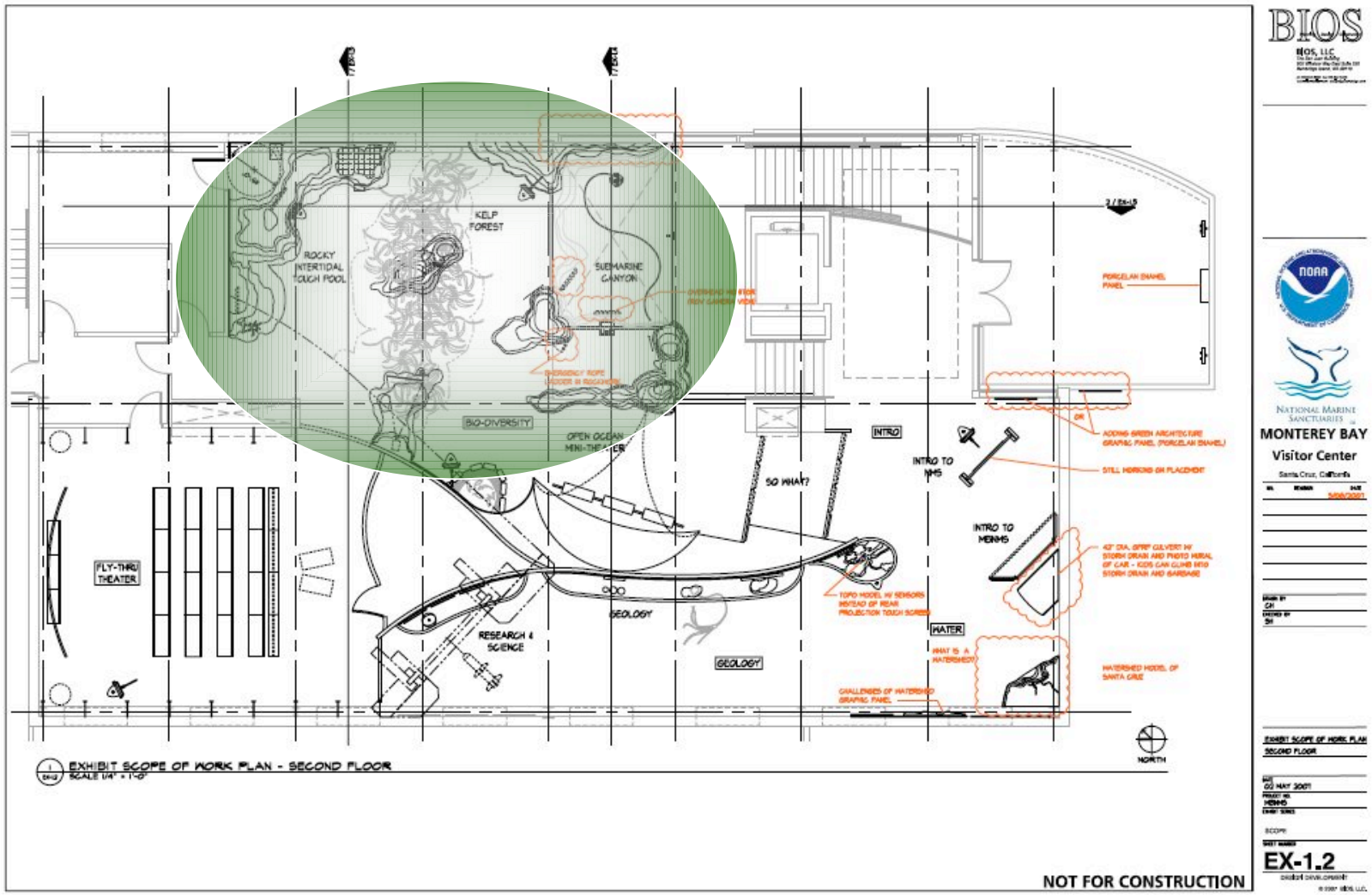


National Marine Sanctuaries

INTERTIDAL POOL
MFH 07

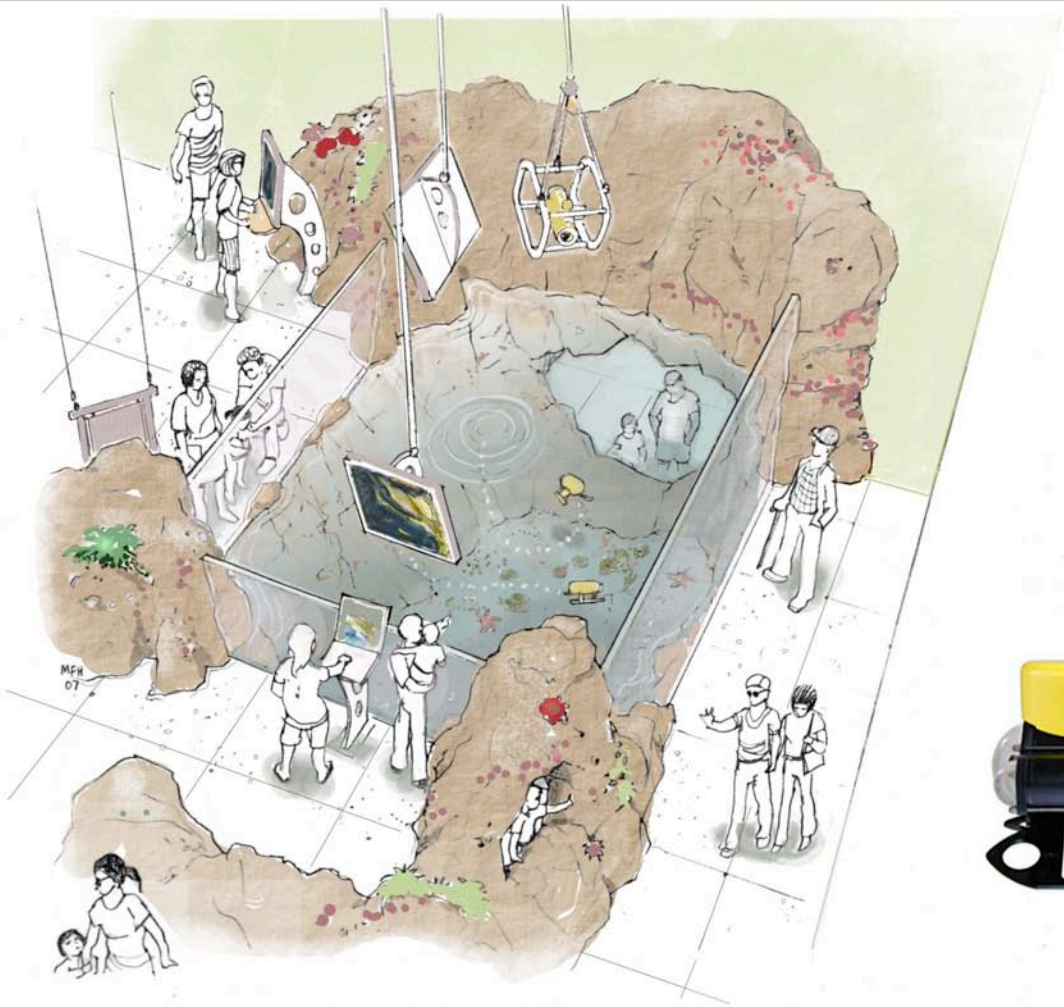
Sea life in these waters

Open Ocean

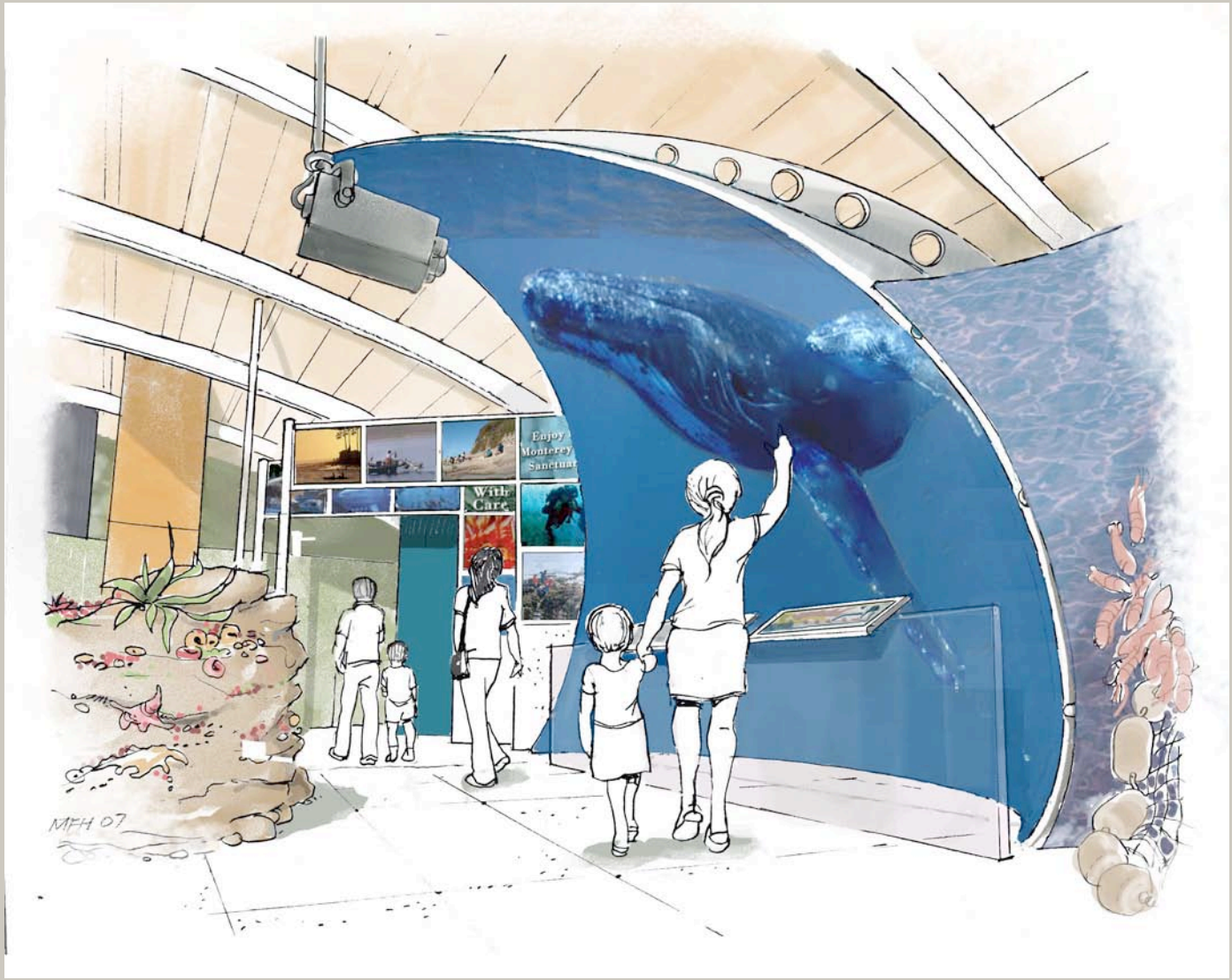
Interesting fact regarding panel topic goes here.

Another interesting fact on the panels topic goes here.

A Leopard Shark cruises through the kelp forest. Many creatures depend on the kelp forest for (insert fact here).


MFH
07

VideoRay



National Marine Sanctuaries

As a result of visiting the Sanctuary Exploration Center, visitors (of all ages) will:

- recognize that the sanctuary exists;
- learn about the many cool things in the sanctuary;
- grasp how they are connected to the resources, how they affect them, and that living things (including people), can continue to benefit from them.

Ultimately leading to a feeling of stewardship for the sanctuary and that it is worth protecting.

Where we are in the process today …

December, 2006:	Conceptual Design complete
February, 2007:	Architectural Schematic Design complete.
March, 2007:	Exhibits Schematic Design complete
September, 2007:	Design Development complete
February, 2008:	95% Facilities Construction Documents complete
	50% Exhibits Construction Documents complete
	Operations Plan Completed
March, 2008:	Environmental Assessment Complete
August, 2009:	AV/Graphics Design Complete

4 months for final permitting & bid negotiations

14-month construction period

Project Completion

National Marine Sanctuaries

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FILM FESTIVAL
THIS LANE
BUSES
BICYCLES &
RIGHT TURN
TRAFFIC
ONLY
R
R
Pacific Av
Viaduct
DO NOT
ENTER
WRONG
National Marine

- Project Background
- Architecture
- Exhibit Content
- Timeline/Budget

National Marine Sanctuaries

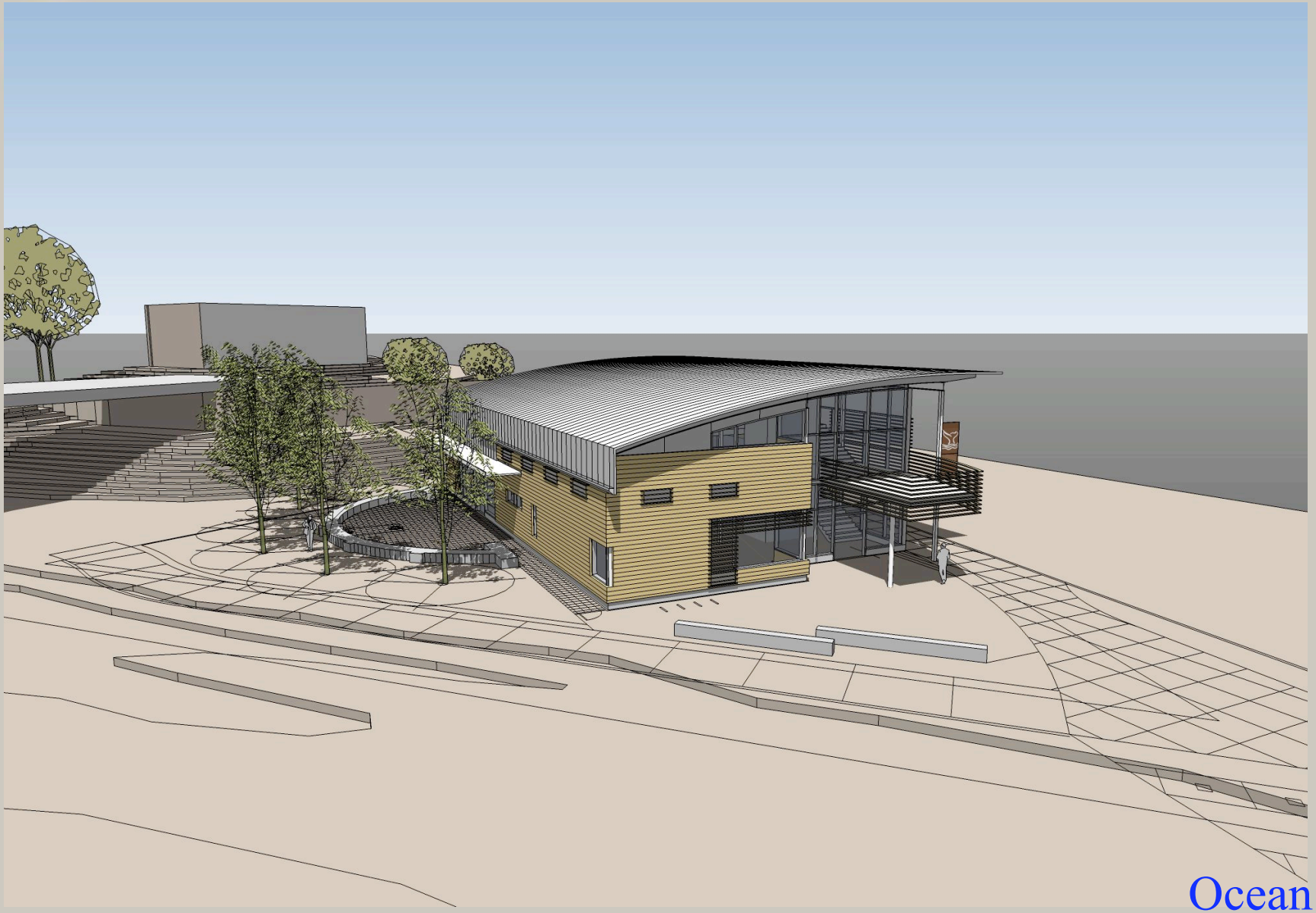
Monterey Bay National Marine Sanctuary
Visitor Center Budget

Project Elements	Total Project Costs	Committed To Date	Additional PAC	Other Funds	Funds still needed
Land	$2,000,000	$2,000,000	$0	$0	$0
Planning	$398,815	$398,815	$0	$0	$0
Facilities	$9,714,811	$1,372,538	$0	$500,000	$7,842,273
Exhibits	$3,434,426	$631,372	$1,000,000	$0	$1,803,054
TOTAL	$15,548,052	$4,402,725	$1,000,000	$500,000	$9,645,327

Facilities Budget Breakdown:

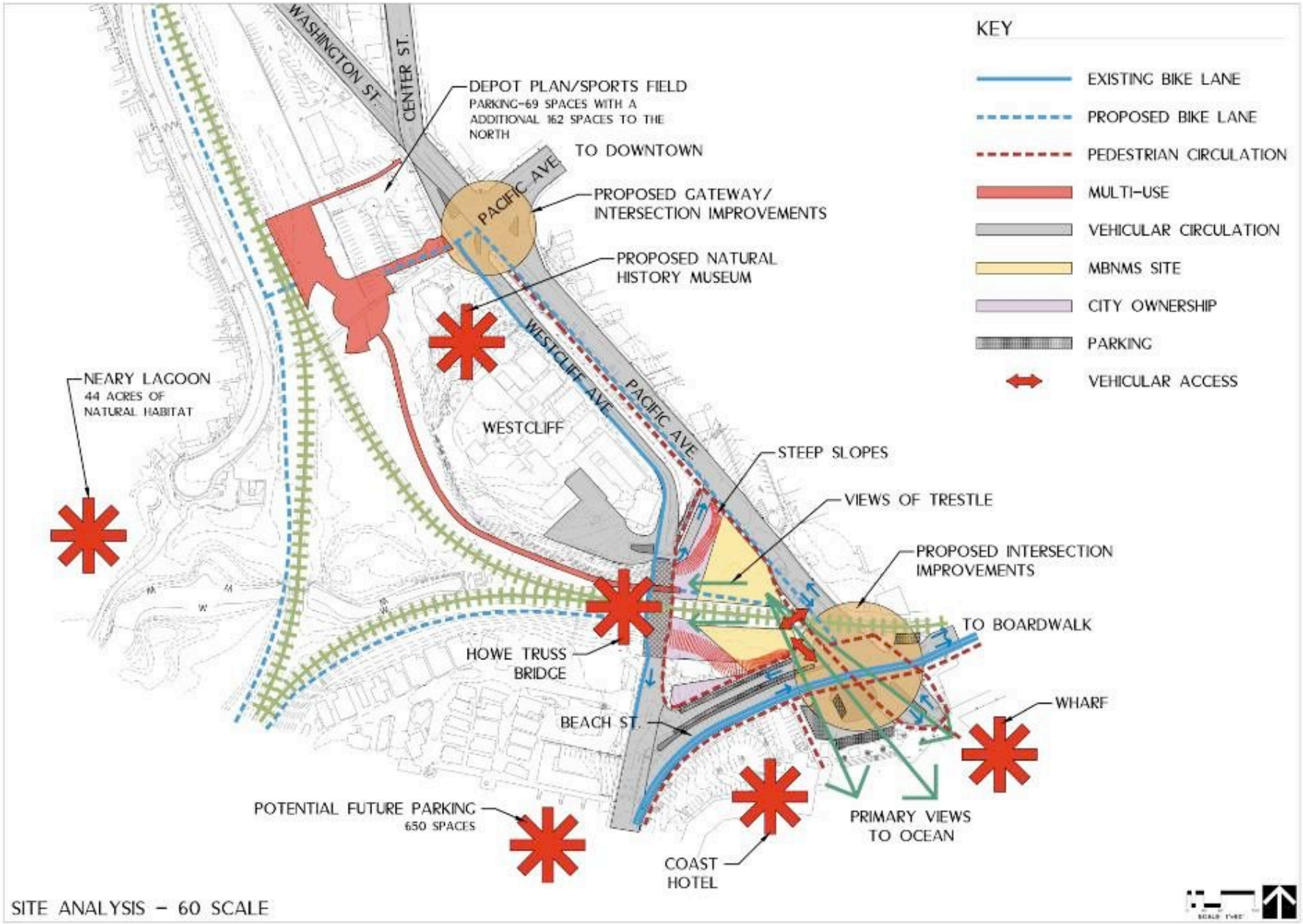
- Construction, building costs, site improvements, parking reconstruction = $5,581,000
- Construction Contingencies = $1,368,000
- Green Building Requirements = $247,645
- Construction inflation with 2-year delay = $613,877

Facility square footage costs = $425/sq ft
Exhibit square footage costs = $700-$750/sq ft



Ocean

National Marine Sanctuaries



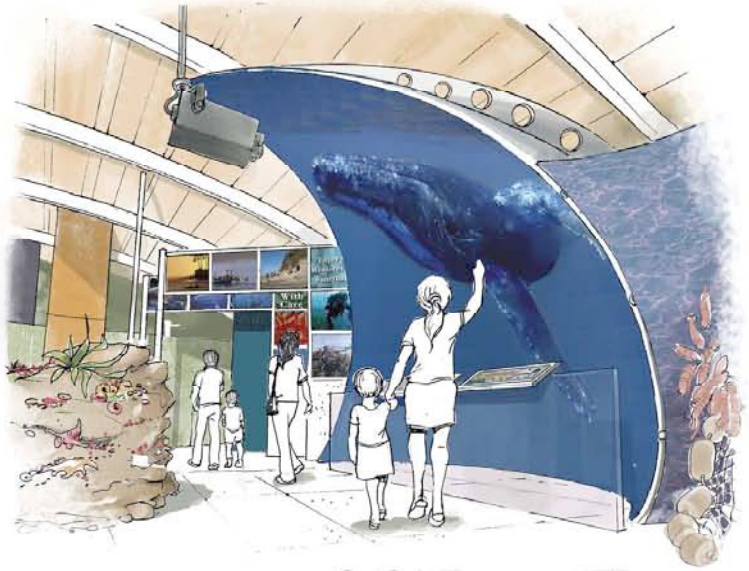
MONTEREY BAY NATIONAL MARINE SANCTUARY VISITOR CENTER

WALKER·MACY THOMAS HACKER ARCHITECTS INC.

MONTEREY BAY
NATIONAL MARINE SANCTUARY VISITOR CENTER

Pacific Avenue
BUS DROP OFF
SCORED CONCRETE
EXISTING RR WARNING LIGHT
EXISTING PALM TO REMAIN
UNIT PAVERS
RAIL CROSSING
LIGHT STANDARD
CONCRETE SEATWALLS
CONCRETE SEATWALL
BELOW GRADE CISTERN FOR CAPTURED RAINWATER
SECURITY FENCING
42" METAL FENCING
LOW BROAD SPREADING SHADE TREES
LANDSCAPE SWALE
RELOCATED SIGNAL HOUSE
EXISTING PARKING LOT
NEW DRIVEWAY AND APRON
Beach Street
EXISTING SIDEWALK

VideoRay

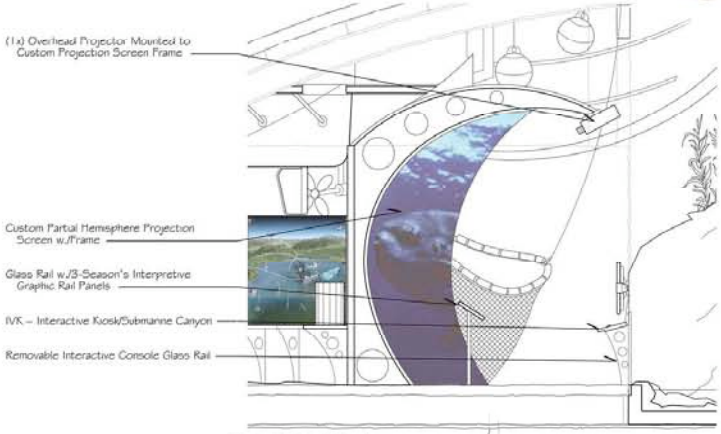


BIOS
Planning Design Construction
The San Juan Building
900 Winslow Way E. Suite 250
Bainbridge Island, WA 98110
Ph 206.842.3468
Fx 206.842.3476
www.bios-design.com

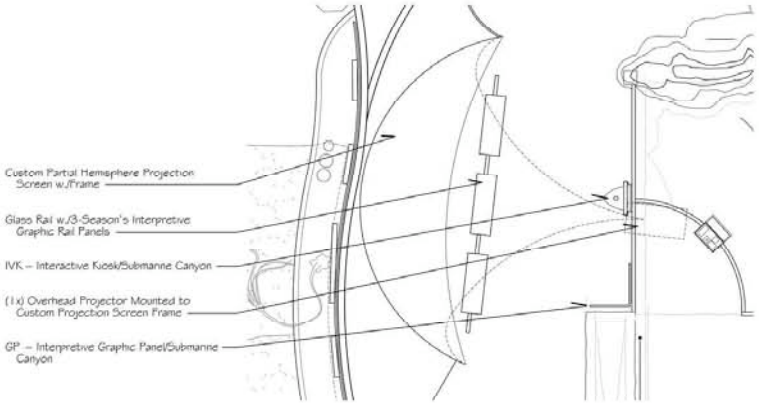
Open-Ocean Immersion Mini-Theater Concept:

To provide a dynamic visitor experience of the infinite "Open-Ocean" found in the Monterey Bay National Marine Sanctuary within the small constraints of the "Bio-diversity gallery spaces a semi-hemisphere immersion theater utilizing high definition footage from NOAA archives will provide the dynamic underwater experiences.

This underwater visit will not be interactive, but will immerse the visitor with 3-5 minutes of underwater "Open-Ocean" audio-visual experiences. The actual footage will be developed to tell the story of the "Three Seasons" found in the sanctuary with the changes to the weather, tides, animals, etc. A frameless glass rail that runs diagonally across the length of the theater prevents visitors from breaking the projection onto the screen from the LCD projector inconspicuously suspended at the opposite end of the theater projection screen frame. Graphic panels mounted on the rail will also interpret the "Three Seasons" message as well. High-definition surround sound speakers and subwoofer are concealed behind and within the hemisphere projection screen.



Partial Exhibit Section



Partial Exhibit Plan

Monterey Bay National Marine Sanctuary Open Ocean Mini Theater

Project Status: Currently in design

10/16/07

National Sanctuary Program

2000: *National Marine Sanctuary System Education Plan*

2001: *Market Analysis and Interpretive Strategy*

2004: U.S. Commission on Ocean Policy Report

2004: NMS approves development of MBNMS Visitor Center

MBNMS

1992: *MBNMS Management Plan*.

2003: 2-year site, 23 site evaluation was conducted

2004: Architects and Exhibits firms chosen.

2005: Visitor Center main messages were developed with a group of stakeholders

2006 Conceptual Design for exhibits and architecture complete.

2006 Eco-Charrette Report identifying specific LEED sustainable goals and strategies.

2007 Schematic Design and Design Development for exhibits and architectural design complete

National Marine Sanctuaries