Washington State Department of Social and Health Services

WESTERN STATE HOSPITAL

Master Plan 2020

07 MAY 2021

Table of Contents

APPENDICES

List of Tables

List of Figures

EXECUTIVE SUMMARY

PROJECT NEED

The primary intent of this master plan is to accommodate a set of facility improvements to the existing Western State Hospital (WSH) campus in Lakewood, Washington. Many of the existing facilities are aging and no longer comply with federal standards for the care of mental health patients.

The approach to behavioral health care has also evolved, meaning that many of the WSH facilities are no longer well-suited to the provision of core services. Significantly, the State has adopted a new approach to behavioral health care, recognizing that the needs of "forensic commitment" patients (those accused of a crime) are different than those of "civil commitment" patients (those determined by the courts to be a potential danger to themselves or the public, but not accused of a crime).

A core goal of the new state policy is to distribute services for civil commitment patients throughout the state, so that patients can be near family and community support. The model for this care is a combination of community hospitals and residential treatment facilities of 16 to 48 beds each.

As new civil commitment facilities become available in western Washington, civil patient capacity at WSH will be reduced. Under this model, Western State Hospital itself will concentrate on treatment of forensic-commitment patients.

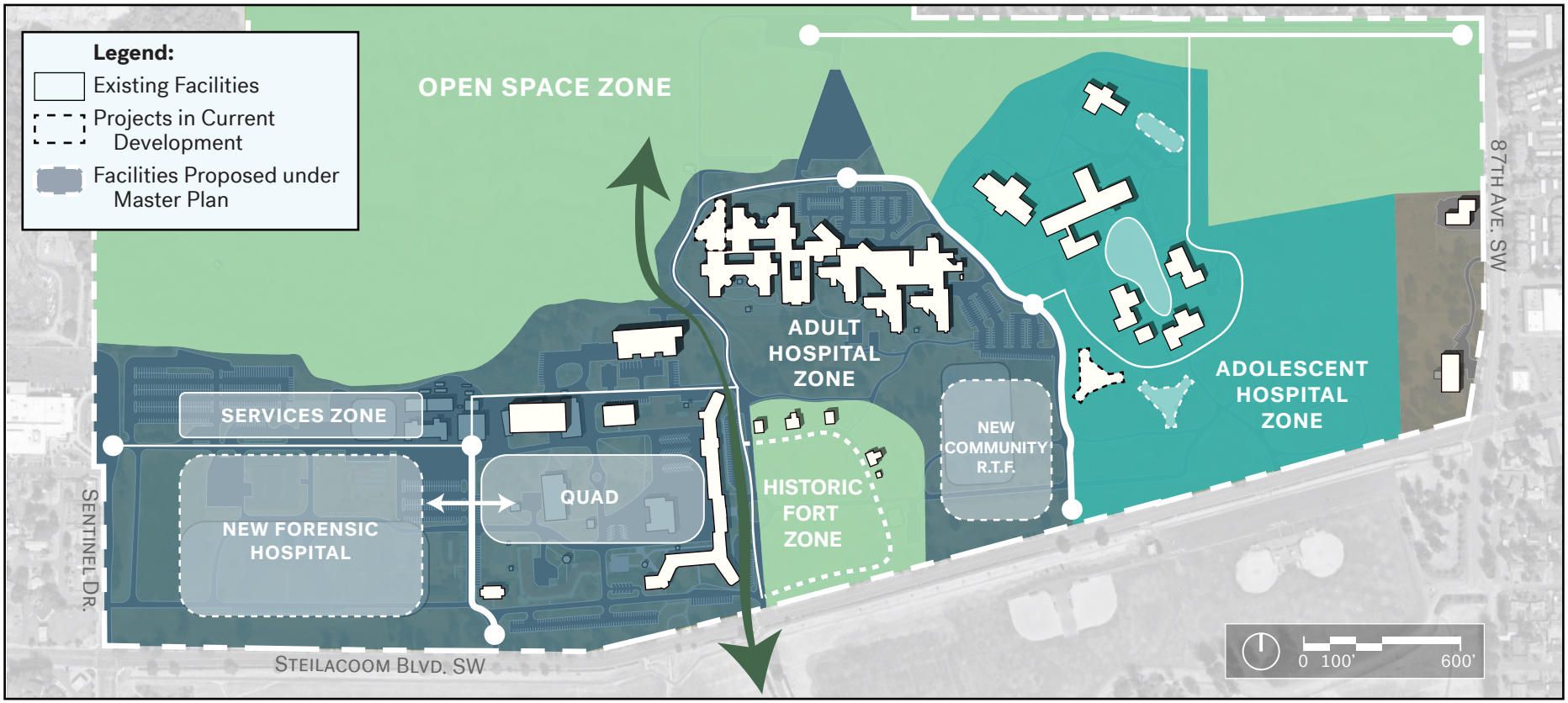


Figure 1: Campus Framework, Developed Areas

PROJECT DESCRIPTION

To address the needs described above, the master plan for WSH calls for a new 350-bed forensic hospital. This will include demolition of several existing buildings that are out-moded. At the CSTC, a second 18-bed residential cottage will be developed, as well as a treatment and recreation center.

The WSH master plan also allocates space for a new community residential treatment facility (RTF) of 48 beds, as one possible site within the western Washington region identified for such a facility. The siting of this residential facility on the WSH campus is not a certainty.

Taken together, the changes in WSH and CSTC facilities will support the patient projections shown in "Table 1: Existing & Projected Bed Counts". The development of specific projects and their effect on overall capacity at the WSH Site is shown in "Table 2: Site Capacity, New Construction & Demolitions".

While these two tables show similar and related information, the difference between them is:

- Table 1 indicates the actual patient population that is projected.
- Table 2 shows how many beds would be in the Hospital's inventory at any point in time - recognizing that there will be times that new facilities are on-board but previously existing bed spaces are not yet demolished.

Through a combination of demolitions and renovations, DSHS will manage capacity on the Western State Hospital campus, to ensure that bed capacity remains under key thresholds identified in this planning process. The planned projects, renovations and demolitions are further described in the section ""Facilities Development" on page 27.

Table 1: Existing & Projected Bed Counts*

Date Range	2019-21	2021-23	2023-25	2025-27	2027-29	2029-31
M.P. Year:	Base	1-2	3-4	5-6	7-8	9-10
Bed Type						
Center for Forensic Services (CFS) - Buildings 21, 27, 28, 29	387†	445	415	180	180	180
Civil Commitment - Buildings 17, 19, 20, 21, 27 & 29	470	415	385	155	155	203
Child Study & Treatment Center (CSTC) Adolescent Services	65‡	65	83	83	83	83
New Forensic Hospital	n/a	n/a	n/a	350	350	350
New Community Residential Treatment Facility	n/a	n/a	n/a	n/a	n/a	48§
Total:	922	925	883	768	768	816

* See "Western State Hospital Goals" on page 20 for further description of goals and needs.

† Includes 58 new beds in Building 28, approved prior to the master plan.

‡ An 18-bed residential cottage for the CSTC facility has been developed concurrently with the preparation of this master plan.

§ The residential treatment facility may be sited at WSH, or may be located at another site in the western Washington region.

Table 2: Site Capacity, New Construction & Demolitions

Date Range	2019-21	2021-23	2023-25	2025-27	2027-29	2029-31
Master Plan Year:	Base	1-2	3-4	5-6	7-8	9-10
Additions:						
New Forensic Hospital	-		-	+ 350	-	-
New Community RTF	-	-	-	-	-	+ 48
CSTC Cottages	+18*	-	+ 18	-	-	-
Renovations:						
Building 28		+ 58†		-118‡		
Building 29		-55§				
Buildings 17, 19, 20 & 21¶		-30	-60			
Demolitions:						
Buildings 44, 45, 46, 48, 49	-	- 0	-	-	-	-
Buildings 10, 11, 12, 15, 24, 25, 26, 27, 30, 31	-	-	- 60	-	-	-
Buildings 1, 9, 21, 32, 33, 35	-	-	-	-167	-	-
Total Site Bed Capacity:	922	895	793	858	858	906

* An 18-bed residential cottage for the CSTC is in development, approved separately from this master plan.

† The addition to Building 28 was approved separately from the master plan update.

‡ Treatment wards to be repurposed as admin or program support space.

§ Treatment wards to be repurposed as a Treatment & Recovery Center

¶ As part of the overall effort to reduce civil commitment patients on the campus, a combination of demolitions and renovations of residential capacity achieve the reduction shown here. See “Renovations” on page 29 for more information.

DEVELOPMENT PATTERN AND PRINCIPLES

The overall development pattern of the master plan is shown in Figure 1. The plan is defined by several key physical planning principles and goals:

1 Transform The Model Of Care
- Develop a new forensic hospital, supporting contemporary treatment approaches
- Shift civil commitment patients to modern treatment facilities distributed throughout the region

2 Improve Campus Efficiencies
- Move Toward a More Zoned Campus based on Program Areas
- Modernize Campus Infrastructure
- Improve Site Access and Way-finding

The plan recognizes City of Lakewood zoning of the northwestern portion of the campus as Open-Space/Recreation, and supports the conservation and visitation of the Historic Fort Steilacoom in the south-center portion of the site.

INFRASTRUCTURE & SUPPORTING SYSTEMS

In support of the primary program-based investments, infrastructure and circulation improvements are planned, including:

- Improved internal circulation for cars and other modes of travel
- Potential shifts in the vehicular access points to the campus to reduce congestion and direct site access to entries along Steilacoom Boulevard
- Parking to be updated, expanded, and re-allocated to meet demand and reduce past informal parking practices on open space areas
- Upgrades to the sewer system and rainwater management infrastructure
- Improved gas and electricity service, as well as investments aligned with the State's zero net energy policy
- Improved public access to extant facilities associated with Historic Fort Steilacoom
- Continued access to open space and recreational lands on the northern area of the site
- Protection of natural resources on and bordering the site
- Evaluation of the potential for conversion of water service from the existing on-site system to the Lakewood Water District system

APPROVALS PROCESS

This campus master plan has been prepared for submission to the City of Lakewood for approval, consistent with the state Growth Management Act and policies stemming from that Act at the local, county, and regional level. Primary requirements of these policies are addressed in the section "Planning Regulatory Context" on page 5.

Western State Hospital, the Child Study and Treatment Center, and the new Residential Treatment Facility are recognized as "Essential Public Facilities" under these policies. As a state facility, the requirements of the State Environmental Protection Act (SEPA) apply to these state facilities.

Figure 2: Governor Inslee at Western State Hospital

The governor announced the State's new approach to behavioral health care at the Hospital in May 2018

PLANNING CONTEXT

Introduction

In May of 2018, Governor Jay Inslee came to Western State Hospital (WSH) to make a significant policy statement, launching a major shift in how the State of Washington will manage behavioral health going forward.

This policy shift recognizes that the needs for patients committed on a 'civil' basis are different than the needs of patients with a 'forensic' commitment. The Department of Social and Health Services (DSHS) - with other state agencies and community partners - is charged with developing new facilities to be distributed throughout the state to serve the civil commitment patients.

Under the new policy, WSH itself is to be modernized with new facilities. This master plan identifies facilities investments needed to modernize the WSH campus recognizing that many of the legacy facilities are poorly suited to contemporary treatment practices and the significant recent investments in the existing campus.

PURPOSES OF THE MASTER PLAN

This master plan for the WSH campus is both an internal document for DSHS to guide facility investments and a land use plan for coordination with local and regional jurisdictions.

Washington's Growth Management Act (GMA) requires county and municipal governments to engage in comprehensive planning, and requires that planning be integrated with state agencies. State agencies are specifically required to comply with local comprehensive plans*.

WSH is located in Pierce County and the City of Lakewood (see "Figure 3: Regional Vicinity" on page 2). This plan has been developed to comply with the current adopted plans of those jurisdictions. Coordination with regional plans is also addressed (see "Planning Regulatory Context" on page 5 for more detail).

* RCW 36.70A.103 This code section also clarifies that local compliance does not affect the state's authority to site essential public facilities.

DSHS Mission, Vision, & Values

Mission

As a Department we are tied together by a single mission: to transform lives. Each administration within DSHS has a refined focus on this mission. Individually we have the following missions:

- Aging and Long-term Support Administration – to transform lives by promoting choice, independence and safety through innovative services.
- Behavioral Health Administration – to transform lives by supporting sustainable recovery, independence and wellness.
- Developmental Disabilities Administration – to transform lives by creating partnerships that empower people.
- Economic Services Administration – to transform lives by empowering individuals and families to thrive.
- Facilities, Finance and Analytics Administration – to transform lives by promoting sound management of Department resources.
- Office of the Secretary – to transform lives by helping those who serve succeed.

Values

DSHS is also tied together by the following set of values:

- Honesty and Integrity – because leadership and service require a clear moral compass.
- Pursuit of Excellence – because it is not enough to get the job done, we must always challenge ourselves to do it better.
- Open Communication – because excellence requires teamwork and a strong team is seen, heard and feels free to contribute.
- Diversity and Inclusion – because only by including all perspectives are we at our best and only through cultural competency can we optimally serve our clients.
- Commitment to Service – because our challenges will always exceed our financial resources, our commitment to service must see us through.

Vision

- People are healthy.
- People are safe.
- People are supported.
- Taxpayer resources are guarded.

Figure 3: Regional Vicinity

Historic Preservation Initiatives

Multiple organizations are working to preserve and interpret the history of the Fort Steilacoom/WSH site.

- The **Historic Fort Steilacoom Association (HFSA)** is dedicated to preservation of elements of the fort itself. The Association operates the Fort Steilacoom Museum, focusing on the four extant cottages and associated grounds - a portion of the former parade grounds- immediately east of Circle Drive. The HFSA seeks to create a visitor center in this area to expand its interpretive efforts.
- A committee of WSH staff manages elements considered by DSHS to be of historical significance to the hospital.
- The **Grave Concerns Association** is engaged in the Western State Hospital Cemetery Restoration Project, which is located at Fort Steilacoom Park, south of Steilacoom Boulevard and east of Lake Waughop. This site is the burial site of patients associated with the hospital. By contrast, the smaller cemetery on the WSH grounds is associated with early American settlers in the area.

Registrations

The WSH grounds and surrounding area are listed on the National Register of Historic Places (NRHP) and Washington Heritage Register (WHR) as the Fort Steilacoom Historic District.

The structures listed as 'Primary" in the NRHP listing are:

- "Ft. Steilacoom Officers Row" — the four surviving 1-story cottages constructed in 1857.
- State Hospital Buildings — specifically, the morgue and bakery, dating from 1887-89.

Additional structures are listed as 'Secondary" in the NRHP listing, including several proposed for demolition/removal in this master plan.

The 2008 Cultural Landscape Assessment identified multiple facilities of the hospital as 'Contributing' to the historic character of the WSH campus, and recommends a period of significance dating up to 1961.

HOSPITAL HISTORY

Western State Hospital has grown over its history, in response to both growing demand and changes in treatment practices.

The site that houses Western State Hospital was developed for agriculture by Euro-American settlers. The U.S. government developed Fort Steilacoom beginning in 1849 (see sidebar "Site History: Timeline" on page 4). Several facilities are extant from the Fort's era and are identified as an historic resource. In 2008 a cultural landscape assessment* was prepared, followed in 2011 by a resource management plan† detailing the status of historic resources and identifying priorities for preservation.

The hospital was established in the 1870's, growing in cycles over the decades. The most prominent building - Administration Building #2 - was built in the 1930's, replacing a prior building on the same site. The Administrative Building faces the parade grounds of the former fort.

In recent years, WSH has been challenged to adapt to contemporary models of care, in part due to the out-dated facilities. The State has committed to reinvesting in behavioral health care through a combination of distributed residential treatment facilities and new hospital facilities for forensic care patients.

Physical growth has included the addition of multiple support facilities to the west of the main administration building, and later companion facilities have been developed in separate clusters to the east. These include the Child Study & Treatment Center (CSTC), as well an "East Campus" cluster at Buildings 28 & 29.

---

* Western State Hospital Cultural Landscape Assessment

† Western State Hospital Cultural Resource Management Plan, by MSGS Architects

Site History: Timeline

Pre-1840s	Steilacoom tribe active in the area
1840s	Early Euro-American settlers
1849-68	Site used as Fort Steilacoom
1871	Hospital established by Washington Territory as "Insane Asylum"
1870s	WSH patients and staff clear nearby lands for agriculture, establishing vegetable gardens and orchards and starting a farming operation that would last until 1965.
1886-87	Administration Building #1 built
1889	Washington statehood; the facility is renamed Western State Hospital
1880s-90s	Significant growth in facilities
1914-16	Rock wall and gates built on south of campus
1930s-40s	Expansion utilizing WPA & CCC, including infrastructure upgrades, i.e. wells and pipe system.
1934-35	Main wing of Administration Building #2 built, with WPA grant, replacing earlier Administration Building on the site. Additional wings added over time.
1950s-60s	Expansion to west to meet growing need for additional wards. Former Military Cemetery remains relocated to S.F. Presidio, to accommodate commissary expansion.
1965	On-site Farm closed after declining use.
1982	Building 29 constructed for geriatric patients
2000	CFS Building 28 constructed

Figure 4: *Administration Building, circa 1892*
(Source: Pacific Coast Architecture Database commons.wikimedia.org)

Figure 5: *Fort Steilacoom circa 1960*
(Source: fortwiki.com, Creative Commons)

Planning Regulatory Context

CITY OF LAKEWOOD

The Western State Hospital campus lies within the City of Lakewood. The City's Development Code includes the following provisions that are particularly relevant to this master plan:

- Comprehensive Plan (Future Land Use) Designation: Public & Semi-Public Institutional, and;

  Designation of the surrounding Oakbrook/Fort Steilacoom area as a Center of Local Importance (CoLI), which recognizes the role of civic facilities such as the hospital, Pierce College - Fort Steilacoom, and the historic Fort Steilacoom lands, among other uses.

- Zoning Designation: Public/Institutional (PI): Mental Health facilities require a Conditional Use permit under Lakewood Zoning (18A.40.060.A).

- Essential Public Facilities proposals are required to include (per 18A.40.060.B.2):
  - Documentation of Need
  - Consistency with Sponsor's Plans
  - Consistency with Other Plans
  - Minimum Site Requirements
  - Alternative Site Selection
  - Distribution of Essential Public Facilities
  - Public Participation
  - Consistency with Local Land Use Regulations
  - Compatibility with Surrounding Land Uses
  - Proposed Impact Mitigation

- Lakewood Zoning includes "Additional Siting Criteria for Mental Health Facilities" (18A.40.060.B.4). These include:
  - Provisions for infrastructure and services
  - Protection of Critical Areas
  - Provision of Usable Open Space
  - Transportation and Circulation, including sidewalks
  - Measures for the safety of the general public

  Each of these considerations are addressed in the corresponding section of this master plan document.

- EPFs on lands zoned PI and over 20 acres in aggregate are required by Lakewood Zoning to be governed by a master plan (18A.40.060.B.5).

  Policies related to a master plan for an essential public facility include:
  - Requirement to provide an Operational Characteristics Description
  - Requirement for a Compatibility Study
  - Adaptive Reuse of facilities would require an amendment to the adopted master plan
  - Provision for multi-modal transportation
  - Provision of utility infrastructure, roads and emergency services
  - Public safety and safety of visitors and staff
  - Protection of critical areas and provision of usable open space

Compatibility of Uses

Lakewood's Development Code requires that the following criteria be addressed as part of a Compatibility Study for an Essential Public Facility (18A.40.060.B.6.):

a. The purpose of the proposed essential public facility civic use
b. An operational characteristics description of the proposed essential public facility civic use and an operational characteristics description of the existing use or uses
c. An evaluation of the potential effects of the proposed essential public facility civic use upon the existing use or uses
d. An evaluation of the potential effects of the proposed essential public facility civic use upon the adjacent properties
e. An evaluation of the potential effects of the proposed essential public facility civic use upon at-risk or special needs populations, including but not limited to children and the physically or mentally disabled and
f. Identification of any applicable mitigation measures designed to address any potential effects identified through the evaluation required herein

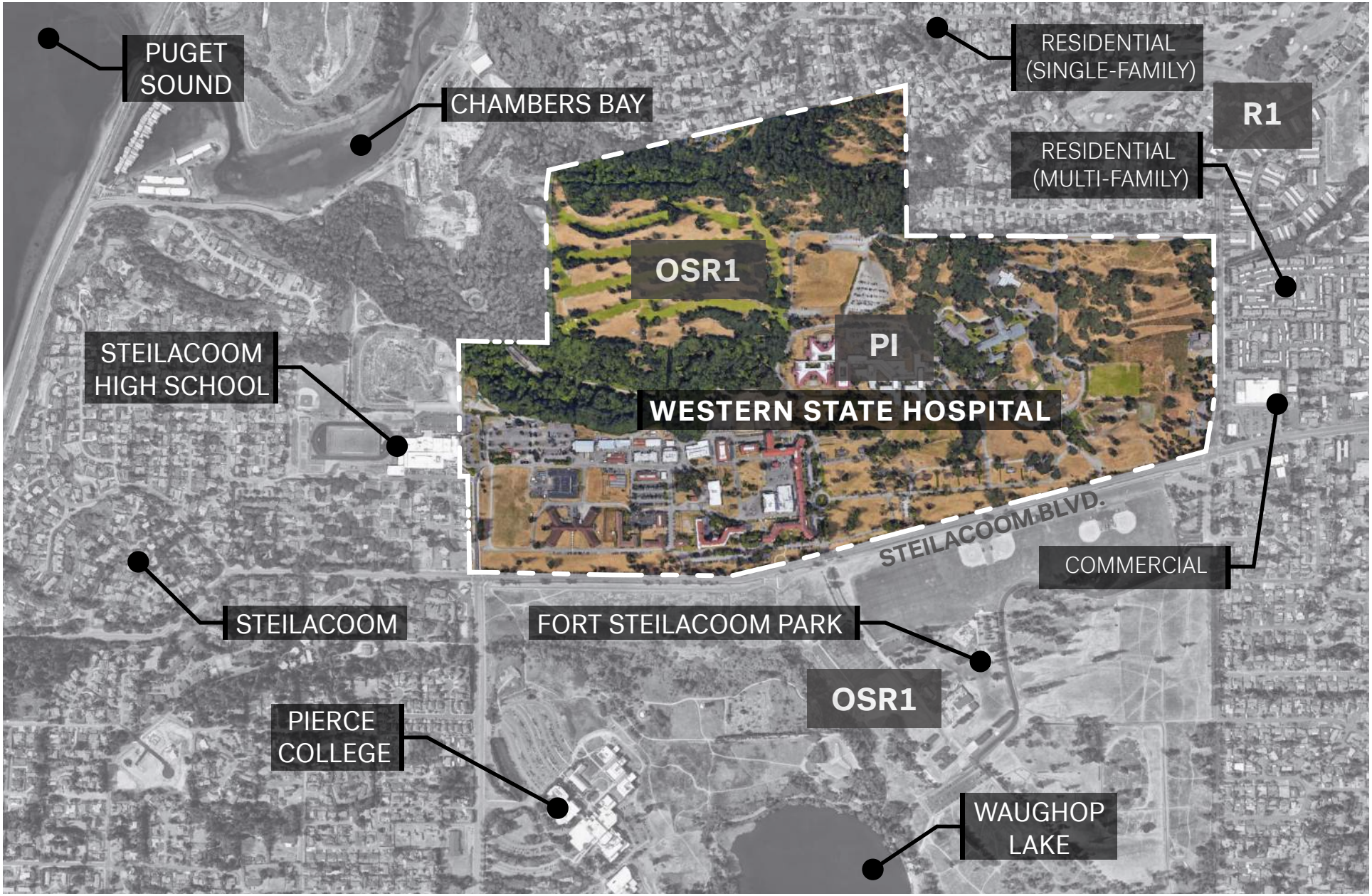


Figure 6: Site Context & Surrounding Uses

Each of these six criteria are addressed below:

a. Purpose of the Proposed use:

The master plan does not propose a change in the general use of the site, but does propose modernized facilities to improve care within the facilities. The Goals and Purpose of the developments under the plan are to modernize existing facilities, addressing deferred maintenance, and adapting to new models of care for behavioral health.

In the process, multiple facility improvements will be made, including:

- Demolition of several buildings
- Improved circulation and parking
- Improved access to historic facilities of pubic interest
- Improved security measures

These are more fully described in the sections "Goals & Project Needs" on page 20 and "Facilities Development" on page 27.

b. Operational Characteristics

These are fully described in the section "Operational Characteristics Description" on page 32.

c. Potential Effects on Existing Uses

The proposed uses are explicitly to modernize the Hospital's facilities. The new facilities will be fully integrated with those existing facilities that will remain.

d. Potential Effects on Adjacent Properties

Given the age of the hospital, the surrounding uses have changed through economic expansion and local planning over its history. Current surrounding uses are indicated in Figure 6 on page 6.

The effects from this plan and related projects should be neutral to positive on surrounding areas. Programs provided will be internal to the WSH campus.

Travel to and from the campus will be similar to current patterns, with potential improvements from potential changes in entry points (see item f, below).

e. Potential Effects on At-Risk & Special Needs Populations

The Hospital's purpose and program directly serve a segment of Washington's special needs population, specifically those with behavioral health needs. The investments being proposed are being made to improve the delivery of those services.

With regard to children, the WSH site includes the Child Study & Treatment Center (CSTC), which provides services to minors with behavioral health treatment needs.

f. Applicable Mitigation Measures

The modernization of the facilities is largely "self-mitigating", in the sense that consolidation of programs into a contemporary facility with enhanced security will further reduce any potential effects of the WSH operations on the surrounding community.

Regular staff access to the campus from the east (87th Ave.) and west (Sentinel Drive), will be reduced by access control, and changes to the access points from Steilacoom Blvd. are suggested to reduce congestion along that route.

PIERCE COUNTY

Pierce County also has regulatory jurisdiction affecting WSH planning. The primary planning policy for the County is the ***Countywide Planning Policies for Pierce County, Washington***. One key section of that policy addresses the "Siting Of Essential Public Capital Facilities of a Countywide Or Statewide Significance".

Key provisions of the Essential Public Facilities (EPF) policy dictate that:

- EPFs must have a useful life of 10 years or more and must serve the entire County, multiple counties, or the whole state (Policy EPF-1.1.)
- County and local implementing policies shall require that: *"the state provide a justifiable need for the public facility and for its location in Pierce County based upon forecasted needs and a logical service area, and the distribution of facilities in the region and state."* (Policy EPF-3.1.)
- *"A requirement that the state establish a public process by which the residents of the County and of affected and 'host' municipalities have a reasonable opportunity to participate in the site selection process."* (Policy EPF-3.2.)

KEY EVALUATION CRITERIA

As identified in Pierce County requirements (Policy EPF-4), a master plan for Essential Public Facilities should address the following. For each item, the reader is directed to the pertinent information.

- Specific facility requirements:
  - Minimum acreage

    See “Facilities Development” on page 27
  - Accessibility; transportation needs and services

    See “Access, Circulation, & Transportation” on page 35
  - Supporting public facility and public service needs and the availability thereof

    See “Utilities & Infrastructure” on page 43
  - Health and safety

    Behavioral Health is a primary function of the facility, See “Western State Hospital Goals” on page 20 for a description of care. For safety and security measures, refer to “Site Security” on page 41
  - Site design

    See “Figure 14: Campus Framework Concept” on page 23, “Figure 17: Master Plan Development” on page 26 and ““Open Space & Landscape” on page 39.
  - Zoning of site

    Public/Institutional See Figure 9 on page 12
  - Availability of alternative sites; community-wide distribution of facilities

    For a discussion of site selection criteria, see “Facility Siting” on page 21
  - Natural boundaries that determine routes and connections

    These are described in “Hospital History” on page 3 and illustrated in “Figure 9: Western State Hospital Lands” on page 12
- Impacts of the facility:
  - Land use compatibility

    The site is specifically zoned for Public/Institutional uses
  - Existing land use and development in adjacent and surrounding areas; existing zoning of surrounding areas; existing Comprehensive Plan designation for surrounding areas

    See”Figure 6: Site Context & Surrounding Uses” on page 6
  - Present and proposed population density of surrounding area

    The residential areas to the north and east of the site are single-family and low-rise multi-family estimated to range in density from 4 to 15 units per gross acre.
  - Environmental impacts and opportunities to mitigate environmental impacts

    A summary of potential impacts is included in the SEPA checklist, included with this report. See “Appendix 8: SEPA Checklist”
  - Effect on agricultural, forest or mineral lands, critical areas and historic, archaeological and cultural site

    No agricultural, forest or mineral lands are impacted by this campus redevelopment. Parts of the site are within the Fort Steilacoom Historic District, which is on the National Register of Historic Places as well as the Washington Heritage Register. See “Documentation of Listed Structures” on page 31.
  - Effect on areas outside of Pierce County

    WSH serves needs throughout the western portion of the state, and will continue to do so for forensic patient services. The State is studying a revised care model for civil commitment patients that would distribute services to multiple localities, throughout the state. That process is proceeding in parallel to this planning process.
  - Effect on designated open space corridors

    The currently designated open space is not proposed for development in this plan. The plan proposes increasing public access to connect between open space areas to the south - Fort Steilacoom Park - and the ravine to the north, which in turn connects to Chambers Bay.
  - “Spin-off” (secondary and tertiary) impacts

    The only potential “spin-off” from the modernization investments on the WSH campus would be the increased distribution of facilities serving civil commitment patients. As described in the program, one community treatment facility of 48 beds may be accommodated on the campus, while others would be developed in other communities around the state.
  - Effect on the likelihood of associated development being induced by the siting of the facility

Since staffing is not projected to grow significantly, a growth inducement impact is not expected. Staff spending in the community is anticipated to remain fairly constant, as the plan does not propose significant new amenities on campus that would shift patterns of behavior.

- Impacts of the facility siting on urban growth area designations and policies:
  - Urban nature of facility

    The hospital's services are an urban use, and there are direct benefits to patient care by being near the state's major population centers. The ability of family and friends to readily visit patients is a factor in their care and recovery.
  - Existing urban growth near facility site

    Surrounding uses include single-family and multi-family housing to the east and northeast, commercial development along Steilacoom Boulevard to the east, open space and a campus of Pierce College to the south, and Steilacoom High School to the northwest. All of these uses post-date the hospital's presence on the site and its last major period of growth.
  - Compatibility of urban growth with the facility

    The proposed uses in the area surrounding the hospital are similar to existing adjacent uses.
  - Compatibility of facility siting with respect to urban growth area boundaries

    The facility is being sited on the existing WSH campus, generally infilling over existing structures and sites of existing buildings to be demolished. There is no shift in siting relative to the urban growth area boundaries.
  - Timing and location of facilities that guide growth and development.

    The projected timing of the WSH facilities are indicated in Table 1 on page iv.

REGIONAL PLANNING

The Puget Sound Regional Council (PSRC) provides coordination across the region, focusing on growth management, economic development and transportation.

PSRC policy documents include:

- Vision 2050, draft plan (Summer 2019)

  The draft plan identifies Lakewood as one of 16 "core cities", a category of major cities second only to the largest "metropolitan cities" in their influence on the economy
- Vision 2040 - the fully adopted regional growth strategy, preceding the current Vision 2050 process
- Regional Transportation Plan (adopted 2018), prioritizing transportation investments

PSRC's draft Vision 2050 plan extends policies from the Vision 2040 plan calling for growth to be concentrated in established urban areas, protection of existing open space and sprawl reduction.

STATE OF WASHINGTON

Land Use in Washington is governed primarily by the Growth Management Act (GMA). This law establishes the requirements for planning by cities and counties, and requires that agencies of the state comply with local comprehensive plans and development regulations.(RCW 36.70A.103).

State law also addresses the siting of Essential Public Facilities, requiring that "each county and city ... shall include a process for identifying and siting essential public facilities" (RCW 36.70A.200).

Additional requirements derive from the State Environmental Protection Act (SEPA), specifically to assess the potential impacts of planned development on natural systems and related infrastructure. A SEPA checklist is included in "Appendix 8: SEPA Checklist".

Executive Order 21-02 - replacing E.O. 05-05 and effective April, 2021 - requires that "Agencies shall consult with DAHP and affected tribes on the potential effects of projects on cultural resources proposed in state-funded construction or acquisition projects..."

COORDINATION WITH OTHER JURISDICTIONS & AGENCIES

Entities that will be affected by this plan were contacted as the plan took shape, to hear their issues of interest or concern, and these meetings will continue through the master plan review process. These meetings are summarized in "Appendix 1: Stakeholder Meetings" and updates to this appendix will be provided as additional meetings are held.

Figure 7: Western State Hospital, aerial view

SITE OVERVIEW

The full WSH campus site is about 288 acres in size. Table 3 on page 12 details the site area by parcel number and City zoning designation. As a legacy of the site's gradual evolution, the WSH campus includes many facilities from different eras and functions.

The total building area serving DSHS programs is 1,435,000 gross square feet (GSF). Table 4, along with Figure 11 and Figure 12 list the existing facilities on the campus, including their current function and year built. This master plan addresses replacement and/or renovation of those facilities that have significant deferred maintenance, and especially those that are poorly suited to providing restorative care to patients.

OPEN SPACE AREAS

The northwestern area of the site includes open spaces of varying types. The former golf course is zoned for open space uses and the ravine to its south is an area of sensitive lands with steep slopes around the gulch that holds Garrison Springs, site of a fish hatchery dating from the 1970s.

FORT STEILACOOM LANDS

While much of Fort Steilacoom laid on lands south of what is now Steilacoom Boulevard, the area immediately east of the main Administration Building includes a core cluster of historic cottages dating from the original fort settlement. The Historic Fort Steilacoom Association has stated a preference to restore this area to be an open parade grounds type of environment. This initiative would remove roads from the area. This objective is reflected in the planning for the hospital's facilities and circulation planning.

Three other key historic facilities are extant west of the Administration Building: i) a settlers' cemetery, ii) a morgue structure immediately south of the cemetery and iii) a former bakery/butchery structure from the early hospital era.

COTTAGE ROW

Two sets of cottages exist to the east of the Administration building:

- A set of four dating from the Fort Steilacoom era (1850s) and organized in a partial crescent around a central open space and allée of trees

  This group is managed by the Historic Fort Steilacoom Association along with other areas associated with the fort. The hospital and DSHS are collaborating with the society on the preservation of these facilities.
- A linear row of cottages along Cottage Row to the east of the Fort-era structures dating from the 1930s

  This latter group were built to house hospital staff, are vacant, and are no longer contributing to the hospital's functions.

EAST CAMPUS EDGE

Two independent facilities are on campus lands facing 87th Avenue SW:

- A fire station operated by West Pierce Fire & Rescue
- Oakridge Community Facility, operated by the Department of Children, Youth and Families

Figure 8: Fort Steilacoom cottages on the WSH campus

Table 3: Western State Hospital Parcels & Land Area

Zoning	Tax Parcel Number	Land Acres
PI*	220321022	215.71
OSR	220283027	29.75
	220321007	36.73
	220283026	6.15
All OSR		72.63
Total		**288.34**

* Includes approximately 25 acres in Sensitive Areas/Steep Slopes

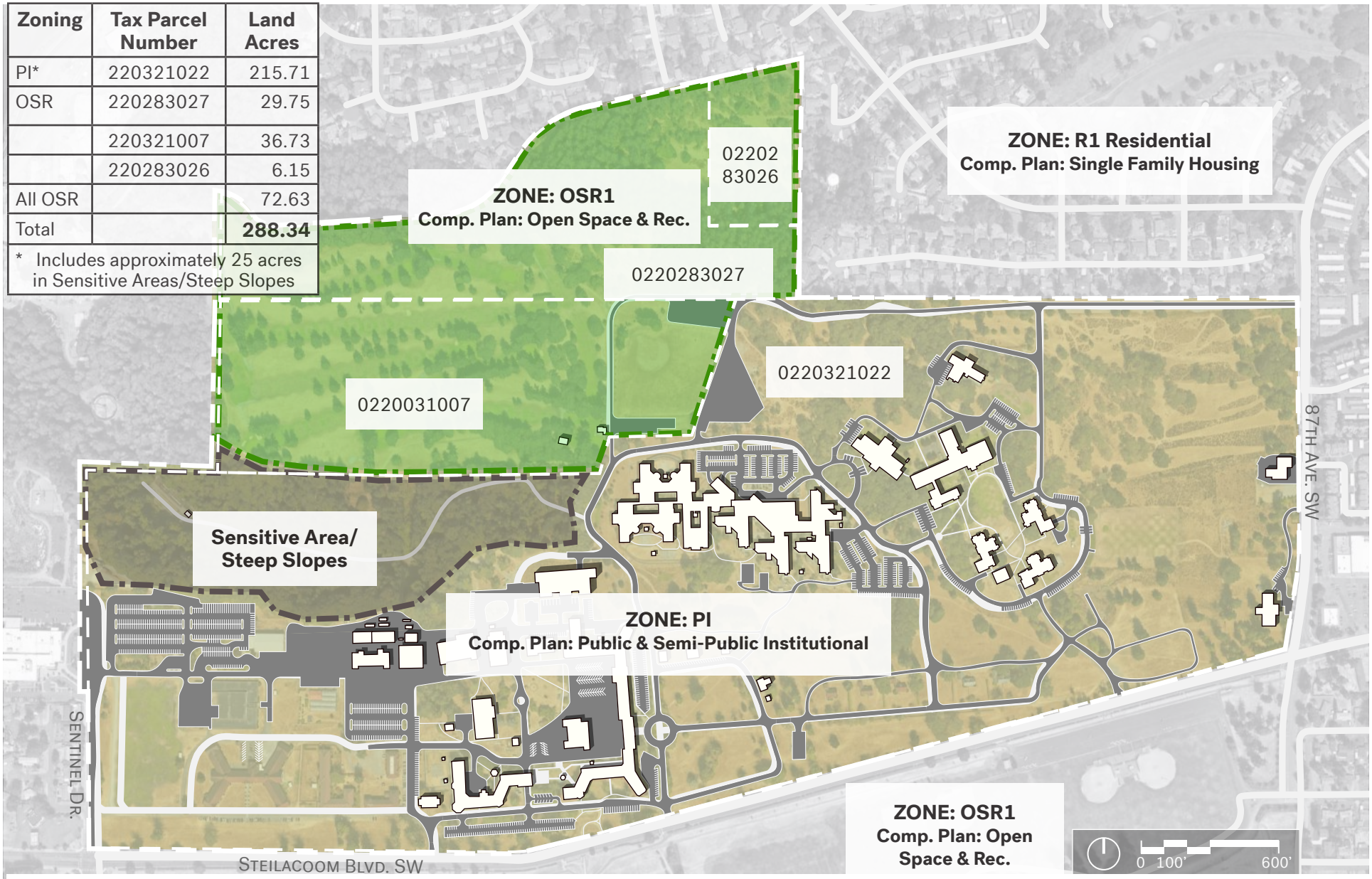
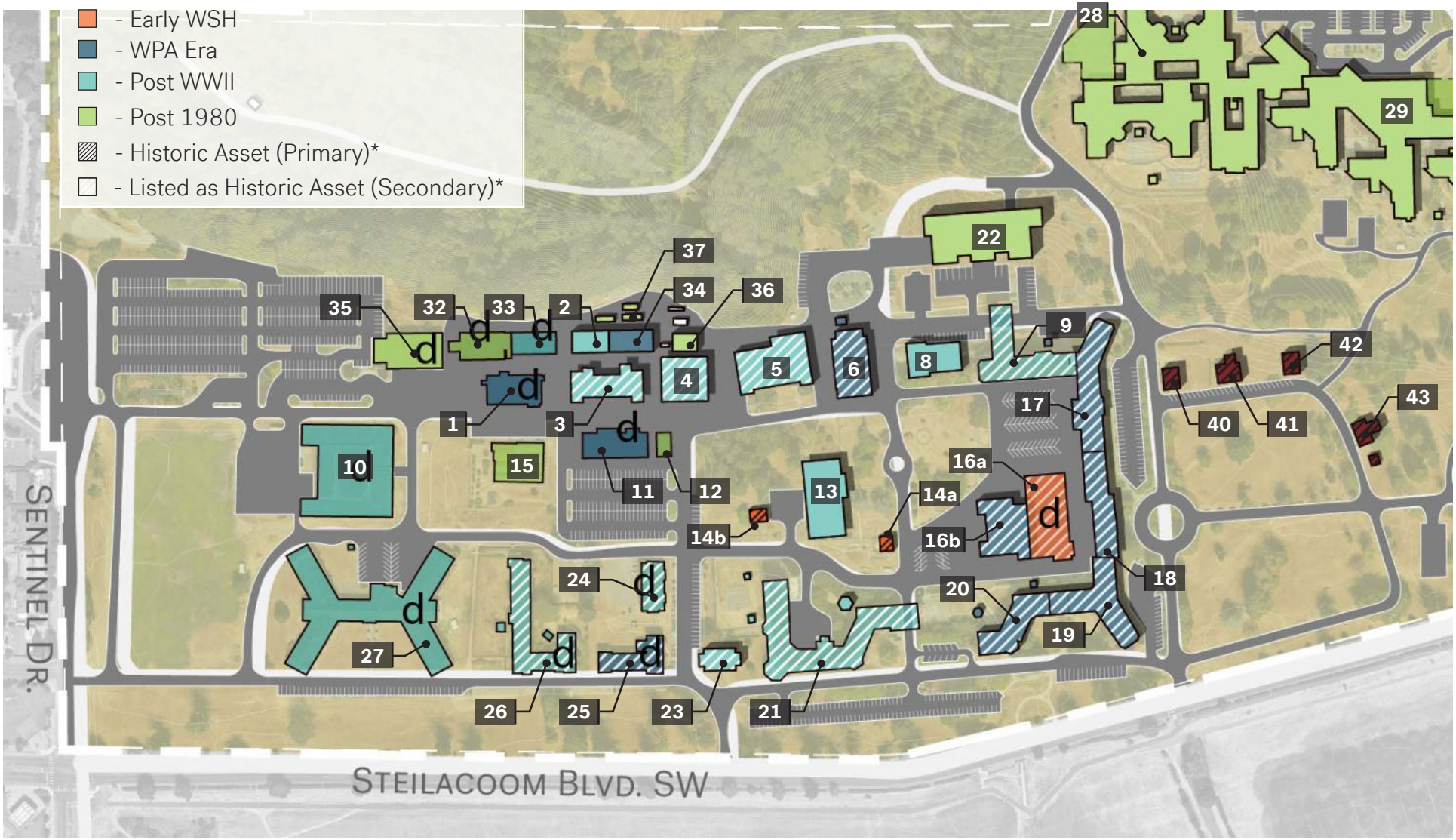


Figure 9: Western State Hospital Lands

The boundary between the OSR zone and the Public/Institutional Zone is as defined by the Lakewood Zoning Map. This is understood to be the southern and southeastern edges of Tax Parcel 0220321007. The boundaries of the Sensitive Area surrounding Garrison Creek are the predominant break in slope at the head of the slopes on the south and north of the creek. On the east, the boundary is 20 feet west of the existing road.

Figure 10: Existing Facilities

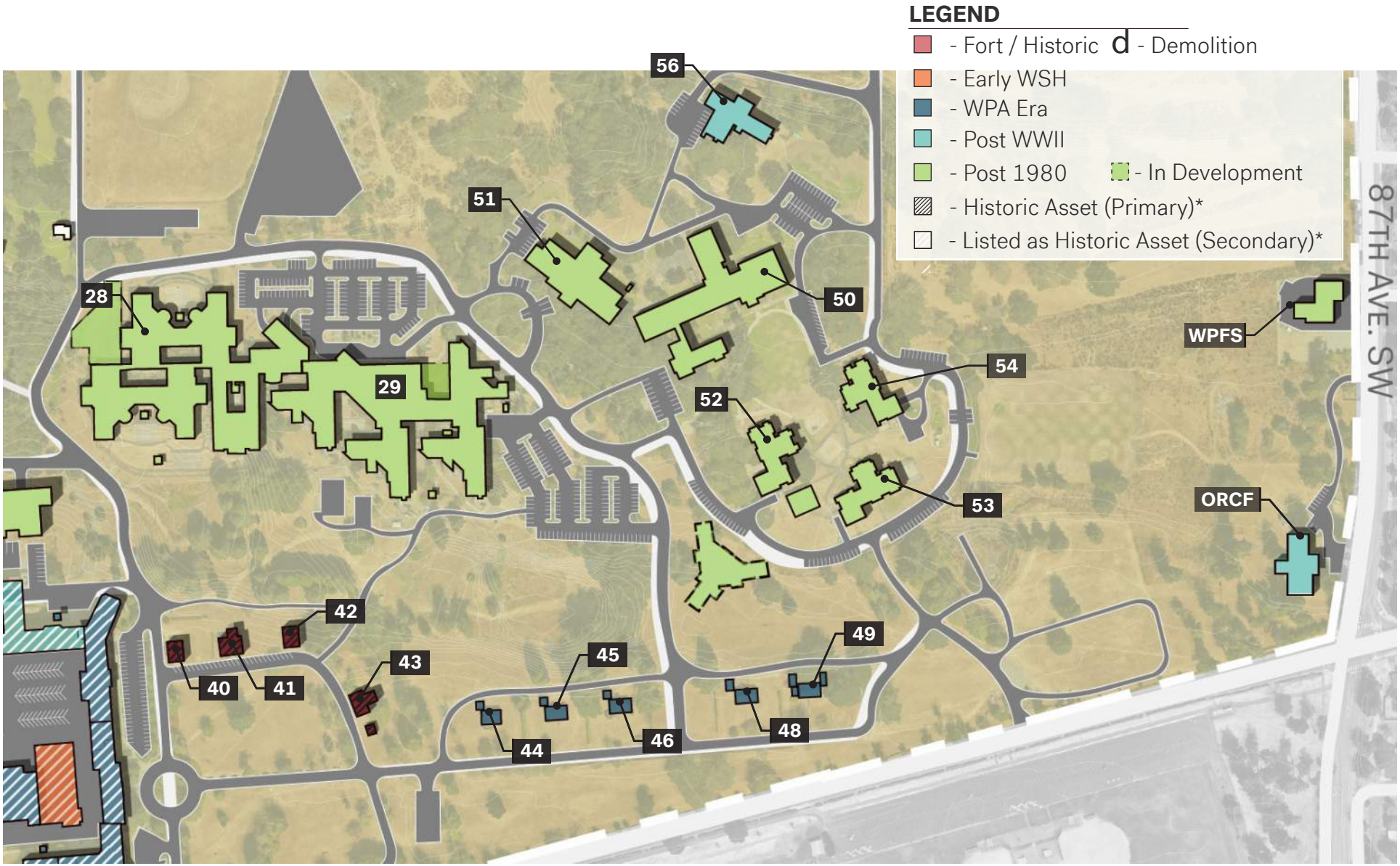


* Facilities listed as historic assets are as determined in the listing of the Fort Steilacoom Historic District for the National Register of Historic Places and/or the **Western State Hospital Cultural Landscape Assessment.**
See "Documentation of Listed Structures" on page 31.

Figure 11: Existing Facilities, West Campus

Table 4: Existing Buildings

Bldg.	Building Use	Built	GSF
1	MOD Maintenance Office	1937	7,623
2	MOD Storage	1958	3,936
3	MOD Plumbing, Garage, Glass, Sign, Paint & Machine Shops	1917	9,382
4	MOD Boiler House	1917	26,376
5	MOD Laundry & Grounds Shop	1917	19,892
6	Art Center, Infinity Center, Beauty/Barber Shop, *etc.*	1933	31,797
8	Library, Key Shop & Staff Offices	1948	25,448
9	Staff Offices	1948	114,327
10	Staff Development Training Center & HMH Carpentry	1960	41,227
11	Commissary	1934	22,620
12	MOD Storage	1986	1,560
13	Pharmacy & Central Services	1975	15,235
14A	Vacant - Historic Bakery	1904	880
14B	Vacant - Historic Morgue	1888	1,516
15	Green House & Industrial Hygienist	2000	1,826
16A	Main Kitchen & HMH Java Site	1908	33,275
16B	Staff Offices, Fashion Center & Laundry Folding	1930	18,180
17	Patient Wards & Treatment Mall	1934	44,091
18	Communications Center & Administration Offices	1938	36,662
19	Patient Wards C1 - C3	1938	46,633
20	Patient Wards C4 - C6	1934	44,328
21	Patient Wards S1 - S10	1948	149,865
22	Patient Support Center	2019	48,190
23	Chapel	1925	7,492
24	Employee Health, Infection Prevention & Patient Financial Services	1937	11,149
25	North West Justice, Legal Services & Department of Assigned Council	1938	22,001
26	Vacant - Not in Use	1945	75,644
27	WSH: Patient HMH Wards W1N & W1S and Fort Steilacoom Residential Treatment Facility	1960	41,144
28	Center for Forensic Services Patient Wards F1 - F8 & Treatment Mall	2000	202,160
	Patient Wards F9 & F10	2020	40,742
29	Patient Wards E1 - E8, Treatment Mall & Clinic	1982	158,111
30	Connex Container: Emergency Management Supplies	2016	160
31	Connex Container: Emergency Management Supplies	2016	160
32	Inventory Control Warehouse	1985	6,161
33	MOD Life, Health & Safety Shop	1979	5,600
34	MOD Carpentry Shop	1972	5,641
35	Maintenance Materials Warehouse & HMH Program Space	1982	12,000
36	MOD Main Chiller Plant	1994	2,079
37	Prime Mover Enclosure: Generator No. 1	1994	476
38	Prime Mover Enclosure: Generator No. 2	1994	476
40	HFSA Cottage No. 1	1855	2,602
41	HFSA Cottage No. 2	1855	3,400
42	HFSA Cottage No. 3	1855	2,600
43	HFSA Cottage No. 4	1855	3,450
44	Vacant: Cottage No. 5	1934	1,350
45	Vacant: Cottage No. 6	1934	1,730
46	Vacant: Cottage No. 7	1934	1,802
48	Vacant: Cottage No. 9	1934	1,650
49	Vacant: Cottage No. 10	1934	1,926
FP	Fuel Pump Station	1993	32
50	CSTC Administration & Elementary School	1995	36,105
51	CSTC High School	1992	19,816
52	CSTC Residential Unit (Camano)	1987	11,209
53	CSTC Residential Unit (Orcas)	1987	11,984
54	CSTC Residential Unit (Ketron)	1987	10,484
	New Cottage, San Juan	2020	19.360
56	Maintenance	1961	9,394



* Facilities listed as historic assets are as determined in the listing of the Fort Steilacoom Historic District for National Register of Historic Places and/or the **Western State Hospital Cultural Landscape Assessment.** See "Documentation of Listed Structures" on page 31

Figure 12: Existing Facilities, East Campus

Table 4, continued

Bldg.	Building Use	Built	GSF
Facilities owned/operated by others			
ORCF	Oakridge Community Facility		
WPFS	West Pierce Fire & Rescue, Station #24		

Table 5: Patient Bed Count, by Ward & Building data is as of Fall 2019

Bldg	Center	Physical Ward	Logical Ward	Service Type	Beds
17	PTRC*	C7	WS56	Rehabilitation	30
17	PTRC	C8	WS77	Acute	30
19	PTRC	C2	WS63	Rehabilitation	30
19	PTRC	C3	WS31	Acute	30
20	PTRC	C5	WS41	Acute	30
20	PTRC	C6	WS25	Acute	30
21	CFS†	S4	WS83	Transitional/Extended	15
21	CFS	S10	WS82	Rehabilitation	30
21	PTRC	S3	WS76	Rehabilitation	30
21	PTRC	S7	WS73	Rehabilitation	32
21	PTRC	S8	WS72	Rehabilitation	30
21	PTRC	S9	WS74	Rehabilitation	30
27	HMH‡	W1N	WS47	Rehabilitation	15
27	HMH	W1S	WS45	Rehabilitation	15
27	FSCRP§	W2N	WS47	Rehabilitation	15
27	FSCRP	W2S	WS45	Rehabilitation	15
28	CFS	F1	WS48	Admission	29
28	CFS	F2	WS14	Admission	29
28	CFS	F3	WS85	Admission/Acute	31
28	CFS	F4	WS61	Acute	31
28	CFS	F5	WS50	Admission	29
28	CFS	F6	WS18	Rehabilitation	29
28	CFS	F7	WS62	Rehabilitation	31
28	CFS	F8	WS16	Rehabilitation	31
29	CFS	E1	WS51	Rehabilitation	30
29	PTRC	E2	WS81	Rehabilitation	27
29	CFS	E3	WS09	Admission	21
29	CFS	E4	WS78	Admission	21
29	PTRC	E5	WS05	Admission	30
29	PTRC	E6	WS08	Rehabilitation	26
29	PTRC	E7	WS70	Rehabilitation	28
29	PTRC	E8	WS59	Rehabilitation	27
C1	CSTC			Children	15
C2	CSTC			Children	16
C3	CSTC			Children	16
C4	CSTC			Children	18
Total Bed Count					**922**

* Psychiatric Treatment and Recovery Center
† Center for Forensic Services
‡ Habilitative Mental Health
§ Fort Steilacoom Competency Restoration Program

PATIENT POPULATIONS & CARE APPROACH

Washington's two state psychiatric hospitals today serve patients with differing backgrounds and needs. Patients are served in two primary categories:

Civil Commitment Patients

Individuals determined by the Court system to be a danger to themselves or others may be civilly committed to the state hospitals for care and treatment. These individuals have not been accused of a crime.

Forensic Commitment Patients

Forensic patients are those patients that have been accused of a crime. In the process of a prosecution, the Courts may commit an individual to the state hospital for a competency evaluation to stand trial. If found competent, the individual is returned to jail to stand trial. If found not competent, the individual stays in the hospital until competency is restored.

Another population of forensic patients are those who have been found by the Courts to be not guilty by reason of insanity (NGRI). These individuals are committed to the state hospitals for care and treatment.

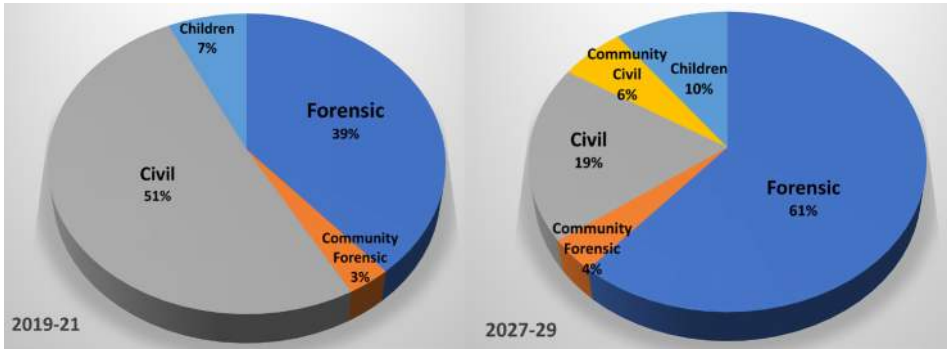


Figure 13: Mix of patients by type

Models of Care

Civil patients receive care in Buildings 17, 19-21, 27 and 29. The environment of care differs from building to building, but generally consists of 25-30 bed units connected end to end.

The organization of the facilities lend themselves to an archaic custodial model of care, where large numbers of patients are housed with limited opportunity for on-unit therapy. For those farther from the Treatment Mall, access to program space becomes more challenging and often results in an inadequate amount of active therapy. Thus, length of stay is often longer than can be achieved with a more contemporary model of care.

Forensic patients reside and receive treatment in a secure environment in Buildings 28 and 29. Inpatient Units are typically comprised of 30 beds supported by 2 group activity spaces and a porch. A generous amount of circulation space surrounds the Nurse Station allowing a high degree of direct observation but little opportunity for staff and patient interaction. All 30 patients share the same limited amount of social space, resulting in a high social density and/or many patients remaining in their rooms, disengaged.

The only significant place for therapy in the forensic hospital is the Treatment Mall. This portion of Building 28 is strategically located between the residential units of 28 and 29. It offers a variety of program space including a gym, fitness rooms, classrooms and multi-purpose rooms.

Child Study & Treatment Center (CSTC)

The Child Study and Treatment Center (CSTC) provides culturally competent care to children and youth with severe psychiatric, emotional, and behavioral disorders complicated by medical, social, legal, and developmental issues. CSTC treats the most complicated and challenged kids. Some of the challenges addressed are psychiatric disorders, ADHD, Bipolar, learning disorders, behavior disorders, sexually inappropriate behavior, aggressive behavior, and conditions where there is the potential for self-harm or physical harm to others.

Although it is not the norm, CSTC also treats some kids with autism. Many of the kids have more than one of these challenges. Almost all have demonstrated an increasing display of the potential to be unsafe for themselves and others. This aggressive behavior tends to continue to escalate. Without appropriate training and treatment, it poses a clear and ever present danger.

Children are placed at CSTC through the Children's Long-term Inpatient Program (CLIP). CLIP is the only publicly funded, longer-term inpatient program for youth in Washington State where youth ages 5-17 years old may be voluntarily committed and those from 13-17 years old may be involuntarily committed. CSTC is under the authority of the Behavioral Health Administration (BHA) within the Department of Social and Health Services (DSHS).

CSTC provides a variety of programming and treatments. The psychiatric treatment/therapy program is based on the most current evidence-based practices including, but not limited to:

- Cognitive Behavioral Therapy (CBT)
- Dialectical Behavioral Therapy, and
- Trauma-Focused CBT.

Additionally, CSTC provides life and relationship skills development, family, recreational, and other specialized therapies. Clinical services include psychiatric/medical oversight, medication management, and 24-hour nursing services.

Licensed as a hospital, CSTC welcomes families, guardians, and community supporters to participate in treatment and discharge planning so children can successfully return to their family home or community-based foster placement.

While at CSTC, patients attend school year-round on campus through educational programs offered by the Clover Park School District (CPSD). The hospital counselors work alongside teachers and para-educators to maintain a safe, therapeutic learning environment. CPSD works with families and homeschool districts to make sure the student's transition into their next school is successful following discharge from the hospital.

Patient Release Procedures

The process for release of patients from facilities on the Western State Hospital campus varies by population. See "Appendix 7: Patient Release Procedures" for a description of release procedures for adult patients.

Children at the CSTC are discharged when they meet discharge criteria established as part of their care and treatment. Their discharge placement can range broadly from their family home to a structured group home or other residential setting.

EXISTING INFRASTRUCTURE

This section provides a brief summary of existing services and known constraints that should be addressed in implementing this plan. Systems are further described and proposed solutions addressed in "Utilities & Infrastructure" on page 43.

- **Electrical** service to the WSH campus is provided by Tacoma Power via two feeder connections, fed from separate utility substations, as shown in Figure 26 on page 45.
- **Natural gas** is provided to the Western State Hospital campus by Puget Sound Energy (PSE). There are three feeds to the campus, shown in Figure 26 on page 45. Each building provided with a natural gas connection is individually metered by the utility.
- **Steam Heat**: Boilers in Building 4 provide steam to most of the campus for heating, domestic water, and process loads. Facilities currently served by steam heat are indicated in Figure 26 on page 45.
- **Water Supply**: Western State Hospital currently acts as its own Water District; all of the water supplied to and used by the campus is owned, operated, and maintained by Western State Hospital, from groundwater wells on Fort Steilacoom; see "Figure 26: Utility Services & Opportunities" on page 45.
- **Sanitary Sewer**: The campus sewer system is privately owned and maintained, and discharges to the public sewer system operated by the Town of Steilacoom. The Town's collection system feeds via pump to the Pierce County Wastewater Plant, located along Chambers Creek.
- **Rainwater:** Currently, catch basins flow to a combination of campus retention ponds and the gulch above Garrison Springs.

Goals & Project Needs

DSHS GOALS

As a result of the State's policy directive, a core goal for DSHS is to provide more of the state's services to civil commitment patients through distributed models, both private and state-run. These facilities are projected to be a combination of small Residential Treatment Facilities (RTFs) of 16 or 48 beds per facility. During this master planning process, DSHS initiated a predesign study for up to three of these facilities.

The distributed Residential Treatment Facilities will provide stabilization of individuals in psychiatric crisis or experiencing an episode of acute mental illness. These RTFs provide clinical and therapeutic services to people on a short-stay basis and connect them to the continuum of psychiatric services upon discharge.

The model relieves the pressure on local emergency departments to address the emergent needs of people in distress who require short, focused, person-centered care so that they can re-enter their communities as quickly as possible.

The Residential Treatment Facilities provide care to those individuals who are managing their mental illness but still require the support that a structured residential environment can offer. This type of facility may provide social services in-house, but facilitates its residents' outpatient psychiatric care. By living in a residential setting with a small number of peers, people are able to exercise their coping skills and connect with others in a more manageable group size.

The distributed facilities for civil commitment patients will be coupled with reinvestment in Western State Hospital's campus and facilities, which will continue to serve forensic commitment patients and a limited number of civil commitment patients. This approach recognizes the significant investments that have been made in the current site over the years.

ESTABLISHING HOSPITAL DEMAND

In establishing the demand for services at the hospital, DSHS follows state laws and protocols, including the "bed need model" established by Engrossed Substitute House Bill 1109 (Chapter 415, Laws of 2019). Projections of demand are inherently dynamic and responsive to fluctuations in need as a result of the patient commitment process which includes evaluations, court hearings and other factors.

ESHB 1109 directed that the bed need models incorporate factors such as:

- The capacity in state hospitals as well as contracted facilities which provide similar levels of care
- Referral patterns
- Lengths of stay
- Wait lists
- Other factors (e.g., capacity utilization rates) identified as appropriate for predicting the number of beds needed to meet the demand for civil and forensic state hospital services.

WESTERN STATE HOSPITAL GOALS

The primary goal of the 2020 master plan is to prepare for the investments in new and renovated facilities anticipated by the governor and legislature's policy directives. To support this goal, several objectives have been identified:

1. Establish a planning framework for the entire campus, recognizing the multiple functions accommodated on the site.
2. Identify a site for a hospital facility to serve forensic commitment patients, replacing the existing outmoded facilities.
3. Accommodate a potential 48-bed Residential Treatment Facility to serve civil commitment patients.
4. Accommodate a second new cottage and a treatment/recreation facility for the Child Study and Treatment Center (CSTC).

FACILITY SITING

The decision to site the new replacement facility on the current campus was made based on several key considerations:

Washington State Demographics

The current State population of 7.67 Million is expected to increase to 8.90 Million by 2040. Over half of the State population resides along the I-5 corridor between Olympia to the South and Everett to the North. The counties with the highest population in Washington are King and Pierce. A 2015 report from the Washington State Institute for Public Policy found that the prevalence rates for mental health conditions in the state are among the highest in the U.S., with 7% of the population meeting the criteria for "serious" mental illness. The WSH Lakewood Campus is located within this population center, close to where patients and their immediate family members live.

Replacement Cost

The State of Washington has made significant investment in WSH facilities, infrastructure and operations over its history. Replacing the property, facilities and programs in-kind would result in costs ranging from $1.76 to $1.83 Billion, including:

- Land value, 80 acres @ $300,000/acre*: $24 million
- Replacement structures, construction cost 1.3 million GSF @ $880/GSF: $1,144 million
- Associated project costs, 25% to 30%: $286-$343 million
- Escalation @ 3.5 %/year for 6 years: $328-$341 million

Qualified Physicians and Staff

The highest concentration of qualified physicians and staff (3,600) in the State needed for the care of the patient population reside in the 1-5 corridor, between Olympia and Everett. They are supported by the highest concentration of education institutions that provide training and certification for mental health professionals.

History

A hospital for individuals with mental illness was established at this location in 1871, 18 years before Washington became a state and 125 years before Lakewood incorporated as a city.

Community Benefit

The operation of the Western State Hospital facilities provides the following benefits to the local community:

5 The WSH Campus has reduced its size over time from a total of 762 acres to 286 acres today, donating over 470 acres to the City of Lakewood and Pierce College for public parks and educational facilities.

6 WSH employs over 2,800 people, most residing in the City of Lakewood and Pierce County.

7 WSH's annual operating budget is $225 million and has a staff payroll that exceeds $14 million per month.

* Based on review of industrially zoned lands in the Pierce County area (Pierce County GIS), and assumes that land could be re-zoned to meet project goals. If appropriate industrial lands could not be secured, other lands could have significantly higher acquisition costs.

PROJECT PROGRAM

The program for projected facilities is summarized inTable 6.

As described above, the new forensic hospital will be the major change on the campus, and a Residential Treatment Facility is included in the allowed project under the master plan, although that facility may be sited elsewhere in the state.

In addition to projects for the hospital under this master plan, Table 6 includes:

- "San Juan Cottage A", in the Child Study and Treatment Center (CSTC). This project has been approved prior to this master plan (permit number BP-0035). Given this prior approval, it is not included in the development totals for this master plan.
- A projected Visitor Center for the Historic Fort Steilacoom Association. This project would be developed by the HFSA, but is included in the plan totals as it is on the WSH campus.

Reduction in Civil Commitment Capacity

In parallel to the development of new facilities for the forensic hospital and in alignment with legislative directives, DSHS is projecting a reduction of 180 beds for civil commitment patients at WSH by April 1, 2023.

This reduction will manage the quantity and type of development on the campus and will be achieved through a combination of renovations and demolitions - see "Renovations" on page 29.

Table 6: Summary of New Program Elements

Program Element	Bed #	Change in GSF
Projects in Development		
CSTC San Juan Cottage A*	***18***	***19,360***
Above figures are counted separately from the program under the master plan.		
Addition to Building 28†	58	40,472
MASTER PLAN PROJECTS		
New Construction		
Renovations to Building 28	-118	0
Renovations to Building 29	-	approx. 5,700‡
CFS: New **Forensic Hospital**	350§	approx. 575,000
Community Residential Treatment Facility	48	60,000
CSTC Cottage B	18	18,000
CSTC Treatment/Recreation Facility	0	15,000
Demolitions¶		
Building 27	- 30, CFS -30, Civil	- 41,140
Building 21	-167	-149,870
Others, w/o inpatient beds	0	approx. -328,960
Total projects under master plan:	**129**	**194,202**
Uses on site by others		
Fort Steilacoom Visitor Center	n/a**	4,000

* This project has been submitted for a permit as BP-0035

† This project was submitted prior to the master plan, under separate approval.

‡ Gymnasium/recreation

§ Maximum bed count for this proposed project.

¶ See Table 8 on page 31 for list of buildings projected for demolition.

** This use is not related to Hospital or DSHS operations. It would be developed and operated by the Historic Fort Steilacoom Association.

MASTER PLAN

Figure 14: Campus Framework Concept

Figure 15: Functional Zones

Guiding Principles

Several high-level principles have informed the planning for the next generation of investments at Western State Hospital.

TRANSFORM THE MODEL OF CARE

Providing a new facility that serves contemporary standards of care is a central consideration in the redevelopment of the campus. Western State Hospital is committed to establishing a forensic service that embodies the recovery model of care. This model is person-centered; care staff and the patient work together, often with the involvement of family, to develop a specific and holistic treatment plan for each individual suffering from mental illness.

In addition to acceptance of medical treatment that can alleviate some of the symptoms of mental illness, the patient is guided through multiple therapies that assist in the acquisition and exercising of coping skills. The path to recovery belongs only to each individual patient.

The hospital's delivery of the recovery model of care can and should, within the constraints of the justice system, lead to the return of the individual to the community with the goal of leading a fulfilling life.

Figure 16: Connecting to Nature
Views of plants, daylight, and fresh air all support a restorative environment.

IMPROVE CAMPUS EFFICIENCIES

In the process of modernizing the approach to behavioral health care at WSH, this master plan seeks to address inherent inefficiencies that have resulted from prior *ad hoc* site development.

Primary functional areas of the overall Western State Hospital campus have been identified as part of this planning process. These are intended to cluster uses with similar needs and issues together in order to enhance security and reduce a sprawling distribution of services.

The areas are shown on Figure 15 on page 24 and provide several benefits:

- Delineation of open space areas along the northern campus edge. These open spaces are of three types:
  - Lands zoned as "Open Space/Recreation" by the City of Lakewood
  - Lands with steep slopes along Garrison Springs
  - Lands that are zoned for Institutional development, but are not proposed for development under this master plan
- Separation of the campus areas serving adult populations - the western and central areas - from the youth-serving facilities at the CSTC area.
- Recognition of the Pioneer Cemetery and historic Fort Steilacoom facilities as unique resources on the WSH campus grounds.

Figure 17: Master Plan Development

In order to modernize the WSH facilities, a combination of new and renovated facilities are projected under this master plan. Development standards for new development are indicated in Table 7 on page 29.

NEW FACILITIES

The largest and most transformative development on the campus will be the development of a new 350-bed forensic hospital in the western campus area. This will be developed to contemporary standards with a focus on treatment over incarceration.

The new forensic hospital will be a free-standing facility in which all residential and treatment services are provided in one building. The new construction will also include administrative and support services.

The newly constructed Patient Support Center will continue to provide nutrition and pharmacy services to this new forensic building as well as other treatment buildings on campus. The new building will be designed in conformance with all applicable Codes and FGI* Guidelines for the Design and Construction of Hospitals. The building and its program will adhere to the CMS† Conditions of Participation.

Figure 18: Courtyards for Daylight & Views

Internal Courtyards of varying scales will allow daylight into core areas, views of nature, and recreational oppoitunities that meet security requirements.

NEW HOSPITAL AND MODERNIZED CARE

The new hospital building will support WSH's commitment to the recovery model of care. It will be comprised of 25-bed inpatient units that are subdivided into smaller apartments of 8-9 patient bedroom pods, each with their own social spaces. The organization of the units will allow care staff to observe and engage patients in a variety of spaces of differing character.

By creating a greater number of smaller social spaces, patients have more opportunity to choose where to be and with whom they want to socialize, and thus experience a lower social density. This factor of choice - in addition to access to nature, personal privacy and the opportunity to control one's own environment - is proven to reduce the incidence of violence and aggression.

Within the new forensic hospital, in-patient units are connected by neighborhood zones which offer a multitude of consultation, therapy, and activity spaces that allow patients to emerge from their residential area to join neighboring patients in a different environment. These neighborhoods are where recovery work takes place.

Beyond the comfort of the neighborhood is the downtown which offers the unique real-life places where patients can demonstrate their recently acquired skills for coping with their illnesses and prepare for life in the community. The new facility takes advantage of its building perimeter to enclose outdoor courtyards for patient use. There will be no significant amount of security fence visible from the surrounding public ways.

* Facility Guideline Institute, an independent, not-for-profit organization developing guidance for the planning, design, and construction of hospitals and health care facilities.

† Centers for Medicare & Medicaid Services, an agency of the Department of Health and Human Services (HHS)

Figure 19: Massing Approach
Preliminary studies illustrate the design intent, including residential wings that would shape courtyard areas and reduce the scale of the building.

CONFIGURATION ALTERNATIVES

Through this master planning process as well as a pre-design study‡ for the forensic hospital, multiple sites and building configurations have been tested. While the building footprint shown in this plan represents the principles and size of the hospital, the final design may vary from the specific footprint shown.

Consistent with LMC 18A.30.150, "Minor Modifications to Approved Conditional Use Permits," building configurations that are equivalent in program and massing shall be considered as minor modifications to this master plan. With regard to location, the LMC provides that:

> "The minor modifications shall not relocate a building, parking area, street or other use or built feature in such a way that visual, light, noise, vibration or other impacts as experienced from surrounding properties and public rights-of-way are intensified, and shall not reduce any required yard, setback, buffer or open space below the area or dimensions established by code or conditions of CUP approval, whichever is more restrictive;" (18A.30.150.B.)

As the hospital design is finalized, it will adhere to the "Development Standards for New Construction" on page 29 and is expected to fall within the parameters defined above for a minor modification.

POTENTIAL RESIDENTIAL TREATMENT FACILITY (RTF)

In addition to the new forensic hospital, land is identified that would be appropriate for a Residential Treatment Facility to serve civil commitment patients. As described further in "Goals & Project Needs", facilities of this type are to be developed state-wide, and will typically have 16, 32, or 48 beds.

Table 7: Height Limits & Setbacks, New Construction	
Maximum Height of New Construction	up to 5 stories, and less than 100 ft.
Minimum Setbacks from Street Frontages	
Steilacoom Boulevard SW	75 ft.
Sentinel Dr.	100 ft.
87th Avenue SW (no projects proposed along this frontage at this time)	general alignment with existing structures, 45 ft. +/-

DEVELOPMENT STANDARDS FOR NEW CONSTRUCTION

Consistent with the City of Lakewood's Public/Institutional Zoning designation, new facilities developed at the WSH campus will follow provisions of the City of Lakewood's Development Standards (LMC 18A.70.A "Community Design, Landscaping and Tree Preservation, Commercial Uses and Zones"), except where provisions are explicitly overridden by this section of the master plan .

Exceptions to Community Design, Landscaping & Tree Preservation Standards

The following provisions are specific to the WSH aster Plan:

1. Heights and Setbacks for development under this master plan shall comply with "Table 7: Height Limits & Setbacks, New Construction".
2. Development at WSH shall follow the tree preservation goals to the greatest extent feasible while meeting project needs. See "Tree Retention & Protection" on page 39 for objectives specific to this master plan.
3. The design of facilities shall follow contemporary best practices for architectural design, scale and composition, including place-making, sustainable design and daylighting. This approach is in lieu of prescriptive requirements of 18A.70.040.2.

RENOVATIONS

Two existing facilities at the East Campus - **Buildings 28 and 29** - are proposed for significant renovation. Building 28 is operated under the Center for Forensic Services, while Building 29 houses both forensic and civil commitment patients. Together, these two buildings provide patient wards, treatment malls, and a clinic. The renovations are primarily to better serve patients found to be not guilty by reason of insanity (NGRI), as well as patients with special needs and security requirements.

Renovations to Buildings 17, 19, 20 and 21 will convert residential wards to other uses, to manage overall site capacity and address unmet needs for staff support, storage and similar uses

Additionally, minor renovations to portions of the Administration Building are expected, to serve administrative functions of the hospital. These will not result in a change of use for the facility and are likely to be phased.

‡ The pre-design study is available on the DSHS website: www.dshs.wa.gov/sites/default/files/FFA/capital/Projects/2020_0821_WSH Predesign Report_reduced.pdf

Figure 20: Anticipated Building & Parking Demolitions

DEMOLITIONS

Several outmoded facilities are proposed for demolition, both to clear land for the new facilities and to address deferred maintenance on older facilities of marginal useful value. These are indicated in Figure 20 on page 30 and summarized in Table 8 on page 31.

DOCUMENTATION OF LISTED STRUCTURES

The Cultural Resources Assessment considers four generally distinct eras as part of the historic assessment:

- Aboriginal — pre-historic to ongoing
- Exploration and settlement — 1830s to 1849
- Fort Steilacoom — 1849 to 1868
- Western State Hospital — 1871 to 1961

The National Register of Historic Places (NRHP) listing for the Fort Steilacoom Historic District identifies as “primary resources” the extant structures from the fort era - the four cottages on the parade grounds - and two buildings from the 19th Century associated with the early hospital era - the Morgue and Bakery.

These primary resources are maintained under this master plan, as is the Settlers’ Cemetery and the parade grounds landscape.

Several structures that are proposed for demolition in this master plan are listed in the NRHP listing as secondary resources, and are identified as “Contributing” to the Hospital era in the Cultural Landscape Assessment. These secondary resources include (see Figure 11 and Figure 12):

- The five 1930s-era cottages to the east of Officer’s Row
- “Powerhouse, Heating Plant and Utility Structure” (Building 4)
- “South Hall and Wards D, E, F, G, and W-I“ (1940’s)
- “Nurses’ Dormitory and Geriatrics Building“ (1945)

As described elsewhere, site structures that may be removed in whole or in part include the rock wall along Steilacoom Blvd. and the pedestrian tunnel under that road.

Mindful of the *Secretary of the Interior’s Standards for the Treatment of Historic Properties*, DSHS will take appropriate action prior to demolition of any of these structures.

Table 8: Facility Status under Master Plan

#	Facility Name/Function	Area
New Construction		(estimated)*
-	Forensic Hospital	571,000
-	GFS (Bldg 28) Addition	40,740
	Residential Treatment Facility (48-bed)	60,000
-	San Juan Cottage (CSTC)	17,000
-	Future Cottage (CSTC)	17,000
-	CSTC Treatment/Recreation	15,000
-	Historic Fort Visitor Center	4,000†
	Total New Construction	≈ 724,740
Demolition		
1	CMO Maintenance office	7,620
9	Staff Offices	114,330
10	Training Center/Carpentry	41,230
11	Commissary	22,620
12	CMO Storage	1,560
15	Green House	1,830
21	Patient Wards	149,870
24	Health/Financial Services	11,150
25	Legal Services	22,000
26	not in use	75,640
27	Wards W1-N&S, W2-N&S	41,140
30 & 31	Connex Containers	(2x160) 320
32	Warehouse	6,160
33	CMO LHS Shop	4,000
35	Material Warehouse	12,000
44-49	Cottages	8,500
	Total Demolitions	≈ 520,000

* New Construction areas are based on preliminary facility planning.

† Visitor Center is a non-hospital facility, to be operated by others.

OPERATIONAL CHARACTERISTICS DESCRIPTION

As noted in "Planning Regulatory Context" on page 5, a description of the WSH facilities' operational characteristics is required for approval by the City of Lakewood. The following are the criteria to be addressed in that description, with notes on the criterion and references to other sections with relevant information.

1 Description of proposed use/project application.
- Modernization of WSH facilities through a combination of building replacements and renovations, addressing facility conditions and changes in behavioral health care practices.
- The largest project will be a new 350-bed forensic hospital on the western area of the current WSH campus. See "Figure 17: Master Plan Development" on page 26.
- Space for a 48-bed community residential treatment facility is reserved. The State is identifying sites for these facilities, to be distributed around the state, where patients can have access to family and other community support.
- A new 18-bed residential cottage or the Child Study and Treatment Center (CSTC).
- A new treatment/recreation center for CSTC.
- Land is identified for a potential Visitor Center for the Historic Fort Steilacoom Association.
- A full description of the project elements can be found in the section "History" on page 21.

2 Extent and type of proposed improvements to the site and/or interior or exterior building remodeling to existing building(s) (i.e. additions to buildings, interior building improvements or alterations, landscaping, proposed signs, additional parking spaces, etc.).
- Refer to "Table 8: Facility Status under Master Plan" on page 31, "Figure 17: Master Plan Development" on page 26, and "Figure 20: Anticipated Building & Parking Demolitions" on page 30.

3 Proposed number of full and part-time employees.
- Current staffing is 2,800 full-time equivalents (FTE) across multiple shifts. At build-out, staffing is projected to be up to 3,035 (3,155 with an RTF) with 2,700 FTE on site at any given time; see question 5.

4 Proposed number of students on the site at any one time if application is for a day care or educational facility.
- Not applicable

5 Maximum numbers of employees on the site at any one time.

Staffing of the hospital varies by shift, as indicated below. Also, staffing levels can fluctuate based on services and the needs of patients. These figures are estimates based on the bed counts indicated in the program, which exceeds the current census. Maximum staff on site at one time would be periods of about 1 hour when the day and swing shifts would overlap, for a total of 2,695.

Shift	**Staff FTE** (Hospital + CSTC)	**Potential RTF**
Day	2,040	80
Swing	655	25
Night	340	15

6 Proposed hours, days, place and manner of operation.
- The facilities on the WSH campus operate continuously, with services to residential patients. This pattern is in alignment with existing operations on the site.

7 Type of products or services proposed to be available on the site.
- The services of the site are behavioral health care treatment and related services.

8 Number of commercial vehicles proposed to be parked or stored on the site.

Currently, there are approximately 150 commercial or fleet vehicles on the campus, and future numbers are expected to fluctuate around that figure by +/- 10%. They are of several types:
- Maintenance vehicles (currently 82)
- Vehicles assigned to on-site departments (currently 45)
- Motor pool vehicles for regional use by staff (currently 19)

9 Traffic (vehicular trips to and from site per day) generated by the use, including deliveries and client-related trips (i.e. any proposed shipping and receiving activities, projected employee trip generation, projected customer trip generation).
- See "Vehicular access & circulation" on page 35.

10 Total square footage of the floor area of the tenant space.

- There are no significant tenant spaces on the campus. Some administrative offices are used by the Courts and the Historic Fort Steilacoom Association. No change in this current use is proposed under this plan.

11 Proposed type of equipment/machinery to be used by the business or stored on site (i.e., office equipment, manufacturing equipment, construction equipment).

- General maintenance equipment for landscape and facilities maintenance is currently used. No significant change in these operations are anticipated.

12 Proposed use of outdoor space on lot (i.e., outdoor storage, outdoor display and sales of merchandise, parking/open space, recreation space).

- As part of the treatment process, future facilities are expected to have courtyards for patients to recreate and socialize outdoors. These will most likely be fully or partially enclosed by contiguous buildings, as appropriate for treatment and security needs.
- Existing recreation uses such as the play field at the CSTC facility are to remain and may have minor improvements.
- The intent of the master plan is to welcome the general public onto areas of interest on the campus grounds, including the Fort Steilacoom area and the former golf course - working with the City, the County, and others as new uses for that site are proposed.

13 If more than one tenant on the site, provide the square footage of each tenant space, business names of tenants, and type of business.

- Western State Hospital's facilities are the primary use of the site.
- The Historic Fort Steilacoom Association maintains a cluster of historic cottages on the site.
- Oakridge Community Facility operates under a ground lease with the Department of Children, Youth, and Families.
- West Pierce Fire & Rescue operates a fire station on the eastern end of the property.
- Facilities for all of these uses are identified in Table 4 on page 15.

14 Previous use of property.

- Fort Steilacoom was the first Euro-American use of the site and some buildings are extant from that era.
- The hospital has been on the site since the 19th Century, although its facilities and site uses have changed over time.
- See "Hospital History" on page 3 for more detail.

15 Existing number of parking spaces.

- Existing and proposed parking is detailed in Table 10 on page 37.

16 Surrounding uses and businesses next to proposed business/project site.

- Surrounding uses are noted in Figure 6 on page 6.
- Specific adjacent businesses and institutions include:
  - Oakridge Community Facility (on WSH lands, but independently operated).
  - Steilacoom High School, located across Sentinel Drive to the west.
  - Pierce College at Fort Steilacoom, south of Steilacoom Boulevard.
  - Fort Steilacoom Park - south of Steilacoom Boulevard.
  - Oakbrook neighborhood - north of the site.

17 Operational characteristics or functions that create emission of gases, dust, odors, vibration, electrical interference, smoke, noise, air pollution, light, glare, odor or dust in a manner likely to cause offense or irritation to neighboring residents.

- There are no industrial processes on the site that would contribute to these types of impacts.
- Over the long-term, it is expected that energy loads will be shifted to electrical rather than boiler-based heating and cooling, reducing carbon emissions.

18 Site and building design features that minimize land use impacts, such as traffic, aesthetics, etc. or environmental impacts such as noise, vibration, dust or air pollution, glare, odor and dust, etc.

- The scale of new construction will be similar to the scale of existing facilities on the site, with landscaped setbacks from the campus edges.
- Parking is generally away from the campus edges, limiting the potential for glare from parked cars.
- Supporting facilities and service areas are internal to the site, away from campus edges, reducing incidental noise impacts off site.

19 Storage, distribution, production and/or operations that involve the use of toxic or flammable materials.

- Materials used on campus include typical housekeeping cleaning and maintenance supplies and fuel for emergency generators.

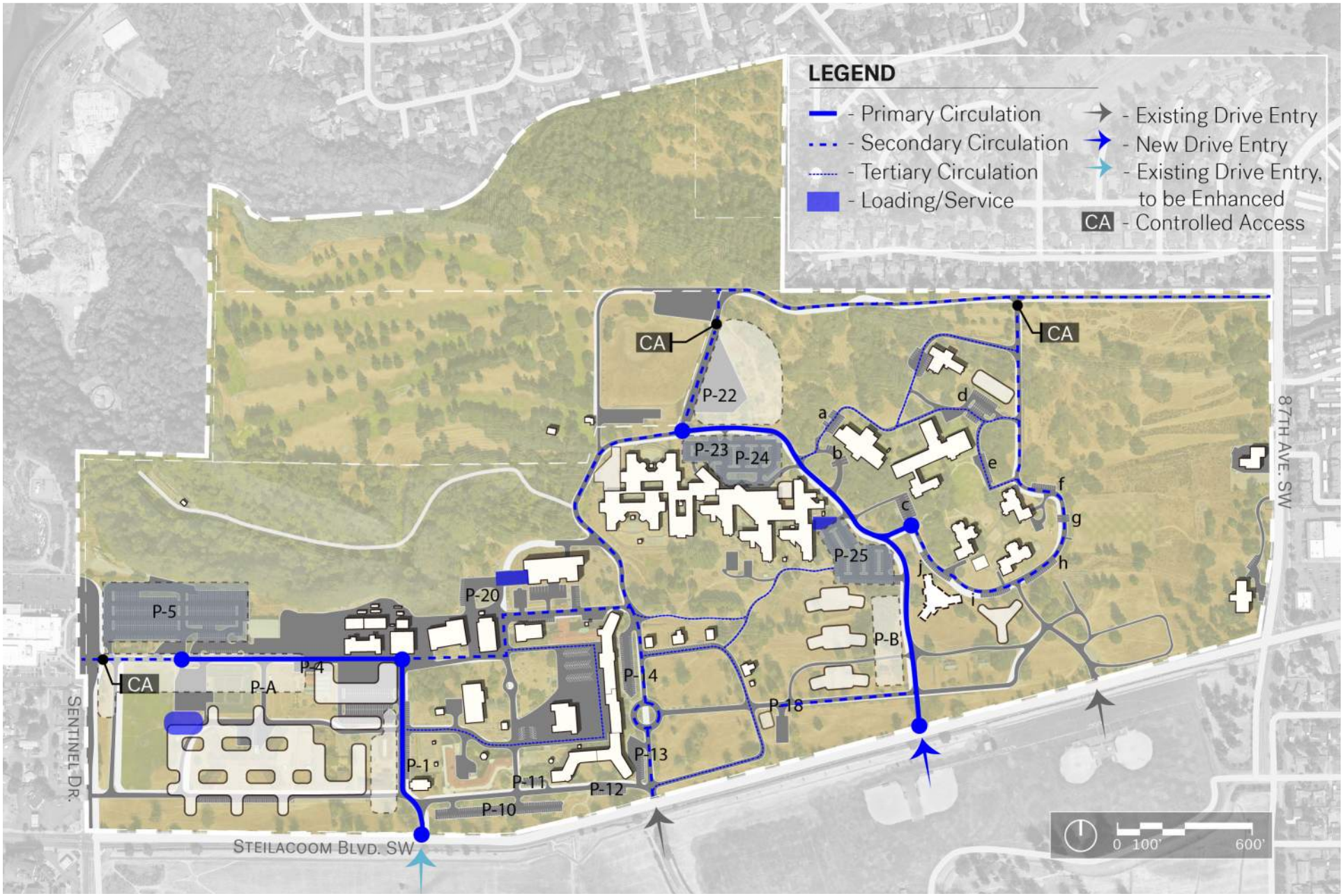


Figure 21: Circulation & Parking

MODES OF TRAVEL TO WESTERN STATE HOSPITAL

The majority of staff and visitors to Western State Hospital currently arrive by private vehicle. WSH participates in the State's Commute Trip Reduction (CTR) program, providing information on commute options to all new hires and various forms of outreach to build awareness of the program.

Alternatives to drive-alone travel include:

- Public transit service: **Pierce Transit** operates regularly scheduled buses, as well as van-pool support and para-transit services. Route 212 serves the site, with stops along Steilacoom Boulevard, and service west to the Steilacoom ferry landing and east to the Lakewood Transit Center.

  Transfers at Lakewood provide connections to the rest of Pierce Transit's service area, including Tacoma, Gig Harbor, and Puyallup.

  Approximately 900 employees receive an employer purchased transit pass for Pierce Transit, while 2,023 receive an ORCA pass, for use on the larger regional transit network.
- Carpooling: WSH provides ride-matching services - both internal and regional - as well as dedicated carpool parking based on demand (see "Table 10: Parking Inventory" on page 37).
- Bicycle and pedestrian network: While the bicycling network around the WSH campus is incomplete, there are paths that would serve local trips well. A trail system in Fort Steilacoom Park - including a multi-use path paralleling Steilacoom Blvd. - help connect the campus to Steilacoom and central Lakewood.

  Pierce Transit provides bike racks on all of their buses, providing support for blended bus/bike commuting for longer commutes.

Other programs in place to support commute trip reduction include:

- An internal circulator system for internal campus trips
- A guaranteed ride home program, to support carpool riders who may need to work late or leave early for unscheduled circumstances

VEHICULAR ACCESS & CIRCULATION

The projected traffic volumes are expected to decline as a result of the master plan, as summarized in Table 9 on page 36. These are based on the projected bed counts described in the program.

This master plan proposes several improvements to the vehicular circulation system, to address the following objectives:

- Relocation of vehicular entries to reduce congestion risk on Steilacoom Boulevard.

  Moving the eastern Steilacoom Blvd. entry westward will increase separation from the intersection at 87th Av. SW and help separate CSTC-bound trips from those accessing the adult forensic facilities to the west.
- Simplification of the on-site circulation system, to improve way-finding and reduce internal traffic and taking advantage of changes in the campus security system, *i.e.*, with main routes not needing to enter secured areas to cross the site.
- Collaborate with the Historic Fort Steilacoom Association on removal of roads and parking within the core Fort area, east of the main Administration Building.

Steilacoom Boulevard Projects and WSH Access

In preparation of this plan, the City of Lakewood has shared its plans to improve Steilacoom Boulevard. The initial phase, including the WSH frontage has been funded and the plans are being finalized. DSHS and WSH will coordinate with the City to refine the plans to address the revisions to the site access, with the goal of doing all required work on the frontage in one iteration.

VEHICULAR PARKING

Table 10 summarizes both existing and planned parking areas. Lots that will be removed to accommodate planned development will be offset with new spaces.

Currently, most of the staff parking demand is accommodated in parking lots, but there is also a significant amount of informal parking on lawn areas. An objective of this plan is to provide parking that is well distributed

Table 9: Projected Trips & Change from Existing Conditions*

	Projected	Change from Existing
Average Daily Trips	5,709	-5%
AM trips, 6:30 - 7:30	782	-5%
AM trips, 7:00 - 8:00	639	-5%
PM trips, 2:15 - 3:15	721	-5%
PM trips, 4:00 - 5:00	345	-5%

* Per TSI, Traffic Impact Analysis Amendment Memo, WSH Master Plan, July 31, 2020, Tables 2 & 3. See Appendix 3B

and will meet the needs of staff and visitors. Parking will be provided in lots developed to City of Lakewood standards and near facilities with significant staffing.

- In addition to the existing lot on the west campus, a new lot will be built north of the new forensic hospital.
- A lot will be provided adjacent to the potential residential treatment facility.

As shown in Table 10 on page 37, parking capacity is projected to exceed the maximum parking counts listed in the Lakewood Zoning Code (18A.80.030,F "Parking Standards Table"*). As identified in the Zoning Code, a hospital has a minimum of ½ parking space per bed and a maximum of 1 space/bed.

The reason for the space count shown in Table 10 is related to operational factors. Staff of an incoming shift overlap their time on-site with the prior shift that is ending. This facilitates staff communication and provides continuity of patient care. The maximum space count indicated in the LMC would serve the largest shift, but it does not provide for this period of overlap. This has been a contributing factor to the past practice of staff parking in areas not designated for parking.

* Per LMC 18A.80.030.D., the Parking Standards Table applies to Commercial, Office and Industrial uses. The table has been used as a guideline for this planning study.

SERVICE & LOADING

Service access to the site will be accommodated at the main entries from Steilacoom Boulevard, as well as a service entry from Sentinel Drive to the west. Distribution facilities and loading areas for primary facilities are indicated in the circulation diagram, Figure 21 on page 34.

PATHS & PEDESTRIAN CIRCULATION

Currently, the WSH campus has some dedicated pedestrian paths between major facilities. Many pedestrians also choose to walk along the roadways on the site. Given the numerous building access points within the central quadrangle of the campus, pedestrian circulation within this area connects to the larger campus system at limited points.

With the change in service model and security approach (see "Site Security" on page 41), there will be opportunities to develop a more deliberate path system. The WSH master plan proposes a path network to connect major facilities while reducing the potential for pedestrian/vehicular conflict along primary roadways.

Pedestrian Tunnel, Steilacoom Boulevard

The pedestrian tunnel that crosses under Steilacoom Boulevard was built in approximately 1916 and served to connect the southern Fort lands and the hospital area once the road was built. It is in right-of-way but has had significant investment by DSHS in the 2000s.

It is proposed that DSHS and the City coordinate on its management and jointly determine if it will continue to have value through the upcoming improvements to Steilacoom Boulevard. If a decision is made to remove the tunnel, it will be documented as appropriate for contributing historic resources. If the tunnel is left in place, DSHS and the City will seek a maintenance agreement that clarifies their respective roles and responsibilities.

Table 10: Parking Inventory

Area	Tag*	General	ADA	Fleet	Spaces		Status under Master Plan	Net
					2020	Future		
EXISTING PARKING LOTS								
Hosp	1	39	2	0	41	0	Demo	-41
Hosp	2	29	2	0	31	0	Demo	-31
Hosp	3	116	6	0	123	123	Maintain	0
Hosp	4	15	1	16	32	0	Demo	-32
Hosp	5	350	3	0	355	355	Maintain	0
Hosp	6	12	2	0	16	0	Demo	-16
Hosp	7	68	2	3	73	73	Maintain	0
Hosp	8	22	0	0	22	0	Demo	-22
Hosp	10	93	2	0	99	99	Maintain	0
Hosp	11	7	4	2	15	15	Maintain	0
Hosp	12	5	8	1	16	16	Maintain	0
Hosp	13	11	4	3	21	21	Maintain	0
Hosp	14	22	6	10	41	41	Maintain	0
Hosp	15	25	0	0	25		Demo	-25
Hosp	16	17	0	0	17		Demo	-17
Hosp	17	39	0	0	39		Demo	-39
Hosp	18	26	0	0	26	26	Maintain	0
Hosp	22	175	0	0	175	220	Expand & pave	45
Hosp	23	34	0	9	43	43	Maintain	0
Hosp	24	65	23	13	108	108	Maintain	0
Hosp	25	118	6	0	126	126	Maintain	0
Hosp	I				62	24	Partial demo	-38
Hosp	II	0	0	3	3	3		0
SVC	III	0	0	150	150	150	Maintain	0
CSTC	a	19	1	0	20	20	Maintain	0
CSTC	b	8	1	0	9	9	Maintain	0
CSTC	c	19	1	0	20	20	Maintain	0
CSTC	d	41		0	41	41	Maintain	0
CSTC	e	10	2	0	12	12	Maintain	0
CSTC	f	11	1	0	12	12	Maintain	0
CSTC	g	6		0	6	6	Maintain	0
CSTC	h	18		0	18	18	Maintain	0
CSTC	i	6	1	0	7	7	Maintain	0
CSTC	j	18	1	2	21	21	Maintain	0
NEW PARKING LOTS								
Hosp	A					390	New	390
RTF	B					160	New	160
TOTALS								
		1,444	79	212	1,659	1,993		334

* Parking lots are shown in Figure 21 on page 34

Figure 22: Parking Shifts

This plan seeks to remove parking from the Fort Steilacoom parade grounds and lawn areas, adding parking near major facilities.

Figure 23: Landscape & Open Spaces

RECREATIONAL USES

The former golf course is zoned by the City of Lakewood as Open Space and Recreation, Type 1 (OSR1). This category is intended for passive recreation and limits any development to uses that are accessory to recreation. This area has historically been accessible to the public and this master plan does not propose to alter that.

Other areas on the site are used for recreation, either by patients of WSH or by others. For example, the CSTC facility includes a playfield to the east of the building complex for use by patients of the facility. In recent years, a disc golf course has been established by a local club on the northeastern corner of the site, although no formal agreement has been made at this time with WSH or DSHS for this land use.

OPEN SPACE & TREATMENT

Managed open space supports treatment practices. Outdoor walks and recreation for patients provide many wellness benefits. The campus grounds are at times utilized for supervised walks.

While specific design is yet to be developed, the new forensic hospital will include courtyards and other appropriate open areas for patient activities. These will allow regular access to outdoor areas by patients.

HISTORICAL LANDSCAPE ELEMENTS

The WSH site has a unique character that reflects the pre-settlement period, historic site development, and current development. There are large groves of Oregon White Oaks and individual Oregon White Oaks spread across the site that have been growing since pre-settlement times. There are also many large Douglas-fir trees across the site that are second growth trees, the old growth Douglas-firs would have been logged at the time of settlement. The old-growth oaks still exist because there was not a market for their wood. There are also many native Madrone trees growing across the site. The Madrone trees are faster growing and shorter lived that the Oaks and Firs and the oldest would be around 100 years old.

With the development of the site rows of trees were planted along roads and hedges were planted between sites to delineate and organize spaces.

This combination of existing old growth trees and the rows of street trees and hedges significantly contribute to the unique character of the site.

Some elements of the landscape have been identified in the Cultural Landscape Assessment report as contributing to the historic character of the Fort Steilacoom Historic District. The primary elements of concern are:

- The former settler cemetery
- The parade grounds east of Circle Drive and partially enclosed by the Fort-era cottages.

These facilities are not impacted by proposed projects under this master plan. DSHS and WSH will continue to collaborate with the Historic Fort Steilacoom Association on measures to protect and restore the parade grounds, in relation to that organization's preservation and interpretation mission.

Steilacoom Boulevard Frontage: Rock Wall & Pedestrian Tunnel

The rock wall that lines the site north of Steilacoom Boulevard may be removed, in whole or in part to accommodate new access points, support street improvements, and achieve other project goals. The wall will be documented appropriately prior to its demolition. Additionally, the tunnel under Steilacoom Boulevard may be removed as part of improvements to that corridor.

SENSITIVE LANDS

The ravine between the existing hospital and the former golf course has steep slopes and supports the Garrison Springs fish hatchery. No development is proposed in these areas.

TREE RETENTION & PROTECTION

The new forensic hospital has been sited in a previously developed area of the site, significantly reducing the potentiality impact on trees relative to other areas studied.

The identified oak tree stands on the site are indicated in Figure 23 on page 38. Facilities anticipated in this master plan have been sited to reduce impacts on the oaks to the greatest extent possible. Impacts on the mature oaks can be further reduced in implementation of the plan:

Open Space & Landscape (continued)

- As site-specific designs are prepared, care should be taken to avoid development of hardscapes and building footprints under the drip line of the oaks.
- Irrigation plans for future landscaped areas near the oak stands should avoid over-watering of the root zone.

The Western State Hospital site has significant groves of large existing trees, many of them are older than the 19th century settlement of the site. These significant trees contribute to the character of the site and to the City of Lakewood and are subject to the City of Lakewood Municipal Code 18A.50.320 'Significant Tree Preservation'.

The Lakewood Municipal Code (LMC) considers any Quercus garryana (Oregon White Oak) over 6 inch diameter (measured at 4.5' above ground) and any conifers or other deciduous tree species over 9 inch diameter to be 'Significant Trees' that are protected under the LMC.

During construction, all significant trees are to be protected by approved tree fencing located at the drip-line of the trees. There is to be no disturbance to the soil within the tree drip-line or materials store within the drip-line.

A tree retention plan locating all significant trees by species, caliper of each tree, and all tree drip-lines accurately located is required for project permitting. Any significant trees to be removed will need to be replaced according to a formula provided in the Code.

Site Security

Western State Hospital is dedicated to fostering an environment of safety and security for its patients, staff, and neighboring communities. In recent years, WSH has sought to strengthen its partnerships with the Lakewood Police Department and the Steilacoom Police Department to include joint exercises.

ADULT FORENSIC FACILITIES

Forensic patients will be housed in the new forensic hospital and the existing facilities in Buildings 28 and 29. The existing facilities will house patients found not guilty by reason of insanity (NGRI). All facilities for forensic patients are secured at the building perimeter with controlled locked perimeter doors, with vestibules and internal compartmentalization of sub-areas.

The proposed new forensic hospital will include modern security features, integrated with the approach to patient care. Modern design principles for psychiatric facilities include using aesthetically-pleasing walls and courtyards rather than fences, and inclusion of design features into the walls, making them more difficult to scale.

In addition to their security benefits, these design principles also help create more therapeutic facilities that are inviting, aesthetically appealing, and safe. Features like open, well-lit spaces will allow in daylight while using window features that are resistant to breakage.

In addition, the new facility will use key cards and magnetic locks. Key cards and the magnetic locks themselves may be deactivated should a key card become lost or unaccounted for, or if isolation of an area is required. Key cards also allow staff to move swiftly through doors to respond more quickly when needed.

The new facility will offer patients all of their treatment, services, and living arrangements in one facility so there will be minimal need for patients to be escorted across the campus. When patient transport is required, it will be managed with vehicle sallyports, as will deliveries.

The forensic hospital's built-in security features, along with significant security improvements at WSH in general over the past four years - such as fencing, windows, and additional cameras - will result in significantly lower risks of any escapes or unauthorized leaves from the new hospital.

CHILD STUDY & TREATMENT CENTER (CSTC)

As described in the section "Patient Populations & Care Approach" on page 18, the CSTC is a licensed hospital providing culturally competent care to children and youth with severe psychiatric, emotional, and behavioral disorders complicated by medical, social, legal, and developmental issues. CSTC includes families, guardians, and community supporters as participants in the treatment and discharge planning of patients.

CSTC is a locked 24/7 facility which provides a secure placement for patients. The CSTC portion of the WSH campus is not fenced, but the grounds are observed via electronic and general observation.

Staff members are well-trained in the areas of safety and security. Security checks are completed by staff members every 30 minutes to ensure that there have been no elopements. CSTC patients do not have independent grounds privileges and are constantly monitored while on the grounds.

Community outings take place with appropriate staff to patient ratios and contingency plans. Patients' behavior and community readiness are assessed before each outing into the community. Staff members are trained to observe for signs of behavioral escalation and intervene when necessary, both verbally and physically as a last resort.

CSTC utilizes Western State Hospital Security when necessary.

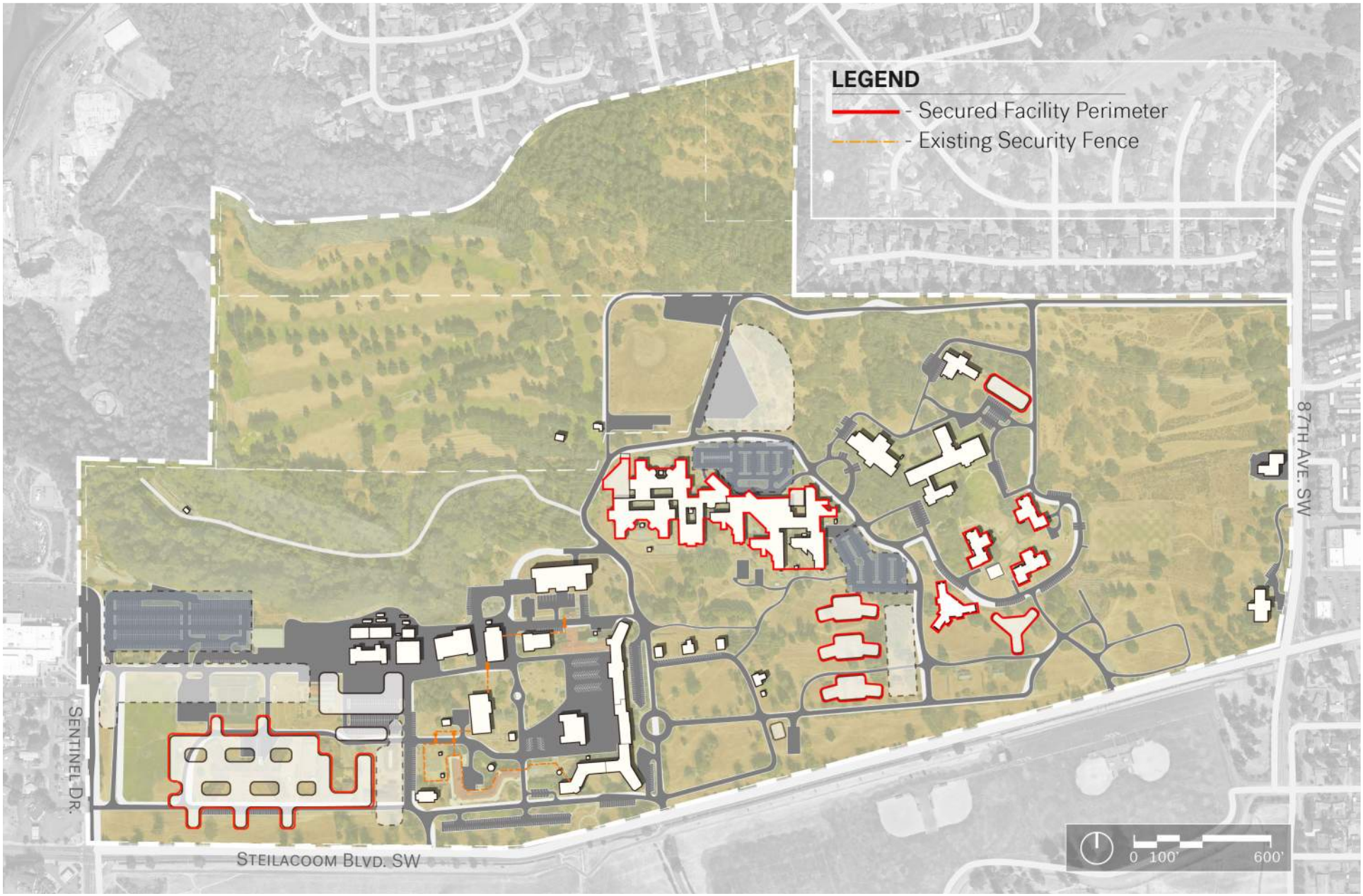


Figure 24: Site Security Approach

ENERGY SYSTEMS

Facilities built under this master plan are required to comply with the state's Net Zero Policy (see sidebar). The core requirement is that facilities be "net zero capable" for energy use. It is recommended that DSHS further explore strategies to migrate from gas-fired steam for thermal conditioning, and factor this transition into projections of gas and electrical demand.

ELECTRICAL SERVICE

Electrical service to the WSH campus is provided by Tacoma Power. The existing campus distribution system has two (12.47kV) feeder connections, fed from separate utility substations, as shown in Figure 26 on page 45.

Capacity

Each substation has a nominal capacity of 8MW with a short term thermal rating of 16MW. The conductors that feed that campus have a nominal rating of 4MW each. Tacoma Power has indicated that up to 1 MW of additional demand could be accommodated on each feeder, but that loads in excess of that would require a detailed study of the system*.

A 2018 Campus Essential Electrical Systems assessment of the on-site DSHS distribution system indicated that a substantial portion of the campus essential electrical system is at the end of its useful life. The report recommends replacement of existing equipment to maintain operational redundancies including life safety systems.

Future Demand

With development under this plan - and assuming a similar blend of gas/electrical fuel split as the campus currently uses - campus electrical use is projected to grow by 55%, with an estimated additional 1 to 2 MW of load on the Tacoma Power grid. There are no infrastructure upgrade projects currently planned for the two substations.

Therefore, if the campus growth does increase demand by more than the 1-2MW preliminary estimate, a new switch and/or new feeder at one or both of the utility substations may be required. Additionally, campus electrical upgrades and modification would likely be required downstream of the utility meter to support future growth. Future campus growth and redevelopment should integrate the 2018 report recommendations.

STEAM DISTRIBUTION & THERMAL CONDITIONING

The boilers in Building 4 - fueled by natural gas - provide steam to most of the campus for heating, domestic hot water, and process loads. Facilities served are indicated in Figure 26. Given the age of the steam system, the State's Net Zero policy, and limits on the gas feed to the boiler room (see below), this master plan assumes that future buildings will not utilize the central steam plant.

In the long-term, DSHS seeks to migrate all facilities from the steam boiler facility and retire it. It is recommended that strategies such as ground-source heat pumps ("geo-exchange") be studied as part of that overall campus conversion. At this time, there is not a specific schedule for doing that.

NATURAL GAS

Puget Sound Energy (PSE) is the natural gas supplier to the WSH campus.

System & Capacity

Three gas feeds serve the campus, shown in Figure 26 on page 45. Their current capacities are:

1. A high-pressure (>60psig) service from Sentinel Drive SW to the campus steam system boilers in Building #4. The current demand on this feed is around 37 Therm/hour. This high-pressure line is at capacity and PSE recommends reducing demand on the line.

   Depending on how DSHS approaches the State's Net Zero Policy, the demand on the campus steam system and therefore on this feeder line can be reduced significantly.

* The system study would require a fee to be paid by Western State Hospital.

Washington's Net Zero Policy

Executive Order 18-01, signed by Governor Inslee, requires that facilities be developed as net zero capable, and that renewable energy sources to achieve net zero should be developed when feasible. The order applies to state-owned facilities including new construction or major renovations at WSH.

"...all newly-constructed state-owned (including lease-purchase) buildings shall be designed to be zero energy or zero energy-capable and include consideration of net-embodied carbon. In unique situation where a cost effective zero-energy building is not yet technically feasible, building shall be designed to exceed the current state building code for energy efficiency to the greatest extent possible."

Meeting this goal at WSH will require investment in sources of thermal and electrical energy from non—fossil fuel sources. Examples of sources include:

Thermal Demand *(i.e.*, space heating & cooling, domestic hot water heating):

- Solar thermal
- Bio fuels

Electrical demand:

- On-site solar photovoltaic or wind generation
- Grid-based solar and wind production

A primary strategy for meeting net zero goals is migration from gas-fired equipment to electrical equipment, when performance and efficiencies can be achieved. Examples of High-Efficient Electric Based Thermal/Domestic Systems are: heat recovery chillers, thermal storage, ground source heat pumps, water-to-water heat pumps

Therefore, a result of meeting the net zero policy mandate over time could be an increase in electrical demand. It is recommended that DSHS develop scenarios to meet the Net Zero policy at WSH in conjunction with providing future demand to Tacoma Power.

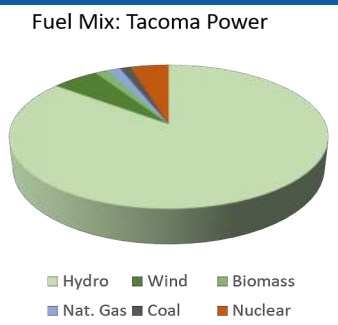


Figure 25: Tacoma Power fuel mix

The fuel mix is is mostly hydropower. This will help the WSH campus to meet the Net Zero mandate

Data Source: mytpu.org/about-tpu/services/power

2 The second service is an intermediate pressure (<60psig) feed from Steilacoom Boulevard near the current eastern driveway and serving the CSTC cluster (Buildings #50-56). The current estimated demand on this feeder is 3 Therm/hour with an estimated future demand of 6 Therm/hour.

PSE has indicated this feed has no additional capacity, and noted that any modifications to the piping network from this feed could trigger a requirement for a complete natural gas service renovation to comply with current codes.

3 The third service is also an intermediate pressure (<60psig) feed from Steilacoom Boulevard on the western end of campus serving Building #10. The current estimated demand on this feeder is 1 Therm/hour with an estimated future demand of 16 Therm/hour.

Future Demand

Based on the master plan building area growth projections, it is expected the natural gas demand may increase by 30% for the campus as a whole, assuming a more traditional building system design. Options for achieving an all-electric net zero capable building(s) or campus would reduce natural gas.

Puget Sound Energy has indicated the Far West Drive SW high-pressure utility distribution pipe and each of three campus feeds are near capacity. However, the Steilacoom Boulevard intermediate pressure utility distribution pipe has sufficient capacity to support campus growth.

While the two feeds from Steilacoom Boulevard are at capacity, the utility has indicated the intermediate pressure distribution main in that street has sufficient capacity for increased demand if a new service is brought onto campus.

Based on master plan development/expansion on the west side of campus, in particular, the current service would need replacement. Additionally, care should be taken for the routing of new services and avoid crossing over/under existing natural gas lines.

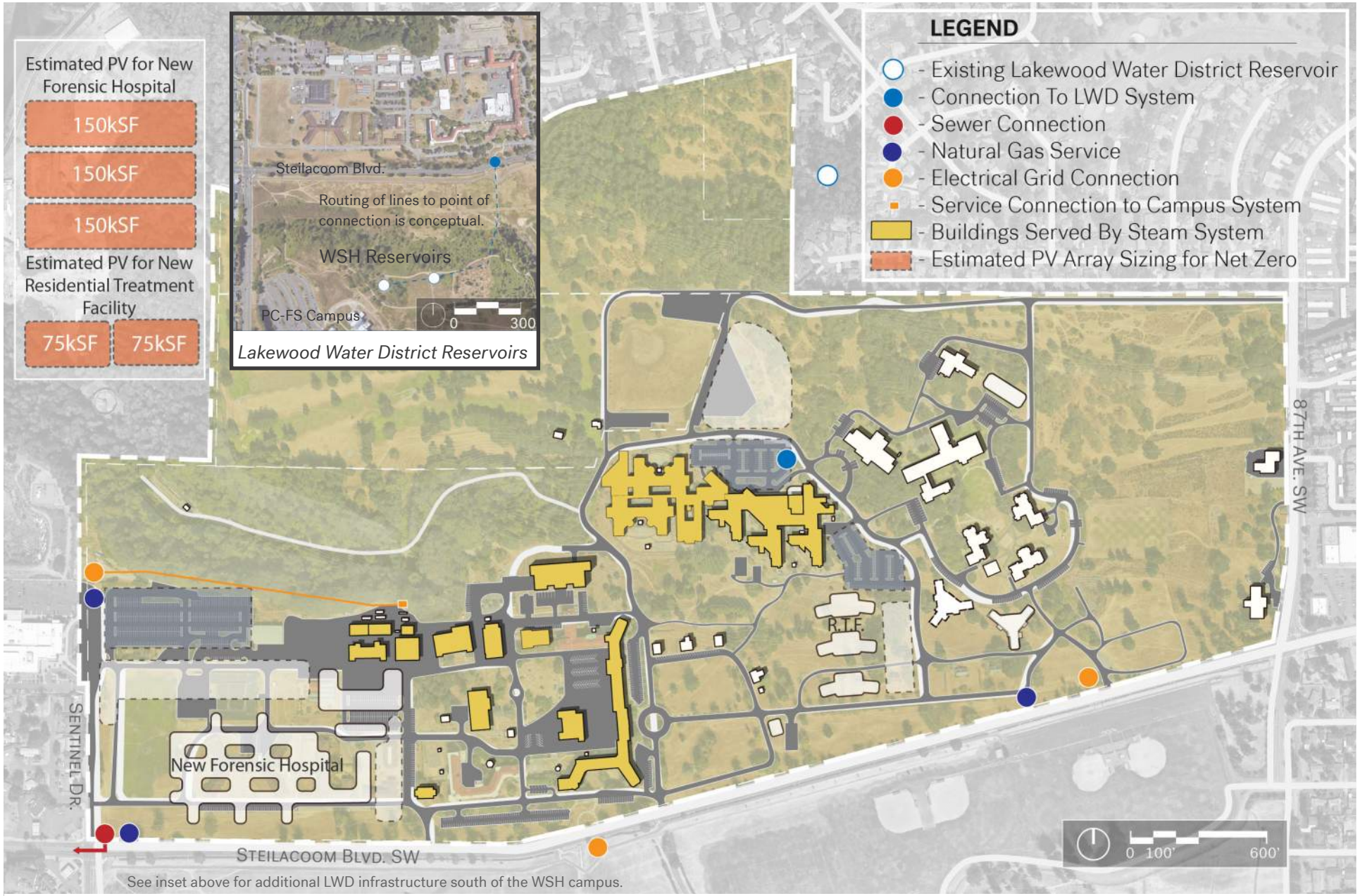


Figure 26: Utility Services & Opportunities

WATER SYSTEMS

WATER SUPPLY

Groundwater has met the needs of Fort Steilacoom and the hospital since the start of American settlement on the site that is now WSH. WSH maintains its water rights and wells to meet present needs. The campus system includes two wells with storage tanks and a network of supply lines.

Existing water main sizes vary from 4 inches to 8 inches and are made from various materials, as they have been extended over time. Fire suppression - including fire hydrants and sprinkler systems - and domestic services are tapped from these private water mains.

Lakewood Water District (LWD) and DSHS have had preliminary discussions regarding the potential to incorporate Western State Hospital into the LWD service area, either partially or entirely†.

LWD has "connection-ready" services extended to each of the campus supply lines in the event the well supply is either unavailable or unsafe. These connection points would be utilized if a decision is made to fully connect the campus to the District's system.

Discussions on conversion of the overall system are on-going, although DSHS' intent is that new major facilities - the new forensic hospital and potential residential treatment facility - would be connected to LWD service.

Prior to assuming any of Western State Hospital's existing infrastructure into their purview, LWD would need to confirm the condition of the existing water infrastructure, including wells, storage facilities, and supply lines. Depending on results of these evaluations, LWD may incorporate only some of the existing water lines and the campus may elect to build new water infrastructure as part of a developer extension agreement.

If the District's service is extended to the WSH campus, the following criteria would apply:

- Provide at least two points of connection to the off-campus system, with interconnection on the campus.
- Upgrade the on-campus system wherever it will be part of the LWD main distribution network.
- Provide a through-campus connection to the existing LWD reservoir east of the former golf course site.
- Provide appropriate metering and backflow prevention at all points where the LWD mains will connect to WSH-maintained distribution lines.

SANITARY SEWER

The campus sewer system is privately owned and maintained and discharges to the public sewer system operated by the Town of Steilacoom. The Town's collection system feeds via pump to the Pierce County Wastewater Plant located along Chambers Creek.

Based on conversations with both WSH operations staff and Steilacoom Public Works, the internal collection system has adequate capacity, particularly since some new developments will replace existing developments, thus offsetting some of the additional capacity requirements. Determining the existing sewage flow through this campus sewer system is complicated since there are presently few water meters to provide a baseline for water use information. Also, many of the existing buildings are old enough, are varied in use, and have unique uses which make standard engineering estimates unreliable for this campus. As an assumed baseline, Steilacoom Public Works is charging Western State Hospital 1,500 REU's (residential equivalent units) each month.

The connection to the Steilacoom sewer system is at the southwest corner of the WSH campus, as indicated in Figure 26 on page 45. This connection is being upgraded, including the addition of a meter. Western State Hospital, in agreement with Steilacoom Public Works, will soon install a flume on the last section of private sewer main to measure the actual sewer flow discharging to the public sewer system. This data will allow for updated data on actual collection from the hospital campus.

Future development will require additional sewer capacity charges and will based on the calculated sewer demand from Pierce County Public Works and Utilities "Documented Water Use Data". The total future sewer capacity will be the current sewer capacity of the current campus development plus the sewer demand for any proposed developments and minus the removed buildings.

Pierce County Public Works has encouraged WSH to provide additional water monitoring on the campus, to support water conservation and support more accurate sewer demand estimates. WSH will evaluate enhanced water metering and monitoring as part of future projects.

† Lakewood Water District is an independent district - e.g., not a city agency - and secures its water fully from groundwater sources.

Any new developments which include food preparation facilities will need to include grease interceptors between the source of grease waste and the sewer main. These interceptors typically include exterior concrete vaults that will capture and store grease.

RAIN WATER

Western State Hospital is situated on gravely-sandy soils with medium to high infiltration rates. Currently, catch basins on campus are piped and flow to a combination of campus retention facilities or direct discharge to Chambers Creek. Infiltration systems range from 'formal' designed systems with a defined storage capacity sized per specific development requirements or 'informal' systems consisting of downspouts spilling onto the ground, for some older facilities.

Proposed developments will need to provide infiltration systems designed to address both treatment and infiltration requirements of the Stormwater Management Manual for Western Washington and other applicable regulations as administered by the City of Lakewood. Existing storm systems will not need to be replaced unless they are determined to be undersized for runoff discharging from new, upstream developments.

Proposed systems may include open infiltration ponds (where space allows) and underground storage pipes, vaults, and/or trenches. Ideally, infiltration systems will be located near the development, but site-specific features may dictate other locations on campus are more suitable. The gravely nature of the native soils will be conducive for on-site stormwater management systems such as bio-retention areas or porous pavements, particularly for stormwater discharging from 'clean' areas such as roofs or plaza areas.

Runoff from pollution-generating surfaces (i.e. parking lots and access drives) will need to be routed to a water quality treatment facility to remove particulates before discharging to the native soils. Typical water quality treatment systems include bio-retention areas, cartridge media filters, or below-grade concrete storage vaults.

Specific engineering of future systems will be included at the project level. Site-specific geotechnical analysis will be required to determine infiltration rates in the native soil and location requirements (such as setback distances from sensitive areas).

Acknowledgments

DEPARTMENT OF SOCIAL & HEALTH SERVICES (DSHS) MASTER PLAN LEADERSHIP

- Robert Hubenthal, Chief, Office of Capital Programs
- Aarón Martinez, Project Manager

WESTERN STATE HOSPITAL LEADERSHIP

- David Holt, Chief Executive Officer
- Danielle Cruver, Chief Operating Officer
- Chris Campbell, Deputy Chief Operating Officer
- Charles Southerland, Deputy Chief Executive Officer
- Kathy Spears, Chief Director of Communications
- Daniel Davis, Chief of Safety & Security
- Dr. Katherine Raymer, Chief Medical Officer
- Karen Pitman, Chief Nursing Officer
- Brian Wood, Chief Nursing Officer
- Bill Hamilton, Deputy Chief Medical Officer
- Joey Roberts, Facilities Office
- Dolynda Allen, CFS Administrator
- Linda C. Silva, Chief Quality Officer
- Angel Lugo Steidel, Chief Clinical Officer
- Michael Rogers
- Dominique Jordan

DSHS - OTHER AFFILIATIONS

- Clynn Wilkinson, Project Manager
- Lea McCormick, Project Manager
- Sean Murphy, Assistant Secretary
- Ken Taylor, Special Assistant
- Tony Bowie, Chief Executive Officer at CSTC
- Rick Mehlman, Prior Chief Executive Officer at CSTC
- Erik Logan, Director of Nursing at CSTC
- Kristi Sigafoos, Administrative Assistant at CSTC
- Carl Gray, Safety Officer at CSTC
- David Luxton, Development Administrator
- Jennifer Masterson, Senior Budget Assistant
- Carly Kujath, Capital Budget Assistant
- Devon Nichols, Budget Assistant
- Dr. Bill Hamilton, Deputy Chief Medical Officer
- Richard Morris

CONSULTANT TEAM

SRG PARTNERSHIP

- Craig Tompkins
- Pierce McVey
- Jon Mehlschau
- Eric Ridenour
- Carl Hampson
- Eric Reynaert

ARCHITECTURE +

- Francis Pitts
- Sara Wengert
- Hiroki Sawai

TRANSPORTATION SOLUTIONS INC.

- Jeffrey Hee

COUGHLIN PORTER LUNDEEN

- Keith Kruger

AFFILIATED ENGINEERS/AEI

- Sean Lawler

MURASE ASSOCIATES

- Mark Tilbe

PBS ENGINEERING & ENVIRONMENTAL

- Patrick Togher
- Tom Mergy