



# HMSC Master Plan 2007 – 2022

# **HMSC Master Plan 2007 – 2020**

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## 1.0 INTRODUCTION

### 1.1 Overview

Established by Oregon State University in 1965 on Yaquina Bay in Newport, the Hatfield Marine Science Center (HMSC) was constructed on land donated by the Port of Newport and funded by grants from the Federal Economic Development Administration. HMSC began to offer classes in 1966 in the form of summer courses in zoology and oceanography.

The Hatfield Marine Science Center (HMSC) is a world-class center for marine science research, education and outreach, and serves as a base for innovative oceanographic research. The combination of location, physical setting, and multi-agency presence at HMSC creates a unique scientific and learning environment that impacts national initiatives in marine and coastal science.

The purpose of the Hatfield Marine Science Center Master Plan is to provide a plan to guide future development to support the marine science research, education and outreach initiatives through fiscal year 2022.

### 1.2 HMSC Vision Statement

*The Hatfield Marine Science Center, as a key component of OSU's internationally recognized coastal and marine programs, will be the leading marine laboratory in the nation for collaborative approaches to marine and coastal issues by creating partnerships among academic institutions, government research agencies, industries, and communities.*

The Hatfield Marine Science Center is internationally recognized for its interdisciplinary approaches to marine and coastal issues and serves as a national model for academic-government-industry collaboration in research, education, and outreach. HMSC embodies OSU's commitment to serve the people of Oregon, the nation, and the world by promoting knowledge-based conservation, management, and sustainable use of coastal and ocean resources as well as stimulating the economic development of coastal communities. The essential qualities that promote this vision include:

- Unique integration of location, collaborative culture, and engaged communities to attract diverse groups (students, scientists, educators, public, agencies, industry, foundations) and promote productive partnerships;
- Research infrastructure and expertise to improve our basic understanding of coastal systems, processes, and natural resource integration;
- Innovative programs with a global audience that engage the public, educate students, train future leaders in integrated coastal science, policy and management, and promote lifelong learning;
- Seamless integration of research, education, and outreach to meet the needs of a diverse constituency; and
- Understanding Oregon's diverse coastal resources by exploring the continuum of ecosystems from the headwaters of coastal watersheds to the deep sea.

### 1.3 HMSC Mission Statement

*The Hatfield Marine Science Center is Oregon State University's campus for research, education, and outreach in marine and coastal sciences. Through its partnerships, HMSC improves scientific understanding of marine systems, coastal processes and resources, and applies this knowledge to social, economic, and environmental issues.*

As a leading marine laboratory in the Pacific Northwest, HMSC has the expertise, technology, and responsibility to address important issues of high economic, scientific, and aesthetic value in marine and coastal systems. Its locality, ready access to the ocean and richness of partners – agencies, industry, and constituencies – create a physical and intellectual center known for multidisciplinary research, education, and outreach that is world-class and international in scope. Hands-on educational opportunities train the marine science leaders of tomorrow, and outreach transfers knowledge to the public sector using new and compelling approaches.

### 1.4 HMSC Core Values

The faculty, students, and staff of HMSC strive to work by a strongly shared set of beliefs. These core values serve as continuing guideposts for our research, teaching, community outreach and involvement. OSU's core values of accountability, diversity, integrity, respect, and social responsibility are the standards for all members of our academic community, and provide the foundation on which HMSC's own core values stand:

- We value stewardship of the marine environment. Our efforts focus on fostering respect, understanding and stewardship of the marine environment and its resources.
- We value scholarship and research excellence. Our research is based on the principles of cutting edge exploration, scientific rigor, and professional integrity.
- We value collaborative partnerships. Our research, teaching, and outreach is collaborative, emphasizing strong partnerships with agency scientists, industry, community, and with OSU faculty integrating across academic disciplines.
- We value making a positive impact on the community. Our professional and personal contributions must positively impact the social, economic, and environmental conditions of the communities we serve.
- We value effective learning and engagement. Our access to marine and coastal environments and communities is central to hands-on learning. Our scholarship and research must be communicated in an effective and timely manner to each other and the communities we serve.

## **1.5 HMSC Character**

The HMSC campus, situated on a productive estuary with ready access to the open ocean, is a fitting location for the activities of OSU and the seven federal and state agency programs with research labs and offices. Shared facilities provide opportunities for information exchange and synergistic activities among scientists and staff from different programs and disciplines, creating a physical and intellectual campus known for multidisciplinary research, education, and outreach.

The character of the HMSC campus is also defined by its physical elements, and how they are arranged. HMSC should be designed for longevity, i.e., the ability to support continued education, and provide outreach and research activities consistent with our institutional missions. Factors that contribute to the center's longevity and sustain impacts of the coastal environmental include the use of sustainable and durable building materials. Incorporating design considerations such as building scale and mass will promote a pedestrian-friendly center, establish inviting landscape settings, encourage community interaction, and create an element of character or sense of place that visitors to HMSC will remember for years to come.

A simple, open and orderly planned development process will meet the needs for all site residents and establish HMSC as a unique place while also reflecting its connection to OSU's main campus. This can be accomplished by incorporating the following initiatives:

### **1.5.1 Cohesiveness**

The HMSC Master Plan outlines design guidelines, development standards and criteria that establish visual continuity and consistency for development of the site over time. Architectural and landscape development creates an identity that reinforces the relationship between the built and natural coastal environment. These basic elements will foster a sense of place and a cohesive framework.

Cohesiveness is an ongoing challenge because each new project must accept and embrace plan objectives, while responding to an array of functional and budgetary opportunities and constraints. The HMSC Master Plan will continue to meet this challenge by offering specific but flexible development guidelines and criteria.

### **1.5.2 Collaboration**

The success of a master plan is measured by how well it guides development to create a functional place that supports all of its occupants and reflects their shared vision. To this end, the HMSC Master Plan provides for spaces to encourage social interactions and support the varied programs housed at the center to stimulate collaboration in research and education. Development that facilitates interaction among stakeholders at HMSC creates a unique sense of place and nurtures the intellectual environment. Future public and semi-public spaces should be designed to create connectivity and promote collaboration.

### **1.5.3 Functionality**

The HMSC Master Plan provides guidelines for future development while also preserving open space to enhance the sense of connection to the coastal marine environment. This will ensure a solid foundation for the center's growth and expansion, which may be achieved through well-designed, functional structures, and attractive and pedestrian-friendly open space. Unique requirements of some research facilities or other special use buildings will necessitate creative design approaches to ensure that they retain the established design.

### **1.5.4 Connectivity**

The HMSC center should be pedestrian-friendly. Clear physical and visual connections with the natural coastal habitat help maintain orientation as one moves around the campus. These connections are accomplished through careful planning for vehicular and pedestrian activity, which should be the guiding premise for the site's development. The estuary path and walkways between locations serve as conduits through open spaces and are essential to linking buildings throughout the place. The Yaquina Bay located to the north of the center provides an opportunity for HMSC visitors an opportunity to connect with the coastal environment as well as experience the events and activities within the facilities.

## **1.6 HMSC Master Planning Process**

The HMSC master planning process was initiated by the Director of the Hatfield Marine Science Center, and the development of the master plan was facilitated by OSU Facilities Services Campus Planning staff. The foundation of planning for the future is a recognition and understanding of the role of all HMSC site stakeholders, and City and County local municipalities. HMSC stakeholders include: OSU faculty, staff and students; State of Oregon faculty and staff; Federal staff; OSU main campus administration, colleges, departments, programs and institutes, and OSU Extension Service.

Local community stakeholders include: City and County governments, marine resource industries, the Oregon Coast Community College, the Oregon Coast Aquarium, all of which partner with the HMSC in different ways. Other stakeholders, more external to HMSC operations but still bearing influence, include state and federal government (agencies and elected officials), as well as the general public. All of these entities have a stake in the future success of HMSC.

The planning process uses a systematic interdisciplinary approach to achieve integrated consideration of the physical, natural, and economic environment. Priority is given to the designation and protection of areas of critical environmental concern. Information in this master plan is based (to the extent it is available) on the inventory of the site and its resources. Aside from the natural environment, these include buildings, improvements other than buildings, sidewalks, streets, open spaces and parking lots.



Present and potential uses of the site are considered and also weighed upon long-term benefits to the public and site occupants against short-term benefits. To the extent consistent with laws governing the administration of public lands, planning efforts were coordinated with the City of Newport Community Development Department and the Lincoln County Planning and Development Department, and applicable planning and management regulations. The planning process consists of five steps as identified below:

**1. Data Collection and Analysis**

Data from group workshops, site evaluations and surveys, and independent interviews provided the basis for understanding academic program, research, outreach and operational needs.

**2. Concept Development**

HMSC long-term development needs were assessed, and conceptual approaches, guidelines and standards were developed to establish a framework to meet HMSC's needs.

**3. Documentation**

The most acceptable planning solutions for the conceptual approaches, policies and guidelines were documented in a preliminary HMSC CMP document.

**4. Community Outreach**

OSU Facilities Services and the HMSC master planning team engaged the broader HMSC community and surrounding neighbors in a series of outreach meetings. These and follow-up outreach meetings further refined the draft HMSC master plan.

**5. Review and Approval**

An implementation strategy was developed to serve as a guide for future development and to ensure that key elements of the HMSC master plan would be carried out.

**Future Development Methodology**

HMSC's development is currently limited to the area as identified in a lease with the Port of Newport. Future Development as identified in Chapter 3 shows the area that the Master Plan will address. The Master Plan methodology comes from typical land use planning concepts. The guidelines, standards and criteria in the HMSC Master Plan were researched from the following information:

**Local Municipalities**

- **City of Newport**
  - City of Newport Comprehensive Plan
  - City of Newport Zoning Ordinances
  - South Beach Development Plan
  - Estuarine Management Plan

- **Lincoln County Comprehensive Plan**

**Oregon State University**

- **OSU Campus Master Plan**

**State of Oregon**

- **Statewide Planning Goals**

**Federal Agencies**

- **Federal Land Use Planning Criteria**

**1.7 HMSC Master Plan Chapter Organization****Chapter 1 – Introduction**

HMSC overview, vision, mission, planning objectives, processes and organization;

**Chapter 2 – HMSC Guiding Principles**

Defines the guiding principles that will direct future development;

**Chapter 3 – HMSC Facilities Needs**

Listing of OSU and partner agencies on the HMSC campus; description of existing development and future growth projections, development capacity, open space, and transportation requirements;

**Chapter 4 – HMSC Design Guidelines**

Site and building design guidelines, and preservation guidelines for natural resources;

**Chapter 5 – HMSC Development Standards**

Development standards that impact future development including (but not limited to) code compliance, site development, landscape and site amenities, site access, parking, pedestrian access and circulation, open space, transportation and utilities and infrastructure;

**Chapter 6 – HMSC Development Criteria**

Development criteria of applicable City of Newport zoning ordinances, which may impact future development projects;

**Chapter 7 – Community Planning Considerations**

Newport and South Beach neighborhood planning context;

**Appendix – Maps**

Map figures illustrating HMSC property boundaries and land ownership, buildings, parking facilities, transportation and pedestrian corridors, open space and potential development.

## **2.0 Hatfield Marine Science Center Master Plan Guiding Principles**

This chapter identifies the guiding principles that will provide the direction for long-range development for the Hatfield Marine Science Center. Community relationships are essential in the planning process; therefore these principles have been identified by stakeholders who live and work at the center.

### **2.1 Keep Planning and Communication Open and Transparent**

The master planning process is a significant investment of resources, both physical and human. All have an investment in how the site is planned for future development. Part of the planning process included several core meetings of HMSC's essential stakeholders to ensure that communication remained open and transparent. With the undertaking of a comprehensive master plan, the HMSC community shows a commitment to ensure that future development is inclusive and effectively planned for all site investors.

### **2.2 Support HMSC Strategic Planning Goals**

HMSC aspires to become one of the nation's leading marine laboratories, known internationally for advancing knowledge through interdisciplinary and collaborative research partnerships among academia, government agencies, industries and communities. The HMSC Master Plan will ensure that the vision, mission and strategic planning goals are the fundamental goals when planning for its physical environment.

### **2.3 Preserve and Value HMSC Natural Features**

One of HMSC's core values is the center's natural features. The Center recognizes its responsibility to be stewards of the environment and continue to use environmentally responsible and responsive development practices

### **2.4 Maximize Sustainability and Minimize Impact to the Environment**

HMSC recognizes its responsibility to promote and sustain the environment. These practices, defined as "sustainability," shall be incorporated into the design, construction, renovation, expansion, and operation of facilities and structures. HMSC encourages other sustainability efforts including improving current environmental conditions, reducing impacts on known natural resources, reusing and recycling materials, and support for less impacting transportation options.

## **2.5 Develop for Marine and Water-Related Programs**

HMSC is a leading marine-related institute in the Pacific Northwest; so future site development should be focused on marine and water-related programs. Future development will need to include support for seawater storage and infrastructural improvement mechanisms to support these programs.

## **2.6 Create a Pedestrian-Friendly Site**

Pedestrian systems and open spaces must provide safe and well-defined areas for the movement of the thousands of visitors that visit the site each year. Many elementary and secondary education students visit the site for field trips. Expansion or improvements to pedestrian systems should provide connectivity between HMSC and its surrounding neighbors for ease of movement, including convenient means of egress to exit and enter the center.

Existing open spaces provide an opportunity for future development; therefore new development should be designed to encourage a communal, interactive space through the use of courtyards, covered-pedestrian walkways, and estuary trail improvements. This will allow site visitors, as well as residents, an opportunity to co-mingle in a more interactive social environment.

## **2.7 Support Accessibility and Public Use**

Because of the high volume of visitors to the center, the site must be accessible to all people. HMSC promotes a site that is functionally accessible to allow access for person with disabilities.

## **2.8 Provide Innovative Facilities**

As a leading marine-related institute in the Pacific Northwest, HMSC requires facilities that offer advanced technological capabilities and adequate support space for laboratories, offices, conference and seminar rooms, classrooms, and public gathering spaces. Future development should include facilities that promote an innovative institution.

## **2.9 Maximize Human Safety and Increase Tsunami Awareness**

HMSC is dedicated to ensuring the safety of its visitors in the event of an emergency. OSU is internationally recognized for its tsunami research. The valuable research completed at the Hinsdale Wave Research lab located on OSU's main campus provides HMSC with the most up-to-date information to assist in coast emergency management measures. To maximize the safety of site visitors and occupants, refer to the HMSC Disaster Plan included as a technical appendix to the master plan.

## **2.10 Develop Planning Concepts that are Bold and Creative, and Encourage Innovative Ideas**

HMSC provides an environment for hands-on educational and research opportunities to train the marine science leaders of tomorrow. The Center's outreach activities provide marine-related knowledge to the general public through new and compelling approaches. HMSC should continue to build upon the educational and research initiatives to move towards HMSC's vision statement. Design and development of the built environment should convey a sense of bold, creative energy and innovation.

## **2.11 Provide Flexibility in Multi Use Facility Design**

HMSC facilities should incorporate existing design elements to maintain consistent design. Future development should also provide flexibility to meet the evolving program needs of the center's research, education and outreach initiatives.

### 3.0 HMSC Facilities Needs

#### Existing Conditions

The Hatfield Marine Science Center is located in the South Beach neighborhood of the City of Newport, on 49 acres of land leased from the Port of Newport. The HMSC campus is located just east of Hwy 101 and is accessed by heading in a southerly direction south of the Yaquina Bay Bridge. The site borders the Yaquina Bay and Yaquina Bay Estuary on the north and east side. OSU Drive and the Port of Newport parking lot and facilities are adjacent to the site's west side. OSU Drive is the main access arterial.

In the decades since the first Marine Science Center buildings were constructed in 1965, state and federal agency partners have developed facilities on the campus, increasing the total area of developed land at the site. As detailed in this chapter, planning for future growth is necessarily a collaborative effort, given the patchwork of land ownership and commonly shared goal of maximizing efficiency in use of land and resources. *(See HMSC Property Ownership map showing land parcel ownership: Appendix, Figure 3.)*

The programs at HMSC require facilities that provide advanced technological capabilities and adequate support space. It is important for future development that the guidelines identified in this master plan be applied to ensure the character and function for development is based on effective land use planning methodologies. The City of Newport's zoning ordinances identifies HMSC as W-2 Water, Water-Related, and Section 2-3-4: Density Limitations states that the total buildout of the site cannot exceed 85 – 90 percent of the total area. Future development of HMSC should benchmark with the 85% threshold.

HMSC must also consider the needs and objectives of its surrounding neighborhoods. Facilities should be compatible with the surrounding community building scale and mass. Development should balance the needs of a marine-research and outreach facility with those of the local community.

#### 3.1 HMSC Population

HMSC houses Federal and State agencies that all play an integral role in marine research and teaching activities. It also provides educational and outreach activities and serves as one of the major ports for oceanographic research.

#### Partnering Agencies

Seven federal and state agency programs have research and public-access facilities at HMSC. All agencies work together to foster collaboration and provide opportunities to share information and exchange synergistic activities among the scientists and staff from various programs. The following university and agency programs comprise HMSC:

### **Oregon State University**

- Coastal Oregon Marine Experiment Station (COMES)
- Cooperative Institute for Marine Resources Studies
- OSU Extension Services
- Oregon Sea Grant
- College of Oceanic & Atmospheric Sciences Ship Operations
- Marine Mammal Institute

### **Federal Agencies**

- National Oceanic and Atmospheric Administration (NOAA)
  - Alaska Fisheries Science Center
  - Northwest Fisheries Science Center
  - Pacific Marine Environmental Laboratory
- U.S. Department of Agriculture: Agricultural Research Service
- U.S. Environmental Protection Agency: Pacific Coastal Ecology Branch
- U.S. Fish & Wildlife Service: Oregon Coastal Field Office

### **State Agencies**

- Oregon Department of Fish and Wildlife: Marine Resources Program

The foundation of planning is the recognition of and understanding the role of stakeholders, including those who are adjacent to the HMSC site. Stakeholders who also participated in the master planning process included:

- OSU Students, faculty and staff
- OSU Research Office
- HMSC Administration
- HMSC Volunteers
- Extension Programs
- Local governments (City of Newport and Lincoln County)
- Oregon Coast Community College
- Oregon Coast Aquarium

## **3.2 HMSC Site Review**

There are 20 buildings totaling 255,637 gross square feet. The activities within the facilities fall into five (5) general categories: instruction, research, library, public service, residential and administration. Research activities comprise the highest percentage of use (33%).

**Table 3.2a Facilities Use by Percent**

<b>FACILITIES USE</b>	<b>% Of Use</b>
INSTRUCTION	7%
ADMINISTRATION	15%
LIBRARY	18%
PUBLIC SERVICE	4%
RESEARCH	33%
RESIDENTIAL	23%
<b>TOTAL</b>	<b>100%</b>

The oldest building on the site is the Visitor Center and Administration/Research Wings, constructed in 1965; this remains the only research facility constructed by OSU. Dormitory housing for undergraduate students on the HMSC campus became available in 1972 with the opening of the Li House apartments. Development continued over the next 20 years, resulting in a 30% increase in gross square footage. An additional 78,204 square feet were added during the 1990s, including an expansion of HMSC housing facilities. Looking back at the Center's first 40-year planning period, HMSC developed at a rate of over 20,000 gross square feet for every 10-year cycle. Table 3.2b below shows the amount of development by major program:

**Table 3.2b HMSC Development by Agency**

<b>Year</b>	<b>OSU</b>	<b>ODFW</b>	<b>NOAA</b>	<b>EPA</b>	<b>USFWS</b>	<b>TOTAL</b>
<b>1965</b>	39,552	0	0	0	0	<b>39,552</b>
<b>1971</b>	0	9,677	0	0	0	<b>49,229</b>
<b>1972</b>	2,444	0	0	0	0	<b>51,673</b>
<b>1975</b>	1,508	0	0	0	0	<b>53,181</b>
<b>1977</b>	15,618	0	0	0	0	<b>68,799</b>
<b>1979</b>	0	0	30,614	0	0	<b>99,413</b>
<b>1982</b>	0	0	31,439	0	0	<b>130,852</b>
<b>1986</b>	5,513	0	0	0	0	<b>136,365</b>
<b>1990</b>	21,637	0	0	45,991	0	<b>203,993</b>
<b>1995</b>	2,376	0	0	0	8,200	<b>214,569</b>
<b>1997</b>	10,943	0	0	0	0	<b>225,512</b>
<b>2002</b>	0	0	15,000	0	0	<b>240,512</b>
<b>TOTAL</b>	<b>99,591</b>	<b>9,677</b>	<b>77,053</b>	<b>45,991</b>	<b>8,200</b>	

(Note: Numbers represent gross square feet.)

### 3.3 HMSC Site Context

The unique natural features of the HMSC campus, with nearly two-thirds of its perimeter bounded by the Yaquina Bay estuary, are an integral consideration for future development on the site. The estuary is protected by policies identified in the State of Oregon Statewide Planning Goals, and the local (Lincoln County) municipality that has the responsibility for



the management practices of the estuary. *Chapter 6.0 Development Review Criteria, Section 6.2.3 Management Unit Districts* of this plan contains the standards applicable for estuary protection. The land itself, created from the accumulated deposits of Yaquina Bay dredge spoils, is in the tsunami inundation zone, which presents some specific engineering considerations with respect to new construction.

At the time of the development of the master plan, there is no proposed expansion of the current 49-acre site; however, a research cruise staging facility on the northwestern side of OSU Drive is being considered.

### **Historic Considerations**

Facilities at HMSC do not currently fall under State Historical Preservation Office criteria for historic buildings. The average building age at HMSC is approximately 18 years old. A building is typically considered historic at 50 years of age. As time goes by, preservation measures will need to be considered and coordinated with the City of Newport when any building approaches 50 years of age.

### **Faculty and Staff Housing**

Due to HMSC's location, it was necessary to construct faculty, staff and student housing. There has been approximately 14,409 gross square feet of housing facilities constructed during the 1990s. If an increase in the number of faculty, staff or students creates a need for additional housing, future development for residential facilities will need to be considered.

## **3.4 HMSC Existing Development**

Existing development includes the building and improvement other than building gross square feet, building and improvement other than building foot print square feet and impervious surface square feet. Impervious surfaces are considered streets, sidewalks, and parking lots (paved and gravel). The following terms will apply:

**Gross Square Feet:** The area around the exterior walls of a building and also includes additional stories.

**Building Footprint:** A building footprint is the area measured around the perimeter of a building (including roof overhang) and is measured in square feet.

**Impervious Surface:** Considered the area of at-grade development other than open buildings (typically parking lots, sidewalks, paved trails, gravel lots, etc).

The following table shows the total building and improvement other than building footprint at HMSC.

**Table 3.4a HMSC Existing Development**

Existing Development	Building Footprint	% Of Total Area
Buildings	292,690	
Impervious Surface	366,493	
<b>Total Existing Development</b>	<b>659,183</b>	<b>31%</b>
<b>Open Space</b>	<b>1,413,837</b>	<b>69%</b>
<b>TOTAL</b>	<b>2,073,020</b>	<b>100%</b>

As the table above indicates, the total footprint for all buildings and improvements other than buildings at HMSC is 292,690 gross square feet or 45% of the total current *buildable* area. Impervious surfaces cover 55% or 366,493 square feet. Future development will impact the ratio of building footprint to impervious surface by constructing new development on existing parking lots that are located at the central part of the site. However, parking spaces are required as a part of any new development per the City of Newport zoning ordinances.

### 3.5 HMSC Future Growth

The total available land for future development is 47.59 acres or 2,073,020 square feet. The City of Newport's zoning ordinance, Section 2-3-4 identifies density limitations for lands within the urban growth boundary of the City of Newport. The density limitation for the W-2 Water, Water-Related zone is 85 – 90 percent. Taking a more conservative approach in land use planning concepts will provide a buffer to accommodate changes to project development, so the *adjusted* total buildable area for HMSC's future development is 40.45 acres or 1,762,067 square feet.

**Table 3.5a Total Development Criteria**

Development Criteria	Square Feet	Acres	% Of Total
<b>Total Site</b>	<b>2,073,020</b>	<b>47.59</b>	<b>100%</b>
<b>City of Newport Density Threshold</b>	<b>1,762,067</b>	<b>40.45</b>	<b>85%</b>

#### 3.5.1 Future Capacity

The future capacity of HMSC is identified by the available buildable lands. Future capacity includes site constraints, transportation requirements identified as roads, bike lanes and pedestrian paths, service access roads, parking lots and sidewalks. The City of Newport zoning ordinance does not consider impervious surfaces for development projects; however ordinances do require additional parking. (*See Chapter 6.0 Development Review Criteria, section 6.5.10*) To effectively plan development and to ensure the ability to facilitate efficient movement for faculty, staff, students and visitors to and from the site, the master plan includes future impervious surface allocations to meet the City's parking and transportation requirements.

### 3.5.2 Future Development Capacity

Potential areas for future development on the HMSC campus total roughly 460,000 square feet or 10.54 acres of buildable land. Impervious surfaces may be used for future development, but additional parking and transportation improvements will be required by the City of Newport. Impervious surface ratios will most likely remain the same, so the future capacity of HMSC can be forecast to assist in this master planning effort, and is identified in the table below.

**Table 3.5.1a HMSC Future Development Capacity**

<b>Future Capacity</b>	<b>Building Footprint</b>	<b>% Capacity</b>
Site Capacity	459,637	44%
Impervious Surface Capacity	575,535	56%
<b>Total Future Development</b>	<b>1,035,171</b>	<b>100%</b>
<b>Total Site Development</b>	<b>1,694,355</b>	<b>82%</b>
<b>Required Open Space</b>	<b>378,666</b>	<b>18%</b>
<b>Total Future Development</b>	<b>2,073,020</b>	<b>100%</b>

Note: Adjacent natural resources were included as constraints within the site as identified in the zoning ordinances.

The next table provides information for the site's maximum capacity when programming future development. The table includes both existing and future development, and the required amount of open space as defined by the City of Newport.

**Table 3.5.1b HMSC Future Maximum Development**

<b>Summary</b>		
<b>MAXIMUM CAPACITY</b>	<b>Building Footprint</b>	<b>% Capacity</b>
Total Development	1,102,884	53%
Site Capacity (by code)	1,762,067	85%
Required Open Space	310,953	15%
<b>OVERALL CAPACITY</b>	<b>2,073,020</b>	<b>100%</b>

The total capacity for future buildout at HMSC is 1,762,067. The open space will decrease from the existing 69% of the total area to 15% or 310,953 square feet. Because of the site's natural feature constraints, new development will most likely include a higher floor to area ratio, in other words, buildings will mostly likely be 2-stories.

### **3.5.3 HMSC Gross Square Feet Development**

#### **Capital Construction Projects**

Several programs at the HMSC are growing, and current space availability is the factor limiting growth and associated extramural research funding. During the HMSC MP planning period, it is anticipated that capital construction projects will be necessary in the following areas:

#### **OSU Research, Academic, and Support Facilities**

Research and academic facilities must be developed and operated in a manner that attracts and retains a high caliber of students, faculty, and staff. These new facilities will offer ample research areas and state-of-the-art telecommunications, and serve as an interface between OSU and its agency and community partners for collaborative research and knowledge-based learning.

##### **Aquarium Science Building**

Growth of the Oregon Coast Community College (OCCC) Aquarium Science Program underscores the need for expansion of classroom and lab space at HMSC, which is currently limited to the Education Wing. The OCCC's plans for construction of a new 14,000 sq. ft. dedicated Aquarium Science building at HMSC were modified to include a second floor to accommodate compatible facility needs projected for OSU and federal agencies. This will more efficiently serve the broader public interest for both instruction and research.

The proposed building received a high priority rating from the Department of Community Colleges and Workforce Development for the 2007-2009 Community College Capital Construction. It appears to have received part of the needed matching funds during the 2007-2009 Legislative Session.

##### **Marine Science/Marine Mammal Research Facility**

The OSU Marine Mammal Institute has embarked upon an ambitious growth plan, which will entail additions of both tenure and non-tenure track research faculty, post-doctoral positions, and associated staff over the next five years. It is anticipated that in that timeframe, space for 75 to 85 people will result in requirements for 18,000 square feet of combined office/lab space. Also growing is the marine genetics and genomics program, which currently utilizes laboratory space in the oldest of the OSU buildings, built in 1965, which are inadequate to meet the needs of modern genetics research. For both programs, the growth and modernization required to stay competitive in the current science funding environment underscores the need for new facilities.

A 2-story, 28,000 square foot building is being planned conceptually. The entire bottom floor (and perhaps part of the second) will be occupied by the OSU Marine

Mammal Institute. This building will not require running seawater. The second floor will include offices and analytical laboratory space to accommodate the marine genetics and genomics program in modern facilities. HMSC's capital campaign plan has been approved to raise funds, in part, for such a building.

### **Youth and Family Marine Education Building**

Recognizing the opportunity for collaboration between the principal providers of youth and family marine education programming on the Oregon coast, a planning study was completed for the concept of a new youth and family marine education teaching facility on the HMSC campus.

The facility is envisioned as serving various program needs for OSU (HMSC Visitor Center, Oregon Sea Grant's Youth Marine Education and Ornamental Fish Health Programs) and the Oregon Coast Aquarium. The goal is for a facility that will help to provide an overall experience of youth, students, families and visitors, while reducing conflicts and incompatible uses of research and teaching needs.

As proposed, the facility would be a 2-story, 20,000 square foot "green" building, designed with flexible spaces to respond to changing technology and program requirements including seawater labs, classrooms, and distance learning facilities. Desired building features would include: wind and rain buffered pedestrian connections to other HMSC buildings and to the Oregon Coast Aquarium; interconnectivity for public access from the HMSC Visitor Center and for public meeting use; potential linkage of pedestrian pathway with local interpretive hiking trails; potential to use an upper-floor as a tsunami refuge area; wind and rain protected multi-purpose outdoor space; and covered entry space for staging of student and other groups arriving at the facility.

### **Physical Plant Facilities**

To facilitate the objectives of the master plan, it would be desirable to move the HMSC Facilities shop and office to a location nearer to the periphery of the property, potentially to the south end of campus. Currently, the Facilities maintenance shop is located in the central campus core and occupies space in a former laboratory building with seawater access. The space was previously used as a wet-laboratory and the seawater infrastructure remains. Converting this space back to its original use would meet several of the objectives of the master plan. The space is in an area with other similar laboratories, which would result in synergies for both infrastructure and collaborative research activities by clustering labs together.

Environmental considerations would also make it desirable to move the maintenance shop out of the current location, as traffic and shop activities interfere with teaching and research functions. Moving the Facilities office would also allow for expansion of classroom space in the Education Wing and would also reduce the noise level. With the dumpster, diesel and gas storage, lubricants, and facilities equipment

housed in former lab facilities, concerns exist about environmental security, which could pose a hazardous materials threat to core campus functions.

In addition, the facility would have improved shipping and receiving capabilities and serve as a central reception area away from the campus core. Relocating the shipping/receiving activities would reduce traffic disruption to the central core, increase pedestrian safety, and enable better security for trucks and delivery vans coming to the facility.

## **Agency Facilities**

### **US Environmental Protection Agency**

The Environmental Protection Agency's (EPA) Pacific Coastal Ecology Branch does not anticipate expanding its existing footprint of 44,500 square feet. The EPA's site master plan suggests filling in the courtyard, or perhaps expanding south towards the gravel lot, if additional office space is needed.

### **Oregon Department of Fish and Wildlife**

The ODFW Marine Resources Program has maximized the available space in its current building. ODFW needs additional space for approximately 25 - 30 staff (5 - 10 new Marine Resources Program staff and 15 - 20 staff from the ODFW North Coast Watershed District). Acquiring funding to expand the current building may take several years. The agency's short term needs will be met by renting additional space off site. If funding were secured, a wing addition would be constructed on the west side of the existing facility.

### **NOAA Alaska Fisheries Science Center**

The Alaska Fisheries Science Center has no current plan for expansion. Staff growth and expanding research can likely be accommodated within the existing buildings, which include Newport Aquaculture Lab, the RSF complex, the Pole Barn, and the Fish Barn.

### **NOAA Northwest Fisheries Science Center**

The Northwest Fisheries Science Center will also require additional laboratory space in support of its programs at the Newport Research Station. This may involve constructing a 15,000 square foot seawater laboratory building as a new wing on the Captain R. Barry Fisher Building. Future development will go through the HMSC Master Plan Committee to ensure that the addition would not place a demand on the existing seawater delivery system. (See also requirements for waterfront facility requirements, below.)

## **USDA Agricultural Research Service**

The U.S. Department of Agriculture (USDA) Agricultural Research Service, which currently houses two scientists and associated staff on the HMSC campus, does not anticipate any program expansion. While staff may expand slightly and require additional office/lab space, this could be provided by other cooperating agencies within HMSC.

## **US Fish and Wildlife Service**

Projected growth in staff for the Oregon Coast National Wildlife Refuge Complex suggests a possible doubling of current FTE to 20-25 personnel by 2016. If funds became available, a future building expansion may include an addition on the north or east side of the existing facility. Expansion to the south or west would be prohibited due its proximity to a 100-year floodplain.

## **Storage Facilities**

Storage is a continuing need for most HMSC programs. Because storage has been limited, some programs have used off-site storage, and past reports documented the need. Additional operational storage and staging requirements have been identified, including environmentally compliant sample storage buildings, space for oceanographic and biological sampling equipment, laboratory equipment, educational and Visitor Center supplies/displays, and records storage. Generally, given the value of space at HMSC and the master plan's future maximum buildout, storage space should be incorporated into any new capital construction project. It may be beneficial to consider off-campus storage locations for longer-term storage needs, to optimize space use at HMSC.

## **HMSC Waterfront Planning**

### **Research Vessels and Vessel Support**

#### **Oregon State University**

While existing dock space is adequate for OSU's research vessels *Wecoma* and *Elakha*, (and most visiting research vessels) the 185-foot R/V *Wecoma*'s useful life will eventually come to an end. A replacement vessel will be sought, and more than likely a larger ship will be needed. In addition, a larger NOAA fisheries research vessel may also docked at HMSC. These two vessels will not fit adequately with the existing dock facilities to provide access and service space for the vessels. The existing dock could be expanded to accommodate the vessels by potentially widening the east catwalk. Additional covered storage on the dock will be needed to provide a covered and secured work area.



There is a critical need for covered storage in the COAS dock facilities staging area, therefore a pole barn or similar structure adjacent to the Ship Operations building is needed to meet the storage demand.

The Marine Mammal Institute (MMI) has three vessels ranging in length from 75 to 84 feet. Presently, all three vessels are moored on the north side of the bay, which creates difficulties for research use. It would be advantageous for three vessels to use the OSU docks for loading and unloading in preparation for research cruises, return to port and occasional heavy equipment transfer. These occasional moorings will be coordinated through the COAS Ship Operations Office. When the vessel usage becomes more regular, future planning for the docks expansion should be considered to provide a permanent space for the MMI vessels, including additional adjacent storage.

### **National Oceanic and Atmospheric Administration**

A new NOAA Fisheries Survey Vessel is being delivered to the West Coast, which presents another critical need for a ship support facility. This vessel support building will provide needed storage and support for current vessel research activities conducted by the Northwest Fisheries Science Center. The current space need would be at least 10,000 to 12,000 gross square feet, and an additional 2,000 to 4,000 gross square feet of outdoor storage. The facility could be located adjacent to HMSC's current acreage, thereby requiring leasing agreements from the Port of Newport for additional land.

### **Additional Waterfront Infrastructure**

Various improvements to HMSC's waterfront infrastructure are projected for the next two to five years in support of research, education, and outreach functions. The seawater pumping system, pump house dock and adjacent research docks are all in need of extensive repairs and/or replacement to support the diverse research, education, and outreach requirements of a modern marine laboratory. HMSC requires facilities that provide access to the water, without the necessary costs and logistical requirements of a full-scale boat launch facility. These facilities would enhance the ability of HMSC to provide opportunities for field learning, graduate student training and youth and public education classes to gain firsthand experience working in the Yaquina bay.

Recommended infrastructural elements to advance the mission, vision, and goals of HMSC's strategic plan focus on modernization of seawater intake facilities and improved access to the waterfront for biological and other marine science research. Proposed improvements include:

- an upgraded seawater pumping system with new technology, energy-efficient, computer controlled pumps;
- limited small boat moorage (presently unavailable at HMSC);



- floating docks or other infrastructure providing enhanced capabilities for:
  - conducting research over the water, including placing *in situ* instrumentation, sampling the water column, and maintaining experimental animals in bay waters;
  - classes to use dock facilities for education and research internship purposes; and
  - improved access for youth and public education courses to access the water to improve learning outcomes.

### **Small Dock Facilities**

HMSC has needs for enhanced capability for small boat access to Yaquina Bay. While only limited docking facilities are required, enhanced facilities to store, maintain, launch, and operate small boats for research, outreach, and collection purposes will markedly improve HMSC's capacity in these important areas.

### **Estuary Trail Access**

While the facilities noted above are program specific and not available to the general public, our educational mission extends beyond our programmatic activities. HMSC has worked to increase access to Yaquina Bay through the Estuary Trail. This trail should, over the next several years, be improved, protected using sustainable shoreline protection methods, and extended if possible, in keeping with the City of Newport's trail plan published in 1993.

## **4.0 HMSC Design Guidelines**

### **Overview**

The HMSC Master Plan includes site design guidelines to ensure consistency in design and mass to help provide direction for future development. This chapter includes design guidelines and references the City of Newport's zoning ordinances and Comprehensive Plan, and Lincoln County's Comprehensive Plan. These documents establish the framework for the HMSC Master Plan. The design guidelines also include provisions that will help to create cohesive and compatible site development between the various agencies housed at HMSC.

HMSC's development will not specifically impact its surrounding neighborhoods but will impact site capacity. It is crucial that the guidelines set forth in this chapter be applied to all future development projects to make certain the character, vitality, and functionality of the site's operations are not compromised based on individual development but rather provide a well-planned and thoughtful development that will be beneficial to all.

The commitment for collaborative development is facilitated through the establishment of a Master Planning Committee (described below), which will support open communication and ensure that all stakeholder interests are considered in future planning efforts.

### **4.1 The Design Process**

#### **4.1.1 The Coordination Process**

A central committee with representatives from each agency should be formed as the HMSC Master Planning Committee. The committee will conduct regular meetings to review future development projects, and will have the responsibility to oversee the site's future development. New construction and major remodeling or renovation projects will be coordinated through the committee to ensure consistency with the design guidelines in this Plan. This will provide developers and/or contractors the necessary guidance based on applicable Master Plan guidelines, standards and criteria.

The committee should be formed by July 1, 2007.

#### **4.1.2 The Review Process**

The HMSC Master Planning Committee will review all proposals for new construction, and major remodel and renovation projects that visually alter the exterior appearance of the campus. The committee shall be chaired by the Director of HMSC or his/her designee, who will be responsible for communicating the committee's work to appropriate levels of administration at OSU. The committee will be comprised of members from each major stakeholder housed at HMSC. This

includes representation from HMSC Administration, OSU departments, EPA, USFWS, ODFW, USDA, and the NOAA Northwest and Alaska Fisheries Science Centers, the Pacific Marine Environmental Lab, and the Oregon Coast Community College. Committee membership should also include representatives from the resident OSU graduate students and provide 4 at-large members representing: 1) the Port of Newport; 2) the Oregon Coast Aquarium; 3) the City of Newport's Community Development Office; and 4) the HMSC Visitor Center Volunteers. This constituency will enable future planning efforts at HMSC to be a collaborative and community based planning process.

The HMSC Master Planning Committee will review the proposal for site layout, building design, construction materials and compatibility with surrounding building uses. The committee will also consider how the proposed construction is consistent with the HMSC Master Plan, City of Newport Zoning Ordinances and Comprehensive Plan, and Federal and State development guidelines. Once the review is completed by the committee, the project will be forwarded to the project sponsor as is, or with other site and/or building considerations.

The committee should establish the guidelines for approval of projects consistent with the HMSC Master Plan, and try to find solutions that might be of benefit to the site. Once the committee has given its support of the proposed project, the project sponsor will be notified that the project can move forward. At the time that schematic design is at 50%, the project should go back for review by the committee to ensure that the project is still within the agreeable scope. At 90% schematic design, the committee should be given the opportunity to give a last review.

A proposed project should be presented to the committee with the following information:

- Project Intent
- Project Scope
- Design
- Size
- Height
- Location
- Materials
- Parking Plan
- Transportation Improvements
- Infrastructure Needs Assessment Plan

#### **4.1.3 Architectural Design and Infrastructure Cost-Sharing**

For OSU-related projects, members of Facilities Services staff and representatives of the sponsoring OSU College or Department shall be involved in the selection of architectural consultants or other design professionals retained to assist in new construction, major remodeling or renovation activities. The project must also

include collaboration with the OSU Procurement and Construction Contracts Office. In addition, all state buildings require 1% of the construction budget dedicated to art.

Development projects are required to pay all associated construction costs. This includes project management, initial surveys, geotechnical studies, engineering studies, architectural design, interior design, landscape design, utility upgrade/extension, and other improvements required by the development (road improvements, required parking, etc.). The project shall also pay for professional services needed to complete the project. The project may also be required to financially contribute to HMSC-wide transportation and parking improvements, sewer, water, drainage, seawater capacity, landscaping, or other development-related improvements. Financial contributions for shared infrastructure costs shall be assessed on a sliding scale proportionate to the estimated cost of the new development. This scale will be based on OSU surcharge policy.

#### **4.1.4 Project Scope**

Each group housed at HMSC has unique facility needs to support their program activities. The following information is broken down by the capital needs for each representative housed at HMSC:

##### **Oregon State University Review Process**

OSU has a capital construction biennium process where project proposals are submitted for consideration for funding by the state legislature. Prior to submittal to OSU, projects must be reviewed by the HMSC Master Planning Committee to ensure that the project is consistent with the guidelines and procedures identified in the HMSC Master Plan.

The HMSC Master Planning Committee shall also review other projects that involve new construction or modification of outdoor spaces or interior spaces with significant public exposure. In addition, the HMSC Master Planning Committee shall review significant remodeling or renovation projects that change the use of space within the building, change the manner in which the interior circulation functions, or change the outside appearance of a building. Projects of a routine maintenance nature or those that do not involve outdoor spaces or significant interior spaces to not need further HMSC Master Planning Committee review.

##### **Review by Other Institutions**

Federal and state agencies, and other institutions that may develop facilities at HMSC may have other capital review processes or procedures; however, development projects will still be consistent with guidelines and procedures identified in the HMSC Master Plan.

#### **4.1.5 Document Submittal Format**

All building and site plan documents submitted for review shall be in hard copy as well as a computerized format (preferably AutoCad drawing files). OSU documents must be formatted as determined by Facilities Services to meet OSU and State Archival retention criteria. Federal documents must be formatted for compliance with agency requirements. All building and site plan documents should be maintained on site as reference documents for use by all HMSC site facilities managers, and preferably located in a central location. Proposals requiring other jurisdictional reviews (e.g., city or county review for zoning or building permits) will be required to prepare applications per the jurisdiction's requirements.

#### **4.1.6 Site Design**

HMSC's location on the Oregon Coast provides researchers and students with excellent field study areas in a variety of coastal habitats. The location has a relatively pristine estuary with good ocean access and egress. The site encompasses a collection of buildings and improvements including streets, sidewalks, open space and parking lots. New development should be similar in design and/or materials to fit within the existing developed environment to provide continuity of design elements.

#### **4.1.7 Building Design**

Historically, buildings designed during the 1960s underwent a refinement of Modernism with emphasis on contemporary design. Architects used light and space to create buildings that would facilitate the activities undertaken in the facilities. The design of HMSC is of a modernistic style with high-pitched roofs that give the buildings a sense of height to offset the one-story facilities that were predominantly constructed.

New facilities should include design flexibility to afford building occupants a functional facility. New construction, which is likely to include multiple story buildings, should also contain existing design elements to create a sense of place and design continuity.

#### **4.1.8 Accessibility**

All new facilities shall be compliant with current International Building Code accessibility requirements as well as meeting the functional needs identified in the Americans with Disabilities Act Design Guidelines.

#### **4.1.9 Sustainability**

Development at HMSC should comply with all Federal, State and local government criteria for sustainable building practices, including minimum LEED standard

certification. Development should minimize energy use in new and renovated facilities and reduce the amount of nonrenewable energy in existing buildings.

## **5.0 HMSC Development Standards**

This chapter identifies the development standards that will direct the long-range development of HMSC. The standards are based on input from the site stakeholders, the Oregon Coast Aquarium and support from the City of Newport. The standards also address issues such as the HMSC community well-being, land use compatibility, transportation, protection of natural resources and public safety.

### **5.1 Code Compliance**

All development shall be in compliance with the HMSC Master Plan Development Criteria (Chapter 6.0), City of Newport Zoning Ordinances and Comprehensive Plan, and the South Beach Land Development Plan. Development proposals shall also comply with all other applicable codes including the International Building Code, Fire Code, and Mechanical and Electrical Specialty Code.

### **5.2 Community Relationships**

HMSC seeks to foster positive relations with surrounding communities and with local, state and federal agencies. HMSC will work with local governments and neighbors in a proactive manner so as to minimize any impact that comes from HMSC future development.

- 5.2.1** Continue to work with the Oregon Coast Aquarium and the City of Newport and other governmental agencies to continue to develop a collaborative development relationship.
- 5.2.2** Create an information exchange process in which adjacent land owners can conveniently comment on potential development.
- 5.2.3** Pursue partnerships with local schools, business and others to promote education and public outreach programs.
- 5.2.4** Continue to support community events.
- 5.2.5** HMSC will work with surrounding business and neighborhoods to proactively maintain and protect the existing integrity of the area.

### **5.3 Student Life and Services**

Students are an important part of the HMSC community. Student housing facilities are included at HMSC to accommodate students housing needs and minimize costs to and from work and school. Undergraduate students and graduate research assistants live and work at HMSC for their educational and research activities.

- 5.3.1** Opportunities for academic collaboration, recreation, cultural and intellectual exchange and social interaction should be encouraged to provide students with a safe, enriched and diverse experience at HMSC.
- 5.3.2** Continue to promote the site as a pedestrian-friendly and interactive outreach place to visit and experience.
- 5.3.3** Provide adequate student housing that is safe, accessible, and promotes academic and social interaction.
- 5.3.4** Develop ways to enhance student life by providing recreation facilities or areas, and improve technology access at student residences.
- 5.3.5** Provide adequate security measures to ensure travel to and from the student housing complexes are safe. Some measures may include exterior lighting around the housing complex as well as lighted corridors to adjacent research or educational facilities. Properly landscape around the facility to create a home-like environment, but provides a safe-haven for the residents.

## **5.4 Site Development**

The most densely developed area is located at the center of the site. Buildings are similar in design with some pedestrian connectivity between buildings. As the site was developed, placement of buildings may have focused on program need and site availability, versus a comprehensive vision or plan for the site. Recent development was constructed around the site's perimeter, including two 2-story buildings, increasing the floor to area ratio of the site.

- 5.4.1** Future development must be consistent with City of Newport Zoning Ordinances and Comprehensive Plan, and the South Beach Neighborhood Plan.
- 5.4.2** Future development will include more 2-story facilities as available land for construction becomes limited.
- 5.4.3** Future development must include similar building design elements to maintain consistency of design and create a more integrated site, augmenting the strategic planning goals of HMSC.
- 5.4.4** Design buildings that are cost effective to operate and maintain, and support students and faculty, as well as educational, public outreach and research activities.
- 5.4.5** Promote sustainable building design concepts and cost-saving measures for incorporation into future development projects.
- 5.4.6** Create space within future buildings to maximize the use of the physical resources so as to not negatively impact the facility's operations and maintenance systems.



- 5.4.7 Effectively and efficiently plan for future development by instituting the HMSC MP Committee. Planning for new construction and renovations should support and strengthen academic and research operations by locating functionally related programs adjacent to one another and consolidating activities with similar physical requirements.
- 5.4.8 Avoid significant building additions that overpower existing development.
- 5.4.9 Orient future public building entrances toward major access routes that reinforce efficient transportation circulation.
- 5.4.10 OSU buildings should comply with the OSU Construction Design Guidelines; Federal and State buildings should comply with their appropriate design guidelines. Both should remain consistent with the guiding principles of this Plan.
- 5.4.11 Maintain space between buildings to ensure adequate areas for landscaping amenities, and circulation for pedestrians, bicycles, service and emergency vehicles.
- 5.4.12 Future development should preserve, where possible, established trees that provide visual relief, wind breaks, and other enhancing value to the landscape.

## **5.5 Landscape and Site Amenities**

The landscape at HMSC is consistent with a coastal environment. It includes a pristine estuary with ocean access and egress. Other landscaping amenities include bio-swailes located on either side of the Visitor's Center, which provides natural open space elements for the enjoyment of HMSC visitors and residents.

- 5.5.1 Landscaping shall be included around buildings to soften the bulk and mass of the facilities and establish a human scale to the area. Plantings shall be placed around buildings so as to not conflict with building maintenance needs. Plantings should not visually obscure or limit site lines from a building entrance to an adjacent street or parking lot, nor should they create a hazardous condition that might compromise public safety.
- 5.5.2 Landscaping should be located along the perimeter and interior of parking lots to provide a visual relief from considerable areas of asphalt. As appropriate, indigenous trees may be planted to add height to landscaped areas to offset building mass. Placement of trees should be planned to accommodate views from buildings adjacent to Yaquina Bay.
- 5.5.3 Future development will be required to support landscape improvements; therefore any development project should include a landscape plan reflecting improvements to the proposed development. If development occurs in an area that does not warrant landscape improvements, a plan to improve an adjacent landscaped area should be included in the site design.

- 5.5.4 Landscaping, building mass and height should be similar to that of surrounding buildings or landscaped areas.
- 5.5.6 Provide landscape screening for all new utility pedestals and storage facilities; develop a program to construct screening around existing outdoor improvements other than buildings.

## **5.6 Site Access**

There are three points of entry to HMSC. The main arterial to the center is from Hwy 101, exiting immediately south of the Yaquina Bay Bridge onto OSU Drive. The first entrance, located at the south end of the site, is more of a “back gate” entrance, used primarily by HMSC staff and students to access student housing and parking lots in the central core of the center.

The second access to HMSC directs traffic to the Oregon Department of Fisheries and Wildlife (ODFW) building and the Guin Library. ODFW provides a public service to the Newport and coastal community, and therefore has a large parking lot adjacent to the building. The Guin Library serves both public and HMSC residents with library services and central meeting rooms.

The third entrance is the main entrance leading to a large parking lot on the north side of HMSC, which is also adjacent to Yaquina Bay. The lot provides ample area for parking and vehicular circulation in and out of the location, and also way finding signage, which directs traffic to the entrance.

- 5.6.1 Future development should include a north entrance design as the primary portal to HMSC, which provides access direction for HMSC visitors.
- 5.6.2 Future development should include re-location or re-design of the other (southern) OSU Drive entrances to accommodate internal access for service vehicle, student residents and staff parking lots.
- 5.6.3 Future development should include a plan to develop a more multi-modal improvement plan along OSU Drive to guide visitors to the site’s main entrance.
- 5.6.4 As future development occurs, it will be necessary for HMSC to evaluate its existing parking circulation by instituting a parking utilization study. It is recommended for HMSC Administration to collect parking lot utilization information on a quarterly basis for a period of five years in order to assess future parking demand, which must be included with any future development capital project.
- 5.6.5 Develop improved campus entrance portals, including kiosks, additional signage and pavement treatments to better instruct visitors to the site.

## **5.7 Streets**

HMSC's development may require an upgrade to adjacent streets and/or intersections. Such improvements may include re-pavement or paving of travel lanes, on-street bike lanes, sidewalks, planning strips, curbs, gutters, and draining improvements. If an intersection needs to be upgraded to increase capacity or mitigate unacceptable levels of service, functional requirements and/or potential upgrade shall be incorporated into the project.

- 5.7.1** When pedestrian improvements and/or crosswalks are needed, they shall be clearly defined through paint marking, raised crosswalk, or other changes in pavement styles. Generally, crosswalks should be at intersections, but if a mid-walk crossing is used, traffic calming techniques should be completed to alert drivers of the crosswalk. These traffic calming techniques include (but are not limited to) speed tables, speed bumps/humps, warning lights and signage.

## **5.8 Open Space**

Open space is an important element of any major research and educational facility. It helps to define the character of the campus and provides a visual relief from buildings. Open space can be defined as land area not covered by buildings or used for vehicle maneuvering or parking. At HMSC it also includes lawn areas, estuary and adjacent trails, riparian areas, bio-swales, and other amenities that provide an opportunity for the HMSC visitors and community to co-mingle. Open space creates a framework for development and offers areas for respite, exercise and social interaction. The City of Newport's Comprehensive Plan identifies specific areas where several environmental factors exist restricting development potential, so special care must be taken prior to and during construction.

- 5.8.1** The State of Oregon's Statewide Planning goals identified natural features and ocean shore lands that list the Yaquina Bay estuary as a protected body of water; therefore any impacts to the protected area must comply with Zoning Ordinance regulations.
- 5.8.2** The Estuary Trail that surrounds the HMSC site will be considered Protected Open Space and will not be subject to further development.
- 5.8.3** Open space and Protected Open Space areas will provide the framework for HMSC's development and should be shown in future development site plans.

## **5.9 Parking**

Planning for parking is a key component of any master plan. A systematic plan to meet parking demand must be integrated into the existing City system. The City of Newport does not include parking lots or streets as impervious surfaces for future development; however, the Zoning Ordinances have established thresholds that impact future build out. The threshold for HMSC is 85 to 90 percent, so planning for additional at-grade parking must be included in any future development project.

- 5.9.1** The existing parking capacity as identified in the appendices will be the baseline parking data to allow for credit negotiations with the City.

- 5.9.2** Parking lot entrances should be designed meeting the City of Newport Zoning Ordinances sight distance criteria. Other improvements required for access to and through the site may be required to ensure safe and adequate site access. New development will need to include the required number of spaces as defined in Chapter 6.
- 5.9.3** Future development will need to include a parking plan as a part of the part of the development project.
- 5.9.4** Future development must include off-street parking and loading areas to preserve the health, safety and welfare of the citizens of the site occupants, visitors and the City of Newport. If the level of capacity does not warrant more parking, a funding mechanism should be developed to help support other infrastructural needs.
- 5.9.5** Off-street parking for HMSC shall be provided and maintained. For building expansions, parking credits are factored for the loss of parking when new development occurs. Required parking will increase based only on the expansion.
- 5.9.6** Individual projects that displace parking through development should replace any displaced parking and/or can pay an equivalent dollar value to relocate the parking elsewhere on the site.
- 5.9.7** Along the bay, parking lots should be constructed away from the front of new development. Sidewalks adjacent to parking lots should be designed so that the overhang of parked vehicles does not reduce the sidewalk width hindering public circulation.
- 5.9.8** Parking lots access shall be designed in accordance with the Americans with Disabilities Act (ADA) regulations, as well as compliant with the City of Newport code requirements.

## **5.10 Pedestrian Access and Circulation**

Future development must provide pedestrian and open space systems for people to co-mingle and have social interaction. Any expansion or improvement to a pedestrian system should adequately provide for inclement weather, cross-campus movement with convenient locations for exiting and entering the site.

- 5.10.1** Include pedestrian connectivity with buildings as well as the surrounding natural features and amenities on the HMSC site.
- 5.10.2** Buildings should have multiple points of access with provisions made for pedestrian and bicycle traffic. (i.e. sidewalks, on-street bicycle lanes, multi-use paths, etc.)
- 5.10.3** Pedestrian safety should be considered in all new development projects. Projects should also include design to accommodate delivery service vehicles without impacting pedestrian connectivity at the HMSC site.

- 5.10.4** Continue to maintain and enhance pedestrian walkways throughout the site (e.g. covered walkways), especially with new development.
- 5.10.5** Reinforce the pedestrian nature of HMSC by creating more opportunities for multi-modal activities, including covered areas and wind blocks, where appropriate, to enhance the usability of outdoor spaces.
- 5.10.6** Prepare a plan for improvements to sidewalks and replace with creative ways to integrate learning into walkways through pavement/cement implants or signage.
- 5.10.7** Create more pedestrian paths and sidewalks adjacent to the Estuary Trail.
- 5.10.8** Create ways to encourage more bicycle travel to the site.

## **5.11 Lighting and Site Furnishings**

All signage and site furnishings (i.e. lights, benches, bicycle racks, etc.) should work within the parameters established with existing conditions. Lighting plans should be included in the project scope of future development to ensure that safe conditions are met for access, use and circulation, especially during fall and winter months.

The Employment Lands and Conceptual Land Use Planning Project: South Beach Neighborhood Plan identifies policies and guidelines in addressing storm water systems, which impact HMSC. The plan was submitted to the City of Newport Community Development Department in September 2005 and is pending approval and incorporation into the Zoning Ordinance.

- 5.11.1** Future development should comply with existing utility plans and will be subject to public review.
- 5.11.2** Future development projects must include a utility plan that will addresses a systematic, HMSC-wide need. The goal of the plan will be to ensure that utilities are sized and placed in manners that will serve HMSC today and tomorrow. The plan should include measures to prevent interruptions to critical research and educational activities, and not create a burden to existing systems. Older systems should be identified and tracked, so as future development projects occur, systems can be upgraded to sustain HMSC's operations.
- 5.11.3** Create a sense of identity by using a cohesive design for benches, signage, bicycle racks and trash receptacles. Some criteria may include similar finishes, colors and materials.
- 5.11.4** Seek and install energy-efficient light fixtures that provide adequate illumination but are designed to cast the light downward. Refer to the City of Newport Zoning Ordinances for lighting criteria.

- 5.11.5** When designing major portals, utilize special lighting, site furnishings and signage that are consistent with site specifications.
- 5.11.6** Place bicycle racks near building entrances without obstructing building access.
- 5.11.7** Enhance areas that may serve as major gathering points around the site by adding appropriate amenities such as benches, trash receptacles, signage and wayfinding and/or informational kiosks.

## **5.12 Utilities and Infrastructure**

Utilities at HMSC have most probably existed since the site was first developed. As the site develops concerns about seawater capacity and demand on existing systems is of concern to the site residents. As the site develops, projects must include infrastructure and/or utility plans to meet the need system-wide needs of HMSC.

- 5.12.1** Maintain an inventory and/or maps of all utilities on the site. Work with the City of Newport and the Port of Newport by providing plans or maps of areas with new or improved systems.
- 5.12.2** Require future development projects to provide a complete set of drawings including infrastructure drawings prior to the close of a project. Copies of the project should be in standard AutoCad drawing format. Copies must be kept on site and for OSU development a copy must be sent to Facilities Services.
- 5.12.3** Locate utility management systems to provide for centralized control to ensure more efficient monitoring of operations and provide for more efficient expansion capabilities.
- 5.12.4** Develop a comprehensive stormwater master plan, involving surrounding business to ensure that future development at HMSC does not impact adjacent business or neighbors systems, and that development by adjacent neighbors and business do not impact HMSC systems.
- 5.12.5** All development must comply with the City of Newport utility and stormwater master plans.
- 5.12.6** Any vegetation disturbed as a result of the installation or maintenance of existing or newly installed utilities shall be replaced and/or restored.

## 6.0 Development Review Criteria

### 6.1 Statement of Purpose

The purpose of the Hatfield Marine Science Center Master Plan is to encourage the most appropriate use of the site, to protect, conserve and establish sensible land use practices to provide adequate and sustainable uses for future development. The information included in this chapter identifies specific criteria to meet the needs of all programs located at HMSC. In addition, the Development Review Criteria will include applicable City of Newport Comprehensive Plan code language from the Zoning Ordinances to ensure that future development projects adhere to applicable code requirements. The code included in this chapter is not all inclusive, but will address typical HMSC construction projects affected by the Zoning Ordinances.

### 6.2 General Information: Use and Management Unit Districts

HMSC is located in one of four basic classifications and 13 use districts. The specific district for HMSC is known as W-2/"Water Related." Applicable code describes W-2/Water Related: *"The intent of the W-2 district is to provide areas within and adjacent to the Yaquina Bay Shore lands for water-dependent, water-related, and other uses that are compatible or in conjunction with water-dependent and water-related uses."*

#### 6.2.1 Permitted Uses of W-2/"Water Related" Districts:

**"P" = Permitted Uses**

**"C" = Conditional uses permitted subject to the approval of a conditional use permit.**

**"X" = Not Allowed**

Permitted Use	W-1	W-2
1. Aquaculture	P	P
2. Boat rentals, Sport Fishing and Charter Boat Services	P	P
3. Docks, Wharves, Piers	P	P
4. Dry Dock, Boat Repair, Marine Service, and Marine Railway Facilities	P	P
5. Fuel Facilities for Boats or Ships	P	P
6. Marinas and Port Facilities	P	P
8. Terminal Facilities for Loading and Unloading Ships and Barges	P	P
9. <i>Marine Research and Education Facilities of Observation, Sampling, Recording or Experimentation on or near the water</i>	P	P
10. Boat Building and Marine Equipment Manufacture	C	P
11. Parking Lots	C	P
12. Warehouses	C	P



<b>Permitted Use</b>	<b>W-1</b>	<b>W-2</b>
13. Uses Allowed in the Adjacent Estuarine Management Unit	C	P
14. Water-dependent Uses That Meet the Intent of the W-1 District	C	P

### **Ancillary Use**

1. Essential Services
2. Major and Minor Utilities
3. Telecommunication Facilities

### **6.2.2 South Beach Neighborhood Land Use Plan**

HMSC staff was involved in the development of the South Beach Neighborhood Land Use Plan. The plan builds upon prior planning efforts and was chosen as the preferred alternative plan by the Employment Lands and Conceptual Land Use Planning Project Ad Hoc Advisory Committee as appointed by the City of Newport.

The plan identifies land use criteria that address the specific needs for the South Beach neighborhoods including residential, commercial and institutional occupants, which includes the Hatfield Marine Science Center. Some of the information is included in this master plan that may specifically address land use development at HMSC.

South Beach is generally characterized by very flat land with low hills with steep slopes. Low areas had poor drainage, and wetlands have formed on much of the land. The area around HMSC was built up from dredged material excavated from Yaquina Bay. The area also has a relatively high water table that during some parts of the year may be at or above the surface which can lead to excavation problems. Future development will need to consider these constraints.

### **Flooding**

Lincoln County Comprehensive Plan Section 1.1395 provides information about flood hazard areas. The 1982 FEMA flood insurance rate study indicates that the 100-year flood elevation for Yaquina Bay is within an A-zone category. The purpose of creating a flood hazard zone is to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas. Due to the very high water table, and HMSC within a flood zone area, strict adherence to the County's code requirements must be considered for any future development.



## **Fish and Wildlife Areas and Habitats**

There are four main fish and wildlife habitats, one of which is identified at the Marine Science Center. The area is the tidal lands between Idaho Point and HMSC and is designated as “natural” in the City’s Estuary Management Plan. This area must be protected from development. The setback area is identified in the City of Newport Zoning Ordinances and will be considered as Protected Open Space. (*See Appendix, Figure 6.*)

## **Water Areas**

The water area around HMSC is the Yaquina Bay Estuary. This body of water is regulated by the management units stated below.

## **Wetlands Summary**

Wetlands are protected areas identified in the Natural Features Inventory provided by Lincoln County. Development that occurs on a potential wetland will require a wetland delineation or determination and should be coordinated through the State of Oregon Division of State Lands.

### **6.2.3 Management Unit Districts**

The City of Newport Zoning Ordinance Section 2-2-13: Management Unit Districts states that the purpose of a Management Unit District is to provide estuary area development guidance, to identify development, conservation, and natural management units, and to describe appropriate uses, activities, and structures.

Permitted uses within these districts must be consistent with the requirements as stated in State-wide Planning Goal 16, which states, “...*certain uses and activities are permitted with standards, others are permitted conditionally and some uses are not allowed.*” A use may be permitted with standards or conditionally permitted.

Mitigation strategies include the creation, restoration or enhancement of an estuarine area to maintain the functional characteristic and processes of the estuary, such as its natural biological productivity, habitats, species diversity, unique features, and water quality.

Future development that may impact the estuary must meet the Estuarine Use Standards of Section 2-2-13.015 through 2-2-13.090 which are to be applied to developments on a case-by-case basis through the City’s Estuarine Use Review Procedure specified in Section 2-2-13.013.

## **HMSC Management Units**

The management units directly adjacent to HMSC are units 7, 8 and 9a. The following information includes the code requirements that impact HMSC and must be reviewed prior to any development project:

### **Newport Zoning Ordinance 2-2-13.107 Management Unit No. 7:**

7.1 Management Unit 7 shall be managed to provide for water-dependent development compatible with existing uses and consistent with the purpose of the area.

7.2 Development of deep and medium draft port facilities shall be permitted use only outside of the existing South Beach Marina boat basis.

7.3 Adverse impacts of future development on eelgrass beds, shell fish beds, and fish spawning and nursery areas shall be minimized, consistent with allowed development.

### **Newport Zoning Ordinance 2-2-13.108 Management Unit No. 8:**

8.1 Management Unit 8 shall be managed to conserve natural resources such as eelgrass and shellfish beds.

8.2 Navigational improvements found to be necessary for the maintenance of the deep water channel shall be provided.

### **Newport Zoning Ordinance 2-2-13.108 Management Unit No. 9-A:**

9-A.1 Management Unit 9-A shall be managed to preserve and protect natural resources and values. In order to maintain resource values, alterations in this unit should be kept to a minimum. Minor alterations that result in temporary disturbances such as limited dredging for submerged crossing should be consistent with resource values in this area; other more permanent alterations should be reviewed individually for consistency with the resource capabilities of the area.

9-A.2 Active restoration activities are limited to fish and wildlife habitat and water quality and estuarine enhancement.

9-A.3 Goal 16 exceptions have been taken for the waste seawater outfall for the Oregon Coast Aquarium and for increased storm water runoff through an existing drainage system.

9-A.4 The Idaho Point Marina and the channel that serves it may be maintained as allowed under the existing Army Corps of Engineers permit.

(Permitted use criteria for each of these management units can be found in more detail in the Newport Zoning Ordinances on pages 51 to 53.)

## Development Standards which apply to HMSC Management Units

### a. Structures

Structures are identified as all constructed manmade facilities that extend into the estuary, whether fixed or floating. The following list of structures is generally found at HMSC:

Breakwater: Breakwaters may be constructed of rock, concrete, or piling, or may be floating structures.

Docks: A fixed or floating decked structure against which a boat may be berthed temporarily or indefinitely.

Minor Navigational Improvements: Alteration necessary to provide water access to existing or permitted uses in conservation management units.

Pier: A structure extending into the water from solid land.

Piling: A long, slender stake or structural element of steel, concrete, or timber which is driven, jetted, or otherwise embedded into the bed of the estuary for purposes of load support.

Wharf: A structure built alongside a waterway for the purpose of receipt of vessels.

### a. Shoreline Stabilization

Shoreline stabilization is the stabilization or protection from estuary bank erosion by vegetative or structural (riprap or bulkhead) means.

- Stabilization of the estuary trail located at the south side of HMSC must be monitored and improved according to the City of Newport Zoning Ordinance 2-2-13.030.

### b. Fill

The area around HMSC was built up from dredged material excavated from Yaquina Bay. Fill requirements as identified in the City of Newport Zoning Ordinance are identified below:

- Fill is permitted if required for navigation, a water-dependent use, or for a public improvement project for which there is a demonstrated need, and no practical alternative exists.
- All fill projects shall be designed and placed to minimize adverse impacts on aquatic life and habitats, flushing and circulation characteristics, erosion and accretion patterns, navigation and recreation.

- The fill process requires new fills placed in the estuary to be protected by approved methods of bank stabilization to prevent erosion.

**a. Marina and Port Facilities**

HMSC includes a dock that serves moorage for the College of Oceanic and Atmospheric Sciences' two ocean-going research vessels. The dock includes equipment storage and an expansion area to house another large ship for future consideration. The following information is based on Zoning Ordinance 2-2-13.040:

- All structures, fills dredging, or shoreline stabilization measures undertaken in conjunction with marina or port facility development must comply with applicable standards (Sections 2-2-13-035; 2-2-13-025; and 2-2-13-030.)
- Open moorage shall be preferred over covered or enclosed moorage except for repair or construction facilities.
- Multi-purpose and cooperative use of moorage parking, cargo handling, and storage facilities shall be encouraged
- Maximum feasible public access shall be encouraged, consistent with security and safety requirements for new port or marina facilities.
- Future Development should include

**b. Aquaculture**

Zoning Ordinance Section 2-2-13-045 defines aquaculture as the raising feeding planting, and harvesting of fish, shellfish, or marine plants including facilities necessary to engage in the use.

- All structures located or future development that may impact aquaculture operations shall be subject to City of Newport Zoning Ordinance Section 2-2-13.045.

### **6.3 Permitted Uses**

An approved planned development permit may only include those uses permitted in the underlying district as well as accessory uses of a minor nature necessary for the development and are allowed in all districts. HMSC permitted use falls under 6.2.1 Permitted Use item nine (9): *Marine Research and Education Facilities of Observation, Sampling, Recording or Experimentation on or near the water.*

### **6.4 HMSC Development Allocation**

- (1) Development allocation represents the gross square feet for new development, regardless of type of use.
- (2) Each new development will reduce the available land for development

- (3) Existing development as of August 31, 2006 has been included in the development calculations and will not reduce the overall future development allocation.
- (4) Demolition of existing square feet and/or restoration of non-open space areas converted to open space areas will count as equivalent credit of square feet to the overall development allocation, or open space allocation.
- (5) Parking will be included in the overall allocation for future development in order to meet parking demands created by in-fill projects over existing parking spaces within the HMSC site.

**Table 6.4a: Development Allocation by Gross Square Feet**

EXISTING/ APPROVED	MAXIMUM FUTURE DEVELOPMENT	TOTAL
659,183	1,035,171	1,694,355

#### 6.4.6 Minimum Open Space

- (1) Open space is defined as landscaped areas, pedestrian amenities (e.g. sidewalks, trails, courtyards, and plazas), parks fields, and other non-developed areas.
- (2) The City of Newport does not include impervious surface areas (e.g. parking lots) as development. However, due to the constraints of buildable land, parking lots square feet will be included in future development square feet to accommodate additional parking.
- (3) The estuary and trail, including Zoning Ordinance setback requirements, will be considered Protected Open Space and not be included in any future development. In addition, identified significant wetlands shall not be considered in any future development.

**Table 6.4b: Development Allocation by Gross Square Feet**

City of Newport Zoning Ordinance Build out Standard	HMSC Future Development Allocation	Minimum Future Open Space
1,762,067	1,102,884	310,953

## 6.5 HMSC Criteria for Planned Development

The following criteria describe the process for planned development at the Hatfield Marine Science Center to meet the City of Newport's applicable land development code requirements.

#### **6.5.1 Maximum Building Height Criteria**

- (1) Building height is defined as the vertical distance from the “grade” to the highest point of the roof. Section 2-1-3 in the City of Newport Zoning Ordinance identifies the maximum building height for new development at HMSC as 35 feet.

#### **6.5.2 Roof Mounted Equipment Criteria**

- (1) Roof mounted equipment should not be visible from the entrance of a building that abuts the main development area.
- (2) Equipment should be screened by an architectural feature or constructed inside the building either in an attic or a mechanical room.

#### **6.5.3 Building Setback Criteria**

- (1) Building setback requirements for W-2/Water Related zones is 0 feet; however the estuary is an exception. Setback requirements for the estuary is 50 feet from the Mean Higher High Water Mark as identified in Management Unit 9-A.
- (2) Estuary setback requirements are 50 feet at the mean higher high water mark as identified in the Lincoln County Boundary Map. Estuary boundary areas are identified on maps in the Appendix (see Figure 6). The estuary will also be classified as protected open space and will be removed as buildable land for the future development.

#### **6.5.4 Building Entrance Criteria**

- (1) Building entrances designed for human occupancy with the façade facing a public or private street shall have a main building entrance facing the street.
- (2) Building entrances shall include pedestrian amenities such as a covered entryway, courtyard or plaza as a component of the main building entrance.
- (3) Building entrances shall meet the *International Building Code* requirement for accessible entrances and also be functionally designed, especially for teaching and public buildings.

#### **6.5.5 Ground Floor Window Criteria**

- (1) Ground floor windows should be included as a part of future development projects where the building faces a public or private street. Future development may include in-filling, design elements such as ground floor

windows will provide a “front door” design element and be less confusing to site occupants and visitors when seeking access to any building.

- (2) Renovations for existing facilities should include redesigning elements to incorporate more ground floor windows.
- (3) Ground floor is defined as the finished floor elevation of the first floor that qualifies as a building as defined in the *International Building Code*.

#### **6.5.6 Landscaping Criteria**

- (1) Landscaping shall be provided for all future development projects, including office/laboratory, storage and service buildings.
- (2) Landscaping shall be provided for all major improvements other than buildings including parking lots, seawater storage facilities and mechanical/electrical sheds.
- (3) Landscaping shall be designed as a pedestrian amenity as well as a screening element to buffer areas of intense equipment, and create a visual break from large areas of asphalt.
- (4) A vegetative buffer should be created along both sides of OSU Marine Drive to reduce the sight disturbance of the large parking lot adjacent to the Port of Newport.
- (5) Landscaping materials around the estuary should include indigenous vegetation to minimize erosion and create a connection to the natural environment for the enjoyment of site occupants and visitors.

#### **6.5.7 Drainage Management Criteria**

- (1) Fill, drainage, and channelization should be minimized in wetland areas.

#### **6.5.8 Flood Hazard Criteria**

- (1) HMSC is located within Flood Zones B and C and is not subject to periodic flooding. However, future development should comply with all code regulations for flood hazard zones identified in the City of Newport Zoning Ordinance Section 2-4-6.

#### **6.5.9 Geologic Hazard Criteria**

- (1) Future development should comply with all code regulations for Geologic Hazard Zones as identified in the City of Newport Zoning Ordinance Section 2-4-7.

### 6.5.10 Parking, Loading and Access Criteria

Off-street parking is required as identified in Section 2-3-6.015. Parking will be provided and located adjacent to future development. Parking lot sizes should adhere to Section 2-3-6.045 of the City of Newport's Zoning Ordinances. The following parking criteria apply:

- (1) Future development for a Government office building must provide 1 space/600 gross square feet of the proposed building.
- (2) Disabled (ADA) parking requirements must meet the following criteria and should be included in the proposed development project:

Required Parking Spaces	ADA Spaces
1 – 25	1
26 – 50	2
51 – 75	3
75 – 100	4
101 – 150	5
151 – 200	6
201 – 300	7
301 – 400	8
401 – 500	9
501 – 999	2% of total spaces
Over 1,000	20 spaces + 1 for every 100 spaces or a fraction thereof over 1,000

In addition, disabled parking spaces shall be located on the shortest practical accessible route to an accessible building entrance. Construction of disabled parking spaces must meet the criteria defined in the *International Building Code*.

- (3) For parking spaces of four vehicles or more, 40% of the spaces may be compact spaces.
- (4) Bicycle parking shall be provided as a part of any future development project. The following minimum requirement of bicycle parking is defined below:

Required Bicycle Parking Spaces	Disabled Spaces
1 – 4	0
5 – 25	1
26 – 50	2
51 – 100	3
Over 100	+1/50 spaces



- (a) Spaces should be two and one-half feet by six feet wide, with an access aisle at least five feet wide. Bicycle parking must be clearly marked and reserved for bicycle parking only.
- (5) All parking lots which have more than five parking spaces shall be graded and surfaced with asphalt or concrete.
- (6) A parking lot may contain required spaces for several different uses. (i.e. service vehicle parking, vehicular parking, truck parking.)
- (7) Loading and unloading areas must accommodate the following criteria which are identified by the GSF of future development:
- (8) **Building Gross Square Feet Required Loading Spaces**

0 – 19,999	0
20,000 – 79,999	1
80,000 – 119,999	2
Over 120,000	3

- (a) Loading and unloading areas shall be located and designed so vehicles intending to use the facility can maneuver safely and conveniently and not impact public vehicular circulation areas or adjacent parking lots.
- (b) Loading and unloading areas are not included in the overall allocation for parking requirements for future development.
- (c) If a loading area is adjacent to a building or a major arterial, screening shall be provided.
- (9) Parking lot access shall be from a major or minor arterial or alley. Access must be approved by the City of Newport Engineer.

#### **6.5.11 Transportation Criteria**

Transportation to the Hatfield Marine Science Center is via the principal arterial, US Hwy 101. OSU Drive provides access to the center and is considered a minor arterial. The City of Newport does not provide a transit system, and Lincoln County's comprehensive plan states that the primary mode of transportation within the county border is vehicular.

The South Beach area where HMSC is located, however, provides bicycle lanes along Hwy 101. The lanes are inconsistently applied when entering the location on OSU Drive. With the addition of the Oregon Coast Aquarium and its adjacency to HMSC, and the approval of the Master Plan, the criteria stated below creates opportunities to improve HMSC's transportation needs:

- (1) All transportation improvements will be constructed in accordance with the City of Newport Zoning Ordinance.
- (2) Consider improvements to sidewalks, multi-use paths, estuary trail, on-street bicycle lanes, intersections, turn lanes and road striping as part of the physical development of the site.
- (3) Consider a project surcharge to support transportation improvements.
- (4) Develop an OSU Drive Improvement Plan to development the street as a main portal to the HMSC site. The improvement plan could be facility by a consultant or also be considered for development as a project for programs at Oregon Sate University or a partnering university or college.
- (5) Work with adjacent businesses and neighborhoods to develop a main entrance at the Yaquina Bay Bridge.
- (6) Continue to maintain existing transportation systems of streets, paths, parking lots, and sidewalks for safety and good operating conditions.
- (7) Continue to review potential funding sources for transportation improvements and maintenance projects.
- (8) Coordinate transportation planning and improvements with local governments and area transit provider that services HMSC.
- (9) Consider conducting a transportation study to create baseline trip generation data for use with the City of Newport's base transportation model.
- (10) Traffic calming devices should be considered for OSU Drive pavement improvements from Ferry Slip Road to the entrance that directs traffic to the parking lot at the Visitor's Center. (Devices may include speed humps, pavement treatments, planting beds, etc.)

#### **6.5.12 Estuary Protection Criteria**

- (1) Development of an Estuary Trail Improvement Plan for erosion mitigation and improvements. These may include (but not be limited to) additional way finding signage, observation areas, and ADA improvements.

#### **6.5.13 Density Limitations**

- (1) Lot coverage for W-2/"Water Related" zones is 85 to 90 percent.

#### **6.5.14 Water Systems**

- (1) As identified in the South Beach Economic Development Plan. Refer to page 75 of the Employment Lands and Conceptual Land Use Planning Project, revised March 2006.

## 7.0 COMMUNITY PLANNING CONSIDERATIONS

### Overview

The Hatfield Marine Science Center recognizes the importance of communication and coordination with neighboring landowners, businesses, and residents of the South Beach peninsula on land use planning and development decisions that could potentially impact and shape the character of the surrounding community. The HMSC supports an atmosphere of cooperative engagement, built on mutual trust and respect for the viewpoints of all parties.

As part of the HMSC Master Plan development process, input was solicited from local stakeholders including the City and Port of Newport, Oregon Coast Aquarium, Rogue Ales and others on issues or potential concerns that should be taken into consideration when planning for future development. Common themes emerging from these conversations centered around traffic, pedestrian and bicycle circulation, tourist and recreational amenities, the shoreline, and the desire for a more cohesive community identity for South Beach.

Some of the issues raised offer relevant considerations for future site-specific development at HMSC, while others will require joint planning efforts of multiple South Beach community stakeholders to achieve commonly shared goals.

### 7.1 Traffic and Non-vehicular Circulation

Transportation infrastructure improvements to support projected growth and development plans for South Beach will need to be part of the City of Newport's Transportation System Plan. The plan, which is reviewed and updated periodically, also includes a comprehensive pedestrian and bicycle facility plan for the entire Newport urban growth boundary.

OSU Drive deserves special attention as the principal arterial connection from the South end of the Yaquina Bay Bridge and Hwy 101 to the HMSC campus and South Beach Marina and RV Park. Suggested improvements for improving the flow of vehicular traffic include:

- Upgrade OSU Drive to a parkway with adequate transportation improvement such as turn lanes and curb placement.
- Revise the intersection at Ferry Slip Road.
- Improve ingress/egress to the bridge including improvements to the east side ramp and the OSU Drive intersection.
- Promote the summer shuttle.
- Consider a seasonal water taxi.
- Ensure that tsunami evacuation routes provide adequate signage and are effective.

Consideration should also be given to pedestrian and bicycle access to and around the South Beach peninsula. Among the suggested improvements are:

- Extend the Estuary Trail to 35<sup>th</sup> Street and upland to Mike Miller Park.
- Add sidewalks and/or multi-use paths to OSU Drive.
- Separate mixed use pathway from OSU Drive through to 40<sup>th</sup> Street
- Ensure there is adequate bicycle parking where needed. (For required bicycle parking requirements, refer to Zoning Ordinance, Section 2-3-6-015.)

- Create trail map.

## 7.2 Amenities to Enhance Way-finding and Sense of Place

Amenities such as better linkages and integrated way-finding signage will enhance visitors' and/or residents' experience of South Beach. Additional amenities may include:

- Signage and way-finding
  - Improve existing signage using blue/green signs as benchmark design.
  - Review and add to HWY 101 ODOT signage if needed.
  - Build information gateways to South Beach.
  - Incorporate unifying imagery for way-finding such as the bridge tower (as seen at Oregon Coast Aquarium entrance) or the Rogue red silo.
- Amenities
  - Create a park with playground and basketball courts as community focal point.
  - Improve the north terminus of OSU Drive for beach access and carry-in boat launch.
  - Promote use of picnic areas on Port property.
  - Integrate more historic information in key visitor points.
  - Create 'beauty marks' on vacant pieces of land.
  - Develop consistent landscaping design on thoroughfares.
  - Work with State Parks to expand South Beach State Park into the fore dune by Coho Street.
  - Keep outdoor lighting so it is effective but doesn't increase light pollution.

## 7.3 Planned Developments

Planned developments that target specific sites for improvement should be considered in the context of larger economic development goals and the community's vision for South Beach. Mixed use development of vacant lands currently zoned as industrial provide opportunities for attracting needed services and potential employments consistent with the City's Employment Land Use Goals for South Beach. Particular attention should be paid to potential impacts from shoreline development, as HMSC depends on the high quality of seawater and convenient access to the water.

- Upgrade storm water discharge systems and encourage all new development to install filtered systems.
- Work with the Port to improve shore side amenities for research vessels.
- Secure public access to the estuary while respecting the work flow of neighbors.

## 7.4 Moving Forward

Issues that affect multiple property owners or the South Beach Community as a whole -- such as infrastructure investments to address transportation, tsunami safety, stormwater drainage or community recreation needs, etc. -- would be best served by a community association. Such a body could develop plans for commonly shared community goals and shepherd proposals through the appropriate process (e.g. Urban Renewal Development Commission).

**Appendix: List of Maps**

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Figure 2	HMSC Buildings	A-2
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Figure 4	HMSC Parking Facilities	A-4
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Figure 1

## HMSC Aerial View



OSU Campus Planning \\Cn-share\g3\FA\FS\ACAD\GIS\GIS\_DEV\Planning\Projects\HMSC\HMSC\_Aerial\_wBoundary.mxd Friday, July 6, 2007 10:16 AM By: monaskyr



Figure 2





Figure 3

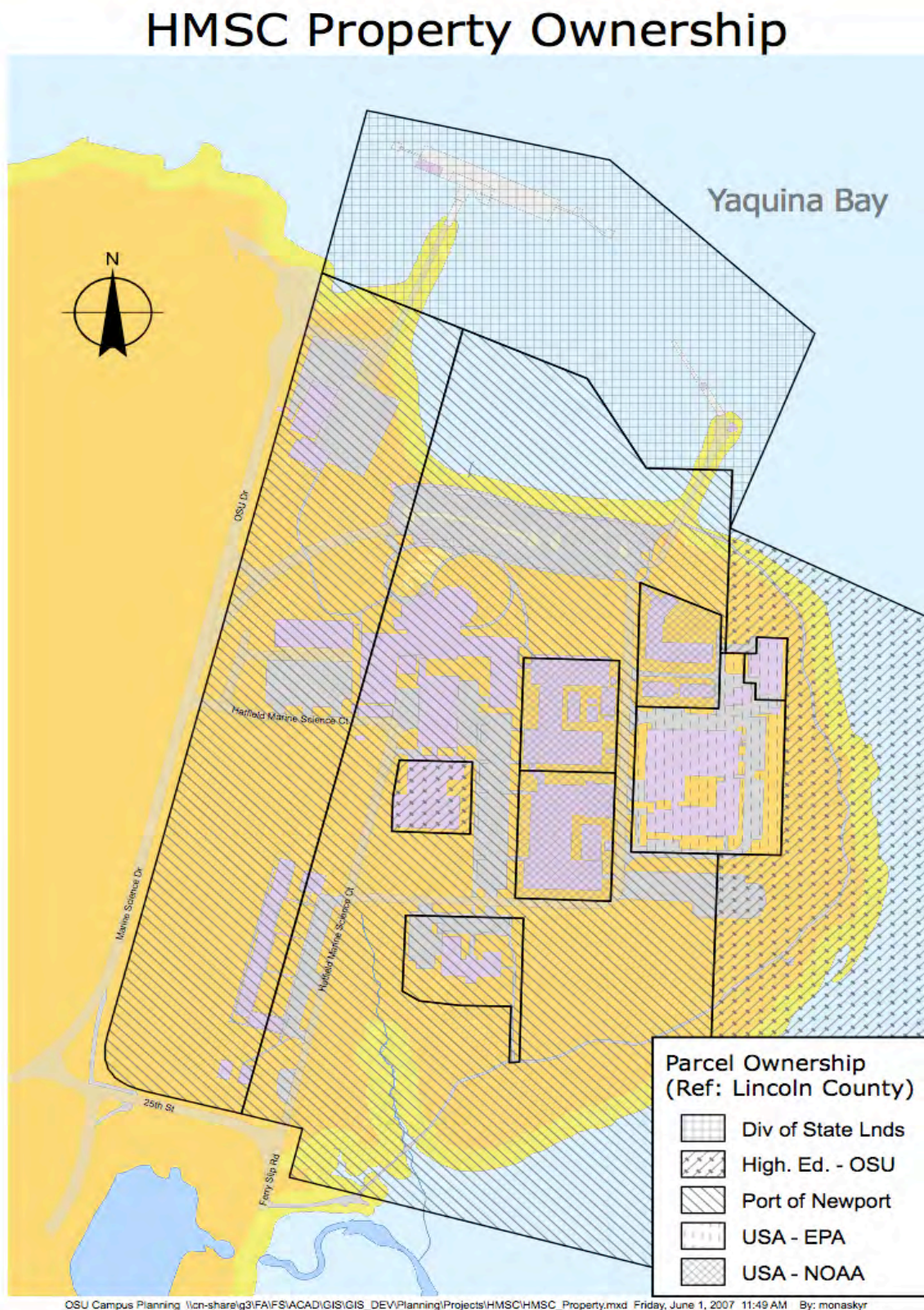


Figure 4

## HMSC Parking Facilities

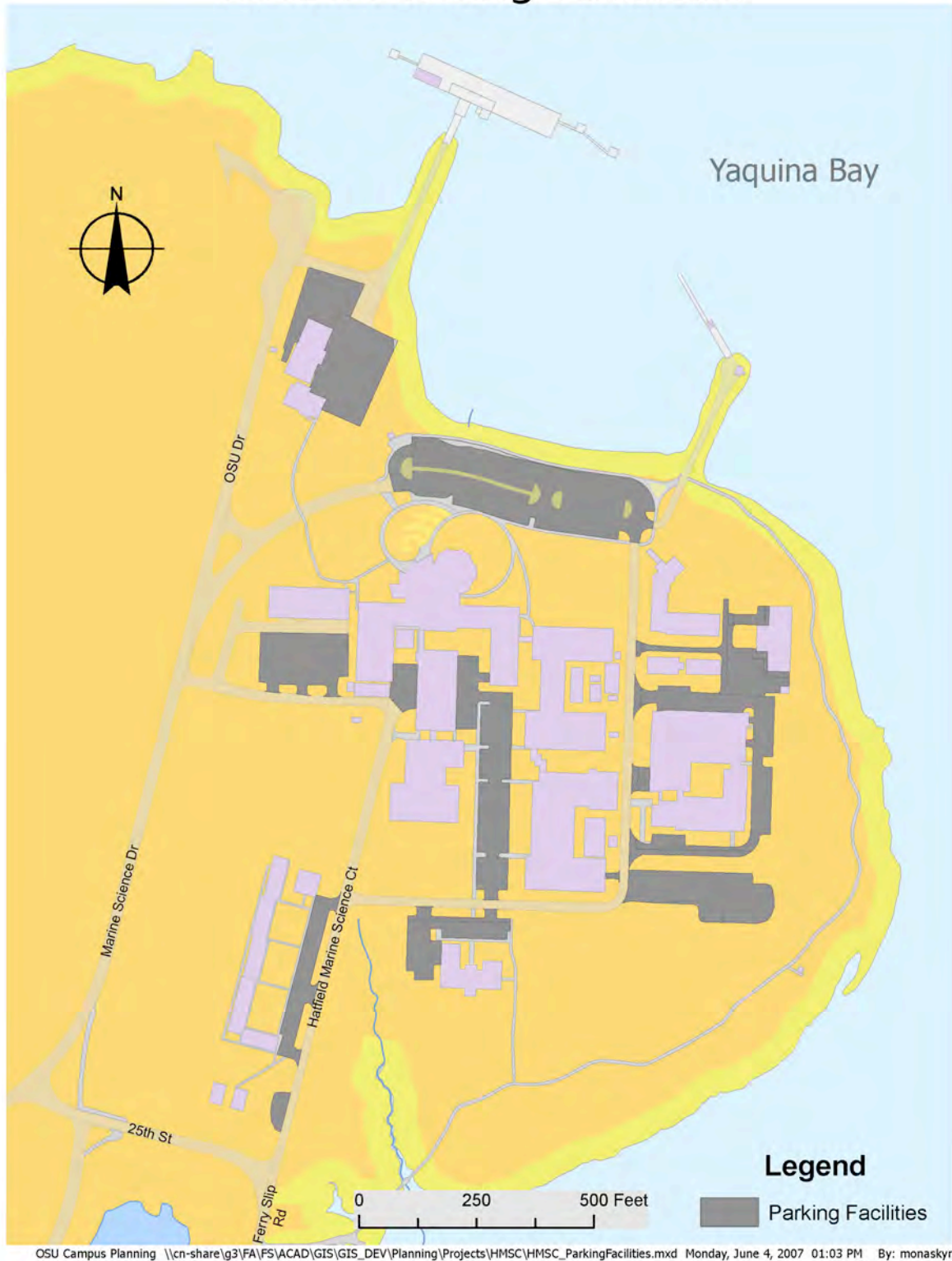




Figure 5

## HMSC Transportation & Pedestrian Corridors

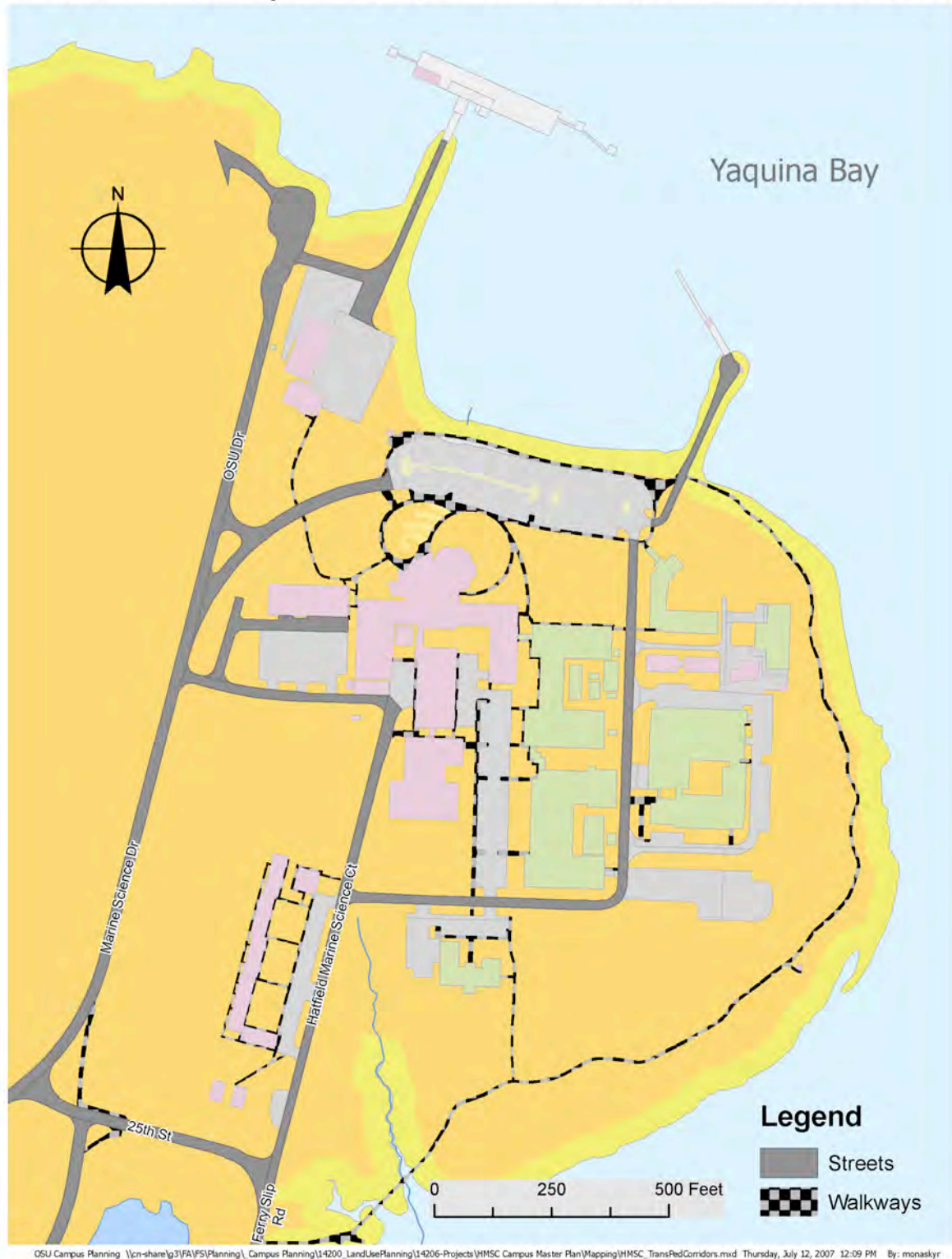


Figure 6

## HMSC Potential Development & Open Space



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