

# Clackamas County Main Street Courthouse Property Disposition

## REQUEST FOR EXPRESSIONS OF INTEREST for Real Estate Acquisition for Development Concepts

January 22, 2025



*Responses received prior to January 22, 2025 will be included for initial consideration*

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## County Contact

For all questions related to this Request for Expressions of Interest (RFEI), please email: [amayernik@clackamas.us](mailto:amayernik@clackamas.us) with subject: Main Street Courthouse RFEI. No other forms of communication will be accepted.

# 1. Introduction & Overview

## Introduction

Clackamas County is constructing a courthouse on the Red Soils Campus in Oregon City, which will be completed in May 2025, to replace the 87-year-old courthouse in downtown Oregon City. The County expects that the current courthouse, hereafter referred to as the Main Street Courthouse, will be vacated by August 2025. The County is issuing this request for Expressions of Interest (RFEI) to seek development concepts for the Main Street Courthouse from creative, experienced development teams.



## Clackamas County & Oregon City Overview

Clackamas County is both a rural and urban county located on the southeastern edge of the Portland, Oregon Metropolitan Area. Its boundaries extend from the City of Portland to the Mt. Hood National Forest. It is bounded by Multnomah County to the north, Wasco County and Hood River counties to the east, Marion County, home of the State Capitol, to the south, and Yamhill and Washington counties to the west. Clackamas County is Oregon's third-most populous county with a population of approximately 425,000 people. The County spans nearly 1,900 square miles and is roughly equivalent to the size of the state of Delaware.

The eastern half of the County is primarily rural with its main industries in the forest products, agricultural, and tourism sectors. The western side of the County is within the regional urban growth boundary (UGB) and is largely urban, with industrial and commercial commerce corridors.

Oregon City, the County seat, established by the Hudson's Bay Company in 1829, was incorporated in 1844 as the first city in the United States west of the Rocky Mountains. Oregon City serves as a regional center in the Portland Metro area, with the City's core having a vibrant mix of small-scale shops, restaurants, and culture amenities. As of the 2020 census, Oregon City has a population of 37,572.

## **Main Street Courthouse Overview**

The Main Street Courthouse, located at 807 Main Street, comprises a 0.94-acre parcel (Site) zoned Mixed-Use Downtown (MUD). The Site encompasses over 2/3 of a city block and is a high-profile location in the core of downtown Oregon City. The current building was constructed in 1935-1937 to replace an 1884 courthouse that was razed after being deemed unsafe. Designed by F. Marion Stokes, the building was constructed as part of the Works Progress Administration program under contractor Glen Hord.

Three stories tall with a full basement that serves as a ground floor, the building is situated at the corner of 8th Street and Main Street in Oregon City, with McLoughlin Boulevard on the northwestern side. An ADA-accessible entrance serves the southeastern side of the building, with additional entrances on 8th Street and from the parking lot off 9th Street.

The Main Street Courthouse is an Art Deco style building with Egyptian Revival overtones, constructed of reinforced concrete with a masonry façade, decorative elements, and double-hung windows covering all four major faces of the structure, and is considered historically significant by the State Historic Preservation Office (SHPO). In addition to interior renovations as occupancy of the building has changed, an addition constructed in 2012 maintains architectural consistency with the original building, allowing for differences due to the current use of the addition as a receiving and secure custody area for inmates awaiting trial and additional trial court space on the third floor. Submittals should contemplate the requirement under Oregon law to preserve the historical significance of the Main Street Courthouse building in consultation with SHPO.

A portion of the Site, known as Liberty Plaza, was consolidated into the current parcel in 2012 after the demolition of the Liberty Theater and construction of the plaza in 2004. Submittals should contemplate preserving the existing open space on the Site known as Liberty Plaza, either as part of the final project, or through a lot line adjustment to separate the two portions, but the County will consider alternative proposals. Final disposition of the Liberty Plaza space is expected to be a discussion item in any negotiations. Lot line adjustments would be subject to the final approval of the City of Oregon City. Additionally, there is a reciprocal access easement on a portion of the property in the northeastern corner that serves as ingress and egress for an adjoining tax lot on the same block.

## **Adjoining and other Relevant Properties**

Clackamas County owns the Ralph M. Holman Law Center, or the Holman Building, on the eastern corner of the block, at 821 Main Street, which currently hosts the county's Law Library, jury lounge, and other County services. The Law Library and jury lounge will be relocated when the Red Soils Courthouse opens in May 2025, and it is expected that other County functions will move into this building. A privately-owned commercial building, currently operating as a McMenamins restaurant with indoor and outdoor seating, occupies the northern corner of the block at 102 9th Street. An existing reciprocal access easement serves this commercial building, the Main Street Courthouse, and the Holman Building.

McLoughlin Boulevard, also known as Oregon Highway 99E, serves as the northern boundary of the block. The Willamette River sits immediately north of McLoughlin Boulevard and no significant property interests exist at this point in the river. On the 5 adjoining city blocks there are a number of privately-owned commercial spaces offering a wide variety of services, including a behavioral health center, commercial office spaces, retail storefronts, and a mix of dining establishments.

## **Solicitation Overview**

The County envisions private or public sector redevelopment to accomplish the goal of disposing of the Main Street Courthouse to a proposer that would contribute to the economic vitality of the downtown Oregon City area. This RFEI is intended to be flexible and invites concept renderings and sufficient detail to demonstrate a compelling vision for the Site from parties that demonstrate the capacity and experience to deliver that vision. It is not expected that submitters will provide final engineering drawings or designs.

The County is open to a broad range of proposals, and notes that the MUD zoning provides a wide range of possible uses, including mixed-use development, multi-family housing, retail and commercial spaces, temporary lodgings such as a hotel, or an event center. Submittals may contemplate reuse of the existing building, renovation of the existing building, demolition and construction of a new building, or any combination thereof.

The County will consider submittals that contemplate a standard purchase and sale to a public or private entity, including conditions of sale to be negotiated, as well as other alternative disposition proposals. Any disposal of County real property will be in compliance with applicable law including, but not limited to, ORS Chapter 271. In addition, the property will be conveyed as-is, with no representations or warranties, express or implied, made by County regarding the condition of the property or its fitness for any particular use, and will be conveyed via a quit claim deed. Proposers will be solely responsible for performing any and all due diligence and inspections associated with the property including, but not limited to, tests, borings, surveys, studies, inspections, investigations, tests for soils, geologic hazards, utility lines and systems and environmental hazards. Depending on the selected proposal the County may require additional restrictions on use of the property including, but not limited to, deed restrictions or restrictive covenants to ensure eligible use following disposition.

Without offering an assurance of direct investment, the County is prepared to assist the selected development team with securing funding to implement their proposal, which may include assistance with pre-development work. Additionally, the County is prepared to contemplate assistance with community engagement and necessary land use processes to implement the proposal.

Ultimately, the County seeks a qualified, professional development team demonstrating capacity in staffing, knowledge, and experience to deliver a project best fulfilling the County's goals as expressed in the selection criteria below. This RFEI sets forth the County's intentions for this project, including the selection criteria, selection process, and other information and requirements. Once it has selected a preferred team, the County intends to enter into exclusive negotiations with that team with the intent to initiate Site development as early as Summer 2025.

### **Creative & Innovative Concepts Encouraged**

The County has proposed a structure for the acquisition of the property identified in this solicitation but is open to alternatively structured acquisitions insofar as the structure aligns with the County's goals. Respondents can propose alternative structures and are encouraged to pursue creative and innovative concepts that incorporate other sources of funding. Should the proposer suggest alternative acquisition programs or structures, a preference will be placed on the ability to secure such financing quickly. The ability to close the transaction in a timely fashion is a critical component of the selection.

In October 2024, the Board of County Commissioners convened an advisory group to evaluate the current condition of the Main Street Courthouse and make a recommendation to the Board on the disposition of the current courthouse following the May 2025 completion of the Replacement County Courthouse under construction on the Red Soils Campus.

That advisory group recommended that the Board of County Commissioners sell or transfer the courthouse to an entity that would fully contribute to the economic vitality of the downtown Oregon City area. In addition, the advisory group outlined three considerations for the Board in determining how to proceed with disposition:

- Evaluate opportunities for continued public engagement and communication with stakeholders.
- Consider including criteria in the selection process that reflects the committee's desire to preserve and enhance the long-term economic vitality of the downtown Oregon City area.
- Encourage, where economically feasible, preservation or reuse of the facility's unique architectural features and assets.

### **Intentional Simplicity & Flexibility**

This RFEI is intended to be simple and to provide flexibility for the County and respondents to work through key details as part of exclusive negotiations. This solicitation does not require a complex or expensive response on the part of prospective respondents. The County is looking for creative responses that detail the respondent's ability to successfully acquire the property and implement a proposal that fully contributes to the economic vitality of the downtown Oregon City area.

### **Submittal and Review Process Overview**

The County has identified criteria it will consider when evaluating responses to this RFEI. Those criteria include each proposal's responsiveness to the objectives set forth in Section 3.

The deadline for submittals is **March 24, 2025 at 7:00 AM (PST)**. The County will enter into exclusive negotiations with successful respondents following the deadline.

Address RFEI responses and questions to: [amayernik@clackamas.us](mailto:amayernik@clackamas.us) with subject: Main Street Courthouse RFEI.

The County reserves the right to cancel or postpone this RFEI at any time and for any reason.

## 2. Offering Overview

### **Zoning**

The parcel is zoned as Mixed-Use Downtown by the City of Oregon City. Complete details can be found in the Oregon City Municipal Code Chapter 17.34. The zoning contemplates "...high-volume establishments constructed at the human scale such as retail, service, office, multi-family residential, lodging or similar as defined by the community development director. A mix of high-density residential, office and retail uses are encouraged in this district, with retail and service uses on the ground floor and office and residential uses on the upper floors. The emphasis is on those uses that encourage pedestrian and transit use. This district includes a downtown design district overlay for the historic downtown area. Retail and service uses on the ground floor and office and residential uses on the upper floors are encouraged in this district. The design standards for this sub-district require a continuous storefront façade featuring streetscape amenities to enhance the active and attractive pedestrian environment." Oregon City Municipal Code 17.34.010.

Proposers should consult with the City of Oregon City on any zoning or development standards questions, as the County is not the planning jurisdiction for this parcel.

### **Relevant Plans and Studies**

#### OC2040 Oregon City Comprehensive Plan

The City of Oregon City adopted OC2040 in 2022 as its blueprint for the future, a policy document that will guide growth, development, and public investment over the next 20 years. The Comprehensive Plan serves as the basis for Oregon City's land use planning process, and submittals should be in alignment with this document and other land use regulations.

#### Downtown Community Plan

The Downtown Community Plan was adopted in 1999 by the City of Oregon City and serves as a guiding document for efforts to redevelop the downtown core. The Downtown Community Plan addresses the entire Two Rivers Neighborhood Association, which extends along the Willamette River from Willamette Falls to the mouth of the Clackamas River and eastward along the Clackamas River to the I-205 crossing. Findings and recommendations from the Downtown Community Plan are incorporated into the OC2040 Comprehensive Plan.

#### 2021 Housing Needs Analysis

The City of Oregon City completed a Housing Needs Analysis in 2021, which projected a growth of 7,435 new dwelling units over the next 20 years. The Housing Needs Analysis identified a lack of housing, including a mix of single-family detached, single-family attached, duplexes/triplexes/quadplexes, and multifamily units. Findings and recommendations from the Housing Needs Analysis are incorporated into the OC2040 Comprehensive Plan.

#### 2013 Transportation System Plan

The City of Oregon City completed a Transportation System Plan in 2013, which identified the needs of the City's transportation network, including multimodal transportation improvements. Findings and recommendations from the Transportation System Plan are incorporated into the OC2040 Comprehensive Plan.

#### Oregon Inventory of Historic Properties

The State Historic Preservation Office has surveyed the Main Street Courthouse twice, once in May 2000 and again in July 2020. The surveys detail the historic significance of the property, including the manner and method of construction and any alterations.

### 2023 Oregon City Urban Renewal Plan

The Main Street Courthouse lies within the City of Oregon City's Downtown/North End Urban Renewal Area and has been identified by the Urban Renewal Agency as a "project of interest" for future Urban Renewal dollars. Submitters should consult with the Oregon City Renewal Agency on potential opportunities that this may present.

### Vertical Housing Development Zone

The Main Street Courthouse lies within the City of Oregon City's Vertical Housing Development Zone. The Vertical Housing Development Zone program provides qualified development projects a 10-year property tax exemption on the value of new construction or rehabilitation for 20 percent per residential floor above a commercial ground floor with total exemption limited to no more than 80 percent. Submitters should consult with the City of Oregon City on questions regarding the zone.



### 3. Selection Criteria & Process

#### Selection Criteria

The following are the criteria that the County will use in evaluating responses to this RFEI. Note that depending on the nature of any particular proposal, not all of these criteria may apply.

- Financial capacity to acquire the property and implement the proposal.
- Agency and management experience delivering similar proposals.
- The proposal's contribution to the economic vitality of the downtown Oregon City area.
- Preservation of the historical significance of the building and its environs.
- Retention of the portion of the site known as Liberty Plaza.
- Project timelines and anticipated opening date, with priority given to proposers that will move quickly.

#### Post-Selection Process

Upon selection, the County will enter into exclusive negotiations with the selected respondent(s) to negotiate the terms of the transaction. During this period, the County will work with the selected respondent(s) on the proposed program, deal structure, financing, and other components may be modified as a more defined proposal is developed. The County may, at any time, and in its sole discretion, cease negotiations with the selected respondent or respondents.

During this post-selection, but pre-sale phase, the County may negotiate a Memorandum of Understanding (MOU), term sheet, or other agreement with the selected respondent(s), setting forth in non-binding terms the financial, programmatic, and other general aspects of the sale. This agreement will also serve as the basis for the negotiation and execution of a subsequent binding document(s), including a purchase and sale agreement. The final, binding document(s) will govern the final disposition of the property, setting forth the terms of the transaction.

The agreement may include provisions reserving to the County the right to terminate negotiations with the selected respondent(s), if the County, in its sole discretion, determines that negotiations during the pre-sale phase are not progressing in a satisfactorily and/or timely manner.

All final binding document(s) are subject to approval by the Clackamas County Board of Commissioners.

#### Anticipated Schedule

<u>January 22, 2025</u>	Issuance of RFEI
<u>February 23, 2025</u>	Deadline to request clarifications to RFEI
<u>March 6, 2025</u>	County responses to requests for RFEI clarifications posted on website
<b><u>March 24, 2025 at 7:00 AM (PST)</u></b>	<b>Deadline for RFEI submissions</b>
<u>April 3, 2025 (tentative)</u>	County completes preliminary evaluation of submissions; decision regarding next steps (short list interviews, etc.)
<u>April 24, 2025 (tentative)</u>	Preliminary selection of respondent(s), pending further negotiations

## 4. Submission Format & Content

### **Preferred Format**

Responses must not exceed 25 pages including letters of reference, samples, financial information, or other supporting documents. Proposals are to be submitted electronically. Hard copies will not be accepted.

### **Recommended Content**

#### **1. Cover Letter**

- a. Briefly introduce the organization and describe its interest in the property.
- b. Summarize the proposed development, management experience, and acquisition overview.

#### **2. Proposal**

- a. Concept for ownership and operations of the Site, including the desired financing structure for acquisition.
- b. Estimated time frame to carry out the proposed acquisition and redevelopment.
- c. Description of how proposal aligns with County goals.

#### **3. Organization and Management Team**

- a. Identify organization and management members and roles and describe qualifications.
- b. Describe the organizations experience in the ownership and management of similar high-quality, successful projects.

#### **4. Financial Capacity**

- a. Explain the organization's financial capacity to undertake the acquisition and provide operating funding, including other funding sources available (such as rental agreements), and other financial requirements that may be a condition of the financing.

*Note: the County will work with agencies to determine appropriate representations and warranties or any other guarantees for the project.*

#### **5. Letters of Reference & Project Examples**

- a. Respondents may submit up to four letters of reference.
- b. Respondents are encouraged to include samples of other project examples.

## 5. General Conditions

1. The County reserves the right, in its sole discretion, to accept any response or to reject any or all responses to this RFEI.
2. The County reserves the right, in its sole discretion, to modify the selection process or other aspects of this RFEI, including canceling the RFEI at any time. The County will take reasonable steps to ensure that any modification or clarification to the RFEI are distributed in writing to all persons who have requested a copy of the RFEI.
3. The County reserves the right to request additional information following review of the initial RFEI response submission. In addition, the County may retain one or more consultants to assist in the evaluation of submissions.
4. In the interest of a fair and equitable selection process, the County reserves the right to determine the timing, arrangement, and method of any presentation throughout the selection process. Respondents are cautioned not to undertake any activities or actions to promote or advertise their proposals except during authorized presentations. However, respondents or their representatives are not permitted to make any direct or indirect (through others) contact with members of the Clackamas County Board of Commissioners, County, or Selection Advisory Committee (if established), concerning their proposals, except in the course of County-sponsored presentations. Violation of these conditions is grounds for disqualification of the respondent(s).
5. All submissions shall become the sole and exclusive property of the County. Respondent(s) shall not copyright, or cause to be copyrighted, any portion of their submission. Any proprietary financial information or other information which respondents identify as such will be maintained as confidential to the extent permitted under public records law. Submissions or information that respondents would like to remain confidential must be marked confidential.
6. The County makes no representations as to whether or not a project to be developed as a result of this RFEI, or any possible participation therein, is a “public improvement” project and as such is subject to the prevailing wage requirements of the Oregon Bureau of Labor and Industry.
7. Media releases or media contacts by the selected respondents pertaining to its selection will require prior written approval of the County.
8. The County permits the participation of real estate brokers acting on behalf of and with the authorization of respondents, provided that the broker arranges for the payment of its commission or other compensation exclusively by the respondent.
9. The County reserves the right to verify and investigate the qualifications and financial capacity of respondents.
10. Respondent costs of developing a proposal or any subsequent request for information, costs of attendance at an interview (if requested by the County), or any other costs incurred as a result of this RFEI are entirely the responsibility of the respondent, and will not be reimbursed in any manner by the County
11. By submitting a proposal, respondent certifies the following:
  - i. **OREGON TAX LAWS:** Respondent certifies that, to the best of the undersigned’s knowledge, respondent is not in violation of any Oregon Tax Laws. For purposes of this certification, “Oregon Tax Laws” means the tax laws of the state or a political subdivision of the state, including ORS 305.620 and ORS chapters 316, 317 and 318.
  - ii. **NON-DISCRIMINATION:** Respondent certifies that it has not and will not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation, gender identity, national origin, or any other protected class. Nor has respondent or will respondent discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business that is certified under ORS 200.055.

- iii. **CONFLICT OF INTEREST:** The undersigned hereby certifies that no elected official, officer, agent or employee of Clackamas County or the County is personally interested, directly or indirectly, in any resulting contract from this RFEI, or the compensation to be paid under such contract, and that no representation, statements (oral or in writing), of the County, the County, their elected officials, officers, agents, or employees had induced respondent to submit a proposal. In addition, the undersigned hereby certifies that any proposal is made without connection with any person, firm, or corporation submitting a proposal for the same material, and is in all respects fair and without collusion or fraud.

## 6. Exhibits: Background Documents

1. Clackamas County Courthouse CBRE Appraisal Report, December 2022
2. MEP Building Assessment, October 2015
3. Report of Geotechnical Engineering Services, October 2015
4. Seismic Evaluation Report, October 2015

CBRE VALUATION & ADVISORY SERVICES

# APPRAISAL REPORT

CLACKAMAS COUNTY COURTHOUSE  
807 MAIN STREET  
OREGON CITY, OREGON 97045  
CBRE FILE NO. CB22US130010-1

CLIENT: CLACKAMAS COUNTY  
CLIENT REFERENCE NO.: 4790

**CBRE**

Date of Report: December 15, 2022

Mr. Stephen L. Madkour  
Dept. Contract Administrator  
CLACKAMAS COUNTY  
2051 Kaen Rd  
Oregon City, Oregon 97045RE: Appraisal of: Clackamas County Courthouse  
807 Main Street  
Oregon City, Clackamas County, Oregon 97045  
CBRE, Inc. File No. CB22US130010-1  
Client Reference No.: 4790

Dear Mr. Madkour:

At your request and authorization, CBRE, Inc. has prepared an appraisal of the market value of the referenced property. Our analysis is presented in the following Appraisal Report.

The subject of this report includes a special use building comprising the Clackamas County Courthouse located within the Oregon City downtown area, along Highway 99E and overlooking the Willamette River. This is a functional courthouse property improved with 11 courtrooms, office areas, security areas, common areas and areas for inmate detention/transfer. The improvements were constructed in 1937, expanded in 2012, and are situated on a 0.94-acre site. This includes one building with three floors, plus a fully built-out daylight basement, with a total area of 65,527 SF. The building is of concrete/steel construction with a brick facade in an Art Deco building style.

The purpose of this report is to conclude the as-is market value of the subject's fee simple interest. The intended use is to estimate value for a potential sale of the property. The highest and best use of the subject is conversion/repurpose to a commercial use, and most likely an office use given the current build-out of the existing improvements.

Based on the analysis contained in the following report, the market value of the subject is concluded as follows.

<b>MARKET VALUE CONCLUSION</b>			
Appraisal Premise	Interest Appraised	Date of Value	Value Conclusion
As-Is Market Value	Fee Simple Estate	November 30, 2022	\$6,400,000
Land	Fee Simple Estate	November 30, 2022	\$1,670,000
Compiled by CBRE			

December 15, 2022

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The subject's land value was also developed to test the highest and best use of demolition verses conversion of the existing improvements. Based on a lower land value compared to the concluded as-is value for conversion/repurpose, demolition is not the concluded highest and best use of the subject. Furthermore, there are legal influences which may prevent demolition of the existing building. Please reference the Zoning section of this report for details.

The following appraisal sets forth the most pertinent data gathered, the techniques employed, and the reasoning leading to the opinion of value. The analyses, opinions and conclusions were developed based on, and this report has been prepared in conformance with, the guidelines and recommendations set forth in the Uniform Standards of Professional Appraisal Practice (USPAP), and the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.

The intended use and user of our report are specifically identified in our report as agreed upon in our contract for services and/or reliance language found in the report. As a condition to being granted the status of an intended user, any intended user who has not entered into a written agreement with CBRE in connection with its use of our report agrees to be bound by the terms and conditions of the agreement between CBRE and the client who ordered the report. No other use or user of the report is permitted by any other party for any other purpose. Dissemination of this report by any party to any non-intended users does not extend reliance to any such party, and CBRE will not be responsible for any unauthorized use of or reliance upon the report, its conclusions or contents (or any portion thereof).

It has been a pleasure to assist you in this assignment. If you have any questions concerning the analysis, or if CBRE can be of further service, please contact us.

Respectfully submitted,

CBRE - VALUATION & ADVISORY SERVICES



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Nick Anderson, MAI, RW-AC  
Vice President  
State Certified General Real Estate Appraiser  
Oregon Certification No. C001242  
Phone: 503.946.4941  
Email: [nick.anderson2@cbre.com](mailto:nick.anderson2@cbre.com)



## Certification

We certify to the best of our knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are our personal, impartial and unbiased professional analyses, opinions, and conclusions.
3. We have no present or prospective interest in or bias with respect to the property that is the subject of this report and have no personal interest in or bias with respect to the parties involved with this assignment.
4. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
5. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
6. Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice, as well as the requirements of the State of Oregon.
7. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
8. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
9. As of the date of this report, Nick Anderson, MAI, R/W-AC has completed the continuing education program for Designated Members of the Appraisal Institute.
10. Nick Anderson, MAI, R/W-AC inspected the subject and the Portland MSA comparables. The remaining comparables were not inspected due to their distance from the subject.
11. No one provided significant real property appraisal assistance to the persons signing this report.
12. Valuation & Advisory Services operates as an independent economic entity within CBRE, Inc. Although employees of other CBRE, Inc. divisions may be contacted as a part of our routine market research investigations, absolute client confidentiality and privacy were maintained at all times with regard to this assignment without conflict of interest.
13. Nick Anderson, MAI, R/W-AC has not provided any services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding agreement to perform this assignment.



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Nick Anderson, MAI, R/W-AC  
State Certified General Real Estate Appraiser  
Oregon Certification No. C001242

## Subject Photographs



Aerial View



Facing southwest along Main St



Facing northwest along 9<sup>th</sup> St



Facing southeast along 8<sup>th</sup> St



Facing southwest along Hwy 99E



Facing east at subject building



Facing northwest at subject building



Facing west at subj. property from Main St



Exterior view of inmate receiving area



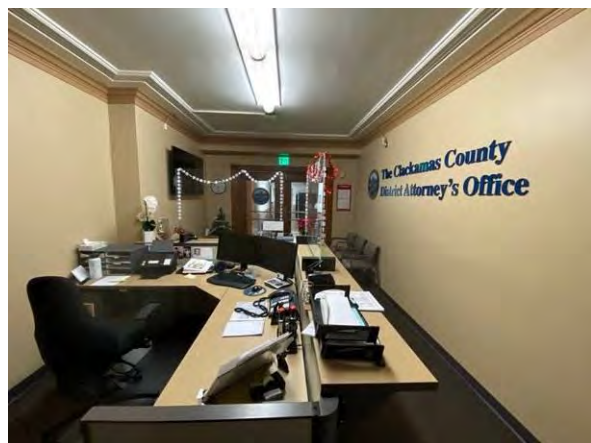
View of parking lot



View of Liberty Plaza



Ground Floor – Interior 8th Street Employee and Juror Entrance



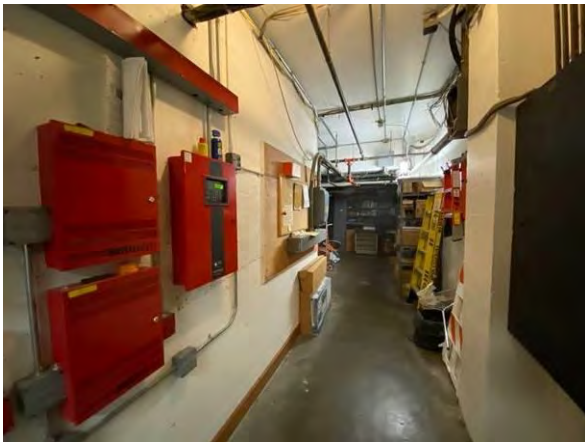
Ground Floor – Interior view of the District Attorney's Office Reception Desk



Ground Floor – Assistant District Attorney Office Spaces



Ground Floor – District Attorney's Lunch and Breakroom



Ground Floor – Mechanical Spaces



Ground Floor – Employee/Public Restroom



1<sup>st</sup> Floor – State Courts and Sheriff's Office, Civil Unit, Public Payment Windows



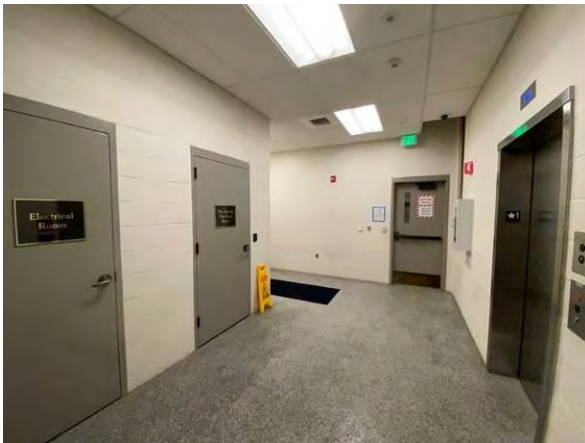
1<sup>st</sup> Floor – Public Restroom



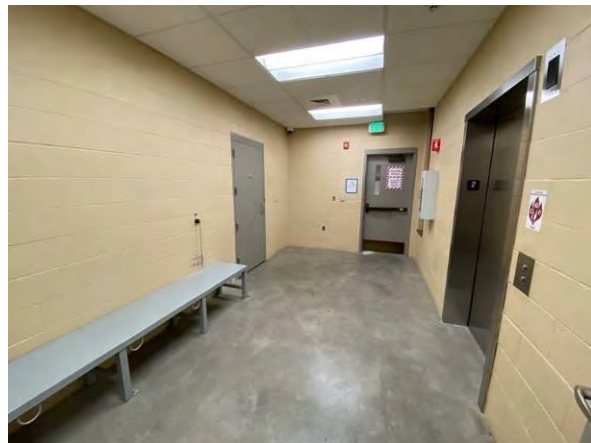
1<sup>st</sup> Floor – Lady Justice Statue and Public Staircase to the 2nd Floor



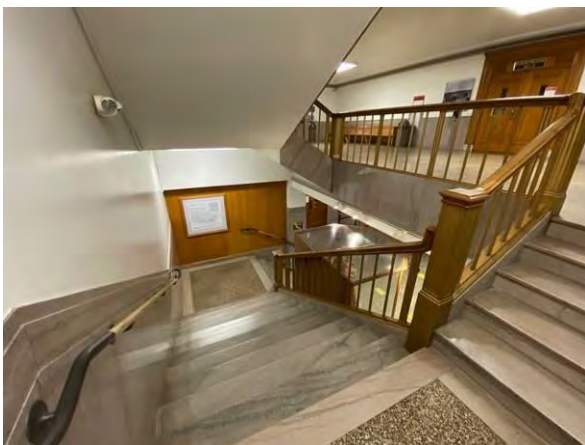
1<sup>st</sup> Floor – Sheriff's Office, Civil Sheriff Unit, Office and Security Monitoring Area



1<sup>st</sup> Floor – Secure Elevator from Inmate Receiving Area to Second Floor Detention Area



2<sup>nd</sup> Floor – Holding Cell Entrance



2<sup>nd</sup> Floor to 1<sup>st</sup> Floor – Public Staircase



2<sup>nd</sup> Floor – Main Public Lobby



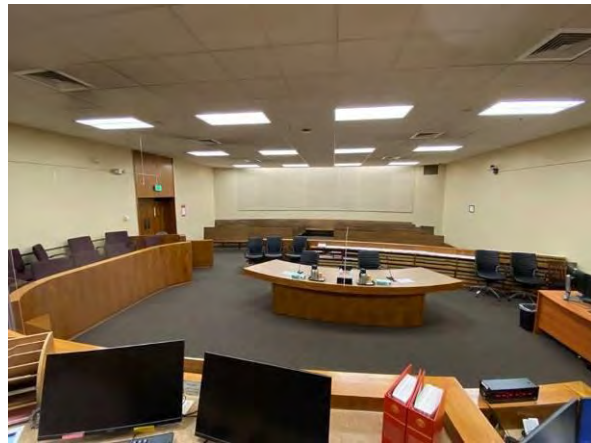
Typical Juror Deliberation Room



Typical 3<sup>rd</sup> Floor restroom



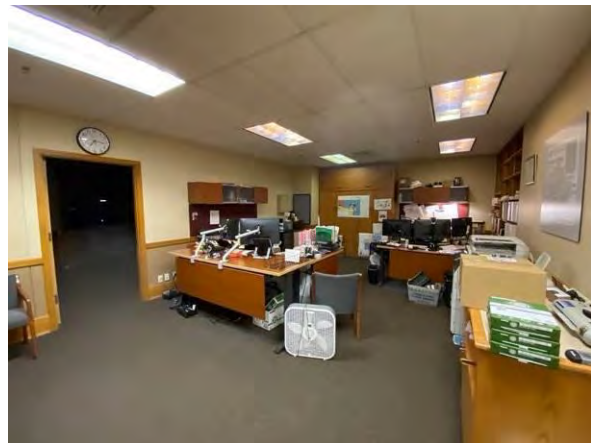
3<sup>rd</sup> Floor - Elevator Lobby and Main Public Stairway



Typical Courtroom



Typical Private Office



Typical Judge's Chambers & Office

## Executive Summary

<b>Property Name</b>	Clackamas County Courthouse	
<b>Location</b>	807 Main Street Oregon City, Clackamas County, OR 97045	
<b>Parcel Number(s)</b>	00572240	
<b>Client</b>	Clackamas County	
<b>Client Reference Number</b>	4790	
<b>Highest and Best Use</b>		
As If Vacant	Commercial development	
As Improved	Repurpose to a commercial use	
<b>Property Rights Appraised</b>	Fee Simple Estate	
<b>Date of Report</b>	December 15, 2022	
<b>Date of Inspection</b>	November 30, 2022	
<b>Estimated Exposure Time</b>	6 - 18 Months	
<b>Estimated Marketing Time</b>	6 - 18 Months	
<b>Primary Land Area</b>	0.94 AC	40,946 SF
<b>Zoning</b>	Mixed Use Downtown (MUD)	
<b>Improvements</b>		<b>Comments</b>
Property Type	Office	(Single Tenant)
Number of Buildings	1	
Number of Stories	3	or four stories including the fully built-out partial daylight basement
Gross Building Area	65,527 SF	Including the basement
Net Rentable Area	65,527 SF	Including the basement
Year Built	1937 / 2012	Addition added in 2012
Effective Age	25 Years	
Remaining Economic Life	25 Years	
Condition	Average	
<b>Buyer Profile</b>	Developer	
<b>VALUATION</b>	<b>Total</b>	<b>Per SF</b>
Land Value	\$1,670,000	\$40.79
Sales Comparison Approach	\$6,400,000	\$97.67

### CONCLUDED MARKET VALUE

Appraisal Premise	Interest Appraised	Date of Value	Value
As-Is Market Value	Fee Simple Estate	November 30, 2022	\$6,400,000
Land	Fee Simple Estate	November 30, 2022	\$1,670,000

Compiled by CBRE



## STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT)

### Strengths/ Opportunities

- Location in the Oregon City CBD with demand for a wide range of commercial uses, including office, retail and multi-family.
- Good exposure/access based on its location along Highway 99E.
- Good view premium of the Willamette River north of Highway 99E.
- Average to good location with the improvements exhibiting regular maintenance/repairs as needed.

### Weaknesses/ Threats

- Limited off-street parking; however, on-street parking is available.
- A 2015 seismic evaluation found the existing courthouse has numerous structural deficiencies. Soil tests indicate the ground under the building could liquefy during an earthquake. Due to the courthouse's proximity to the Willamette River, the building cannot be seismically retrofitted or modified to modern standards.
- Commercial real estate market conditions have deteriorated at the macro level. Borrowing costs have increased significantly. The higher cost of capital and the negative impact on transaction activity is impacting price discovery and creating more uncertainty. Rapidly increasing interest rates and subdued economic growth will continue to weigh on commercial real estate fundamentals and investment volumes. This creates a higher degree of uncertainty in general, though the impacts may vary by market and asset class/type.

## MARKET VOLATILITY

We draw your attention to the fact that a combination of global inflationary pressures, the rapid increase in the cost of capital, and the recent geopolitical events in Ukraine, in addition to the ongoing effects of the global Covid-19 pandemic in some markets, has heightened the potential for greater volatility in property markets over the short-to-medium term. Experience has shown that consumer and investor behavior can quickly change during periods of such heightened volatility and any lending or investment decisions should reflect this heightened level of volatility.

Please note that the conclusions set out in this report are valid as at the valuation date only. Where appropriate, we recommend that the valuation is closely monitored, as we continue to track how market participants respond to current events.

## CURRENT ECONOMIC CONDITIONS

- The Federal Reserve has raised the federal funds rate dramatically through multiple increases in 2022 to combat inflation. CPI figures in early Q4 2022 suggest inflation is slowing. A slight easing in inflation will allow the Fed to reduce the size of additional interest rate increases.
- The 10-year Treasury yield and Secured Overnight Financing Rate (SOFR) have also increased dramatically in 2022. Commercial real estate interest rates typically track at a risk spread over these rates. The cost of capital (higher interest rates and more stringent

underwriting) has increased dramatically in 2022 and is expected to remain at elevated levels into 2023.

- Tighter financial and worsening economic conditions are causing commercial real estate investment volume to decline.

Many expect the U.S. economy will enter a recession in the first half of 2023. As the economy cools and the labor market softens, lower inflation is anticipated. This is anticipated to prompt the Federal Reserve to moderate and conclude its rate increases in 2023.

The table below summarizes the CBRE “House View” for the Federal Funds Rate, 10-Year Treasury, and GDP over the next several years. This view is reflective of what market participants are anticipating over the mid-term.

	2022	2023	2024 - 2028
<b>Fed Funds Rate</b>	4.25% to 4.5%	4.75% to 5.0%	2.0% to 2.25%
<b>10-Year Treasury (Q4)</b>	3.7%	2.7%	3.0%
<b>GDP (Annual Average)</b>	1.6%	-0.20%	2.8%

The CBRE “House View” is for the yield on the 10-year Treasury to fall back to 2.7% by year-end 2023, which will aid in the recovery of real estate investment volume. This is consistent with many market participants who anticipate the cost of capital in the future to be lower than current conditions.

While opinions vary on future economic issues, the general market consensus at the time of this appraisal is the anticipation of moderating inflation as higher interest rates cool demand. Tighter financial and weaker macroeconomic conditions will weigh on real estate fundamentals, leading to lower real estate investment volume through the first half of 2023. Amid this uncertain and dynamic environment, investment market performance will be uneven across property types.

### EXTRAORDINARY ASSUMPTIONS

An extraordinary assumption is defined as “an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser’s opinions or conclusions.”<sup>1</sup>

- None noted

<sup>1</sup> The Appraisal Foundation, *USPAP, 2020-2021 (Effective January 1, 2020 through December 31, 2022)*

## HYPOTHETICAL CONDITIONS

A hypothetical condition is defined as “a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purposes of analysis.”<sup>2</sup>

- None noted

## OWNERSHIP AND PROPERTY HISTORY

OWNERSHIP SUMMARY	
Item	Current
<b>Current Ownership</b>	
Owner:	Clackamas County
Sale in Last 3 Years?:	No
<b>Pending Sale</b>	
Under Contract:	No
<b>Current Listing</b>	
Currently Listed For Sale:	No
Compiled by CBRE	

CBRE is not aware of any sales, listings or contracts of the subject property in the prior three years.

## EXPOSURE/MARKETING TIME

Current appraisal guidelines require an estimate of a reasonable time period in which the subject could be brought to market and sold. This reasonable time frame can either be examined historically or prospectively. In a historical analysis, this is referred to as exposure time. Exposure time always precedes the date of value, with the underlying premise being the time a property would have been on the market prior to the date of value, such that it would sell at its appraised value as of the date of value. On a prospective basis, the term marketing time is most often used. The exposure/marketing time is a function of price, time, and use. It is not an isolated estimate of time alone. In consideration of these factors, we have analyzed the following:

- exposure periods for comparable sales used in this appraisal;
- the opinions of market participants.

The following table presents the information derived from these sources.

<sup>2</sup> The Appraisal Foundation, *USPAP, 2020-2021 (Effective January 1, 2020 through December 31, 2022)*

Investment Type	Exposure/Mktg. (Months)	
	Range	Average
Comparable Sales Data (reflects the sale of similar buildings for conversion)	6.0 - 9.0	6.8
Local Market Professionals	6.0 - 18.0	
<b>CBRE Exposure Time Estimate</b>	<b>6 - 18 Months</b>	
<b>CBRE Marketing Period Estimate</b>	<b>6 - 18 Months</b>	
Various Sources Compiled by CBRE		

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A Land Sale Data Sheets	
B Improved Sale Data Sheets	
C Qualifications	

## Scope of Work

This Appraisal Report is intended to comply with the real property appraisal development and reporting requirements set forth under Standards Rule 1 and 2 of USPAP. The scope of the assignment relates to the extent and manner in which research is conducted, data is gathered, and analysis is applied.

### INTENDED USE OF REPORT

This appraisal is to be used for internal use and no other use is permitted. Reportedly, the owner will use the appraisal to establish value for a potential sale of the subject property.

### CLIENT

The client is Clackamas County.

### INTENDED USER OF REPORT

This appraisal is to be used by Clackamas County. No other user(s) may rely on our report unless as specifically indicated in this report.

Intended users are those who an appraiser intends will use the appraisal or review report. In other words, appraisers acknowledge at the outset of the assignment that they are developing their expert opinions for the use of the intended users they identify. Although the client provides information about the parties who may be intended users, ultimately it is the appraiser who decides who they are. This is an important point to be clear about: The client does not tell the appraiser who the intended users will be. Rather, the client tells the appraiser who the client needs the report to be speaking to, and given that information, the appraiser identifies the intended user or users. It is important to identify intended users because an appraiser's primary responsibility regarding the use of the report's opinions and conclusions is to those users. Intended users are those parties to whom an appraiser is responsible for communicating the findings in a clear and understandable manner. They are the audience.<sup>3</sup>

### RELIANCE LANGUAGE

Reliance on any reports produced by CBRE under this Agreement is extended solely to parties and entities expressly acknowledged in a signed writing by CBRE as Intended Users of the respective reports, provided that any conditions to such acknowledgement required by CBRE or hereunder have been satisfied. Parties or entities other than Intended Users who obtain a copy of the report or any portion thereof (including Client if it is not named as an Intended User), whether as a result of its direct dissemination or by any other means, may not rely upon any opinions or conclusions contained in the report or such portions thereof, and CBRE will not be responsible for

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<sup>3</sup> Appraisal Institute, *The Appraisal of Real Estate*, 15th ed. (Chicago: Appraisal Institute, 2020), 40.

any unpermitted use of the report, its conclusions or contents or have any liability in connection therewith.

## PURPOSE OF THE APPRAISAL

The purpose of this appraisal is to develop an opinion of the As-Is Market Value of the subject's fee simple interest.

## DEFINITION OF VALUE

The current economic definition of market value agreed upon by agencies that regulate federal financial institutions in the U.S. (and used herein) is as follows:

The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. buyer and seller are typically motivated;
2. both parties are well informed or well advised, and acting in what they consider their own best interests;
3. a reasonable time is allowed for exposure in the open market;
4. payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.<sup>4</sup>

## INTEREST APPRAISED

The value estimated represents the Fee Simple Estate as defined below:

**Fee Simple Estate** - Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power and escheat.<sup>5</sup>

**Leased Fee Interest** - The ownership interest held by the lessor, which includes the right to receive the contract rent specified in the lease plus the reversionary right when the lease expires.<sup>6</sup>

**Leasehold Estate** - The right held by the lessee to use and occupy real estate for a stated term and under the conditions specified in the lease.<sup>7</sup>

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<sup>4</sup> Interagency Appraisal and Evaluation Guidelines; December 10, 2010, Federal Register, Volume 75 Number 237, Page 77472.

<sup>5</sup> Appraisal Institute, The Dictionary of Real Estate Appraisal, 7<sup>th</sup> ed. (Chicago: Appraisal Institute, 2022), 73.

<sup>6</sup> Dictionary of Real Estate Appraisal, 105.

<sup>7</sup> Dictionary of Real Estate Appraisal, 105.

*Going Concern* – An established and operating business having an indefinite future life.<sup>8</sup>

### Extent to Which the Property is Identified

The property is identified through the following sources:

- postal address
- assessor's records

### Extent to Which the Property is Inspected

Nick Anderson, MAI, R/W-AC inspected the interior and exterior of the subject, as well as its surrounding environs on the effective date of appraisal. This inspection was considered adequate and is the basis for our findings.

### Type and Extent of the Data Researched

CBRE reviewed the following:

- applicable tax data
- zoning requirements
- flood zone status
- demographics
- comparable data

### Type and Extent of Analysis Applied

CBRE, Inc. analyzed the data gathered through the use of appropriate and accepted appraisal methodology to arrive at a probable value indication via each applicable approach to value. The steps required to complete each approach are discussed in the methodology section.

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<sup>8</sup> *Dictionary of Real Estate Appraisal*, 83.



## Data Resources Utilized in the Analysis

<b>DATA SOURCES</b>	
<i>Item:</i>	<i>Source(s):</i>
<b>Site Data</b>	
Size	Clackamas County Assessor
<b>Improved Data</b>	
Building Area	Client
Parking Spaces	Inspection
Year Built/Developed	Clackamas County Assessor
<b>Economic Data</b>	
Deferred Maintenance:	None noted or observed
<b>Other</b>	
Zoning Information	Oregon City Planning Department
Tax Information	Clackamas County Assessor
Comparable Information	See datasheets for details
<b>Data Not Provided</b>	
Item 1	Preliminary Title Report
Item 2	Engineering studies, soil tests or environmental assessments
Compiled by CBRE	

## APPRAISAL METHODOLOGY

In appraisal practice, an approach to value is included or omitted based on its applicability to the property type being valued and the quality and quantity of information available.

### Cost Approach

The cost approach is based on the proposition that the informed purchaser would pay no more for the subject than the cost to produce a substitute property with equivalent utility. This approach is particularly applicable when the property being appraised involves relatively new improvements that represent the highest and best use of the land, or when it is improved with relatively unique or specialized improvements for which there exist few sales or leases of comparable properties.

### Sales Comparison Approach

The sales comparison approach utilizes sales of comparable properties, adjusted for differences, to indicate a value for the subject. Valuation is typically accomplished using physical units of comparison such as price per square foot, price per unit, price per floor, etc., or economic units of comparison such as gross rent multiplier. Adjustments are applied to the physical units of comparison derived from the comparable sale. The unit of comparison chosen for the subject is then used to yield a total value. Economic units of comparison are not adjusted, but rather analyzed as to relevant differences, with the final estimate derived based on the general comparisons.

### Income Capitalization Approach

The income capitalization approach reflects the subject's income-producing capabilities. This approach is based on the assumption that value is created by the expectation of benefits to be

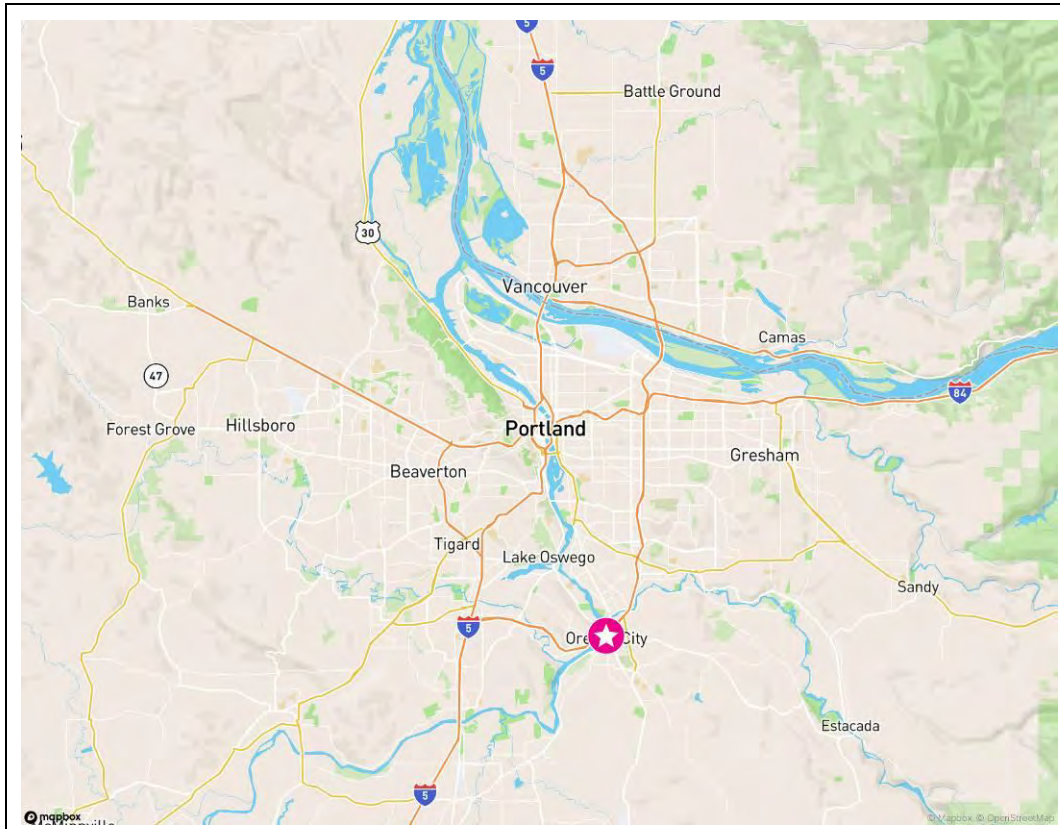
derived in the future. Specifically estimated is the amount an investor would be willing to pay to receive an income stream plus reversion value from a property over a period of time. The two common valuation techniques associated with the income capitalization approach are direct capitalization and the discounted cash flow (DCF) analysis.

### **Methodology Applicable to the Subject**

The highest and best use of the subject is concluded to be conversion to a commercial use, and most likely an office use based on the existing build-out. Within this approach the sales comparison approach is used to value the subject based on similar properties that have sold for a conversion use. The cost and income approaches are generally not creditable with similar speculative developments. As such, these approaches have been excluded. The exclusion of these approaches does not reduce the creditability of this analysis.

The subject's land value is also developed by the sales comparison approach to test the highest and best use of the subject for demolition verses conversion.

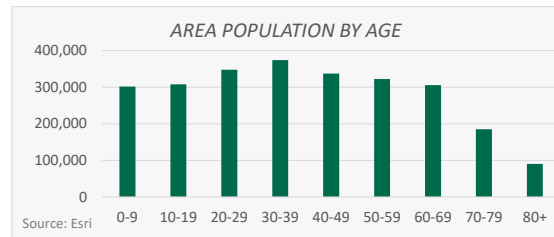
## Area Analysis



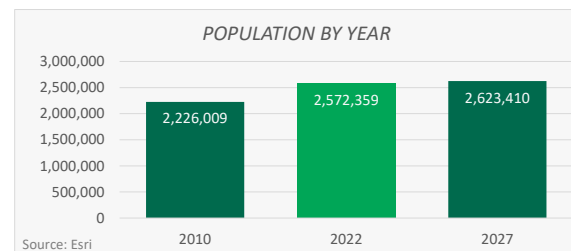
The subject is located in the Portland MSA. Key information about the area is provided in the following tables.

### POPULATION

The area has a population of 2,572,359 and a median age of 39, with the largest population group in the 30-39 age range and the smallest population in 80+ age range.



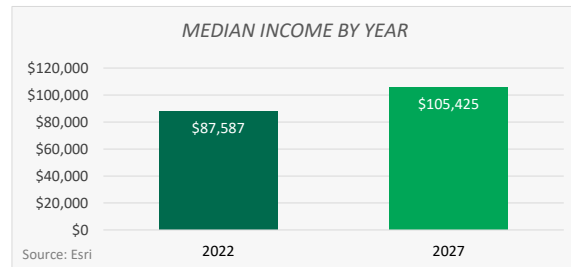
Population has increased by 346,350 since 2010, reflecting an annual increase of 1.2%. Population is projected to increase by 51,051 between 2022 and 2027, reflecting a 0.4% annual population growth.



Source: ESRI, downloaded on Dec, 9 2022

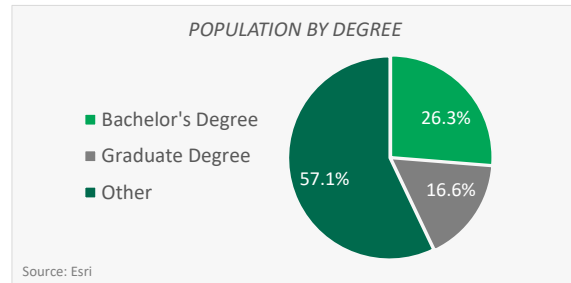
## INCOME

The area features an average household income of \$119,209 and a median household income of \$87,587. Over the next five years, median household income is expected to increase by 20.4%, or \$3,568 per annum.

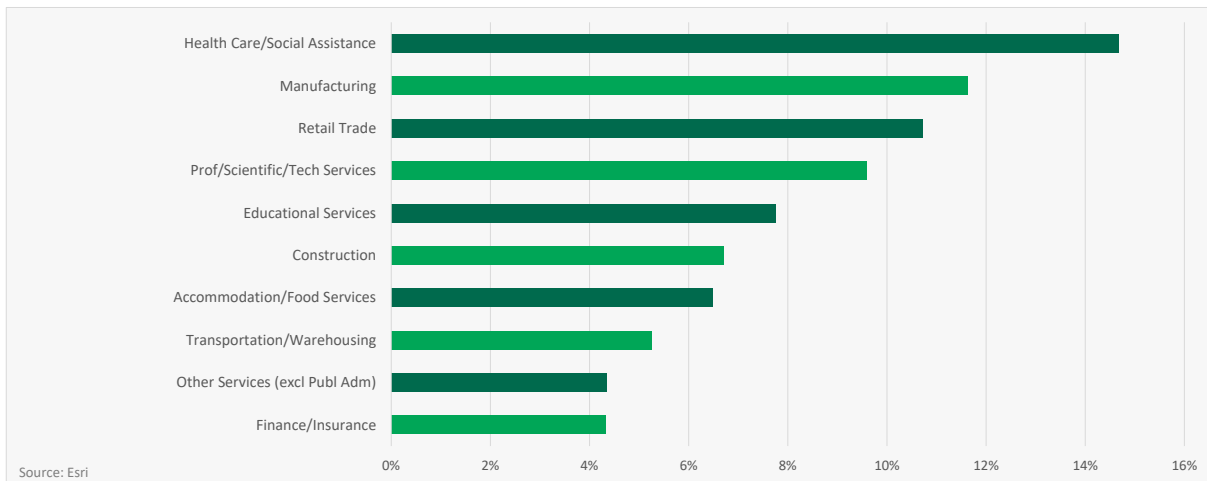


## EDUCATION

A total of 42.9% of individuals over the age of 24 have a college degree, with 26.3% holding a bachelor's degree and 16.6% holding a graduate degree.



## EMPLOYMENT



The area includes a total of 1,365,636 employees and has a 3.7% unemployment rate. The top three industries within the area are Health Care/Social Assistance, Manufacturing and Retail Trade, which represent a combined total of 37% of the workforce.

Source: ESRI, downloaded on Dec 9, 2022; BLS.gov dated Oct 1, 2022 (preliminary)

## CONCLUSION

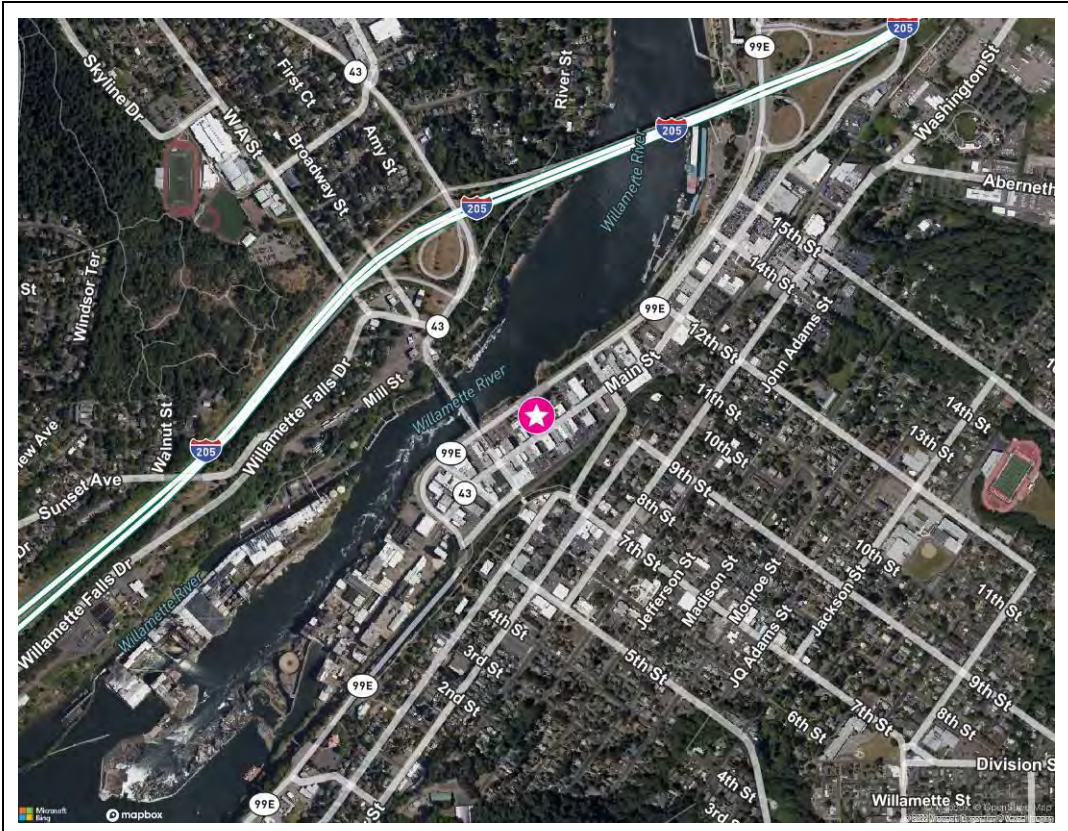
The Portland metro-area is home to some of the most recognizable companies in the world including: Intel, Nike and Columbia Sportswear. Portland is also fertile ground for start-ups and small businesses and is a regional technology hub. A wide range of firms have been attracted to the Portland Metro's quality of life, transportation options, and skilled workforce.

Livability and affordability are hallmarks of the Portland region. The area's abundant natural beauty, mild climate, easy access to Portland International Airport, expansive public transportation system, wide variety of housing options and more make Portland a superb place to work and live. Portland is a hub for innovation and a workforce talent magnet. With a metropolitan labor force growing at six times the national average, this region is home to a deep pool of skilled workers across all industry sectors.

While average salaries in the Portland region can be lower than those of other west coast metros, Portland's cost of living and social amenities are equal to or better. Continued growth in the region's talented workforce suggests that skilled workers understand that their wages will go further here. Employers are attracted to affordable talent. Significant industries in the Portland-Vancouver-Hillsboro include computers/electronics, clean tech, health sciences, athletic and outdoor apparel, and software/technology.

Portland MSA has experienced stable population growth for several consecutive years. According to the information provided by ESRI, which is further supported by the opinions of local economists, continued population growth is expected. In addition, individual and household incomes are projected to continue to grow. Further population and income growth will continue to boost the local economy. Over the long run, the Portland MSA is projected to be an above-average performer.

# Neighborhood Analysis



## LOCATION

The subject property is located in Oregon City, which is a small, historic community situated along the eastern side of the Willamette River, approximately 13 miles southeast of downtown. The immediate area consists of single-family homes, apartment complexes, office buildings, and retail uses.

## BOUNDARIES

The neighborhood boundaries are detailed as follows:

- North: Willamette River/Clackamas River
- South: S. Leland Road
- East: State Highway 213
- West: Willamette River

## RESIDENTIAL DEVELOPMENT

Residential development in the subject market is varied and consists of multi-family projects, older homes on acreage tracts, and newer subdivision development. The older homes are typically average quality and are concentrated in the eastern and southern areas of Oregon City. Substantial new subdivision development occurred between 2000 to 2007 and mid-2010s in the

southern portion of the city. Subdivision development in recent years has slowed due primarily to a low inventory of development land.

Historically, multi-family development in Oregon City has been apartment complexes, many of which were constructed in the late 1960s and early 1970s. These complexes are typically in fair to average condition and range in size from 10 to 50 units. Over the last ten years, a significant number of wood-framed, low-rise, average-quality, garden court apartment complexes have been constructed.

### **COMMERCIAL DEVELOPMENT**

Commercial development in Oregon City occurred first in the historical downtown area and later developed along Molalla Avenue and Hwy 213. Molalla Avenue and S. Beaver Creek Road are now the primary commercial corridors for the city. The downtown core consists of older, average quality commercial buildings, while the properties along the southern stretch of Molalla Avenue and S. Beaver Creek Road are typically newer and of varying quality generally ranging from average to good quality. Commercial growth appears to be moving south along Molalla Avenue and S. Beaver Creek Road. This includes the Red Soils campus, a 55-acre site that consolidates most of Clackamas County's government services and facilities into a campus location. Major development in the area includes the Hilltop Mall, with Safeway grocery anchor (178,798 SF built in 1974 and renovated in 2002), South Ridge Shopping Center (125,224 SF built in 1978), Fred Meyer (186,300 SF built in 1981), the Berry Hill Shopping Center (200,000 SF built in 1989), Trails End Market Place (107,000 SF built in 2000), and Oregon City Point (35,305 SF built in 2007).

### **INDUSTRIAL DEVELOPMENT**

Oregon City has a relatively small industrial base. Areas of industrial development are located at the north end of the city near Abernathy Road and in the southern portion of the city at the juncture of S. Beaver Creek Road and Molalla Avenue. These areas include the Fir Street industrial subdivision and the Red Soils Campus Industrial Park and Red Soils Business Park I and II.

### **COMMUNITY SERVICES & TRANSPORTATION**

Community services and facilities are readily available in the surrounding area. These include public services such as fire stations, hospitals, police stations, and schools (all ages).

Oregon City High School is located approximately 4 miles southeast along S. Beaver Creek Road, and Clackamas Community College is located to the east, situated between S. Beaver Creek Road and Hwy 213. There are a number of parks, golf courses, and other recreational facilities in the area.

Primary access to the subject neighborhood is provided by Interstate 205. This roadway provides direct access to the Portland International Airport and the state of Washington, approximately 20

miles to the north. South of Oregon City, the freeway connects with Interstate 5. Access is also provided by Highway 99E, which extends north to Portland and south to the city of Salem. The area is served by the TriMet, which is the regional transportation provider.

### **GRAND RONDE WILLAMETTE FALLS PROJECT**

On August 15, 2019, the Confederated Tribes of Grand Ronde purchased a 23-acre property at Willamette Falls that was formerly home to a Blue Heron Paper Company mill. The property, which sits on the east bank of the Willamette River in Oregon City, is located within the Tribe's ancestral homelands land and holds significant historical and cultural importance for the Tribe.

Since acquiring the property, the Tribe has been working with a design team from GBD Architects and Walker | Macy to create a vision for the site.

At the site itself, that vision will come to life through:

- Environmental restoration that will restore long-lost natural basalt landscape and water channels.
- Native plantings and restored riparian habitat to benefit native fish, birds and other wildlife.
- Thoughtful mixed-use development at the north end of the site that would visually and physically connect to the restored landscape.
- Opportunities include office, hospitality, institutional or educational spaces, tribal areas, public gathering spots and a long-planned Riverwalk.
- Opportunities to share the story of the Tribe and its historical and cultural connection to Willamette Falls.
- Access to the falls for members of the Tribe and the general public.

The following map summarizes the project area and subject.





**DEMOGRAPHICS**

Selected neighborhood demographics in 1-, 3- and 5-mile radius from the subject are shown in the following table:

**SELECTED NEIGHBORHOOD DEMOGRAPHICS**

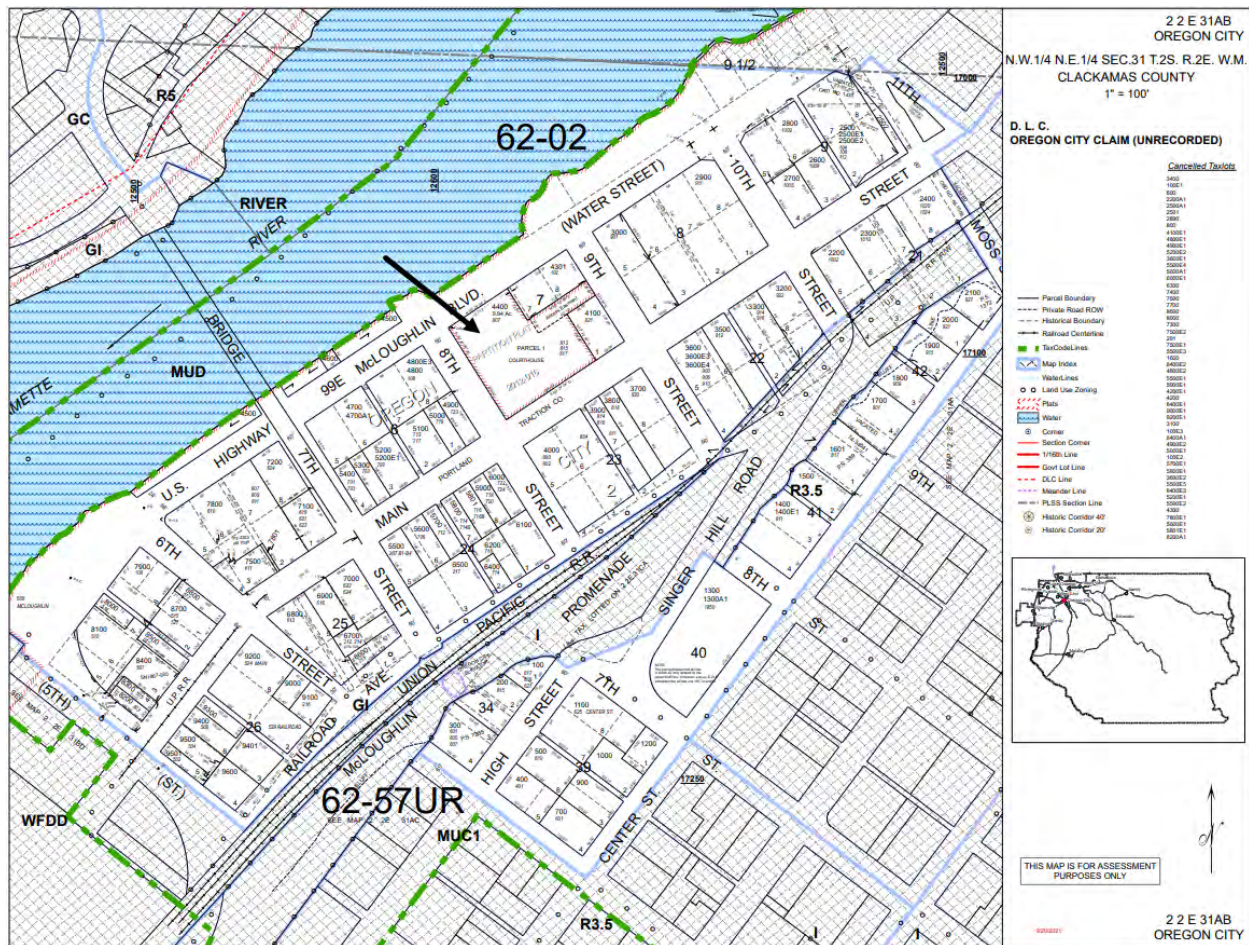
807 Main Street 807 Main Street Oregon City, OR 97045	1 Mile Radius	3 Mile Radius	5 Mile Radius	Portland- Vancouver- Hillsboro, OR- WA
<b>Population</b>				
2027 Total Population	8,693	83,130	142,920	2,623,410
2022 Total Population	8,638	82,187	141,267	2,572,359
2010 Total Population	7,877	74,681	129,509	2,226,009
2000 Total Population	8,056	67,495	118,334	1,927,881
Annual Growth 2022 - 2027	0.13%	0.23%	0.23%	0.39%
Annual Growth 2010 - 2022	0.77%	0.80%	0.73%	1.21%
Annual Growth 2000 - 2010	-0.22%	1.02%	0.91%	1.45%
<b>Households</b>				
2027 Total Households	3,467	31,375	55,186	1,020,870
2022 Total Households	3,450	31,078	54,652	1,002,208
2010 Total Households	3,230	28,766	50,871	867,794
2000 Total Households	3,147	25,080	45,179	745,531
Annual Growth 2022 - 2027	0.10%	0.19%	0.19%	0.37%
Annual Growth 2010 - 2022	0.55%	0.65%	0.60%	1.21%
Annual Growth 2000 - 2010	0.26%	1.38%	1.19%	1.53%
<b>Income</b>				
2022 Median Household Income	\$79,768	\$90,304	\$90,502	\$87,587
2022 Average Household Income	\$110,129	\$122,460	\$123,490	\$119,209
2022 Per Capita Income	\$43,214	\$46,564	\$47,540	\$46,490
2022 Pop 25+ College Graduates	2,504	23,201	41,902	774,285
Age 25+ Percent College Graduates - 2022	40.5%	39.5%	40.9%	42.9%

Source: ESRI

**CONCLUSION**

As summarized in the above chart, the neighborhood has experienced positive growth in both population and households from 2000 to 2022. Positive growth is expected to continue in the neighborhood through 2027. The subject is located in an area of commercial and residential uses, and would be well suited for conversion to a similar use (based on the concluded highest and best use developed in this report). Overall, the subject neighborhood is forecast to maintain a stable performance over the mid to long-term.

PLAT MAP



FLOOD PLAIN MAP



## Site Analysis

The following chart summarizes the salient characteristics of the subject site.

<b>SITE SUMMARY AND ANALYSIS</b>			
<b>Physical Description</b>			
Gross Site Area	0.94 Acres	40,946 Sq. Ft.	
Net Site Area	0.94 Acres	40,946 Sq. Ft.	
Primary Road Frontage	Highway 99E	136 Feet	
Secondary Road Frontage	Main Street	208 Feet	
Additional Road Frontage	8th St	210 Feet	
Additional Road Frontage	9th St	33 Feet	
Shape	Irregular		
Topography	Level, At Street Grade		
Parcel Number(s)	00572240		
Zoning District	Mixed Use Downtown (MUD)		
Flood Map Panel No. & Date	41005C0276D	17-Jun-08	
Flood Zone	Zone X (Unshaded)		
Adjacent Land Uses	Commercial		
<b>Comparative Analysis</b>		<b>Rating</b>	
Visibility	Good		
Functional Utility	Good		
Traffic Volume	Good		
Adequacy of Utilities	Assumed Adequate		
Landscaping	Adequate		
Drainage	Assumed Adequate		
<b>Other</b>	<b><u>Yes</u></b>	<b><u>No</u></b>	<b><u>Unknown</u></b>
Detrimental Easements		Assumed No	
Encroachments		Assumed No	
Deed Restrictions		Assumed No	
Reciprocal Parking Rights		Assumed No	
Various sources compiled by CBRE			

### LOCATION

The subject includes a partial city block bounded by Main Street (south), Highway 99E (north), 8<sup>th</sup> Street (west) and 9<sup>th</sup> Street (east). The street address is 807 Main Street, Oregon City, Oregon 97045.

### SHAPE

The site is irregular in shape; however, the overall size and shape are adequate for development.

## ACCESS/EXPOSURE

The subject includes the majority of a full city block with corner frontage at the Main Street / 8<sup>th</sup> Street and Highway 99E / 8<sup>th</sup> Street intersections.

Main Street is the main arterial in downtown Oregon City with a large amount of pedestrian traffic. Main Street is improved with one lane of traffic in each direction. Street improvements include asphalt paving and concrete curbs, gutters and sidewalks, and street lighting. Street parking is permitted.

Highway 99E (McLoughlin Boulevard) is the primary arterial providing access to the subject neighborhood and provides access to the Interstate 205 interchange roughly half a mile northeast. It also provides direct access to the core Portland area roughly 11 miles north, as well as the cities of Canby and Woodburn roughly nine and 19 miles to the southwest. At the subject, Highway 99E is improved with asphalt, two lanes of traffic in either direction, curbs/sidewalks, and pole mounted streetlights.

8<sup>th</sup> Street is a one lane/one way street, whereas 9<sup>th</sup> Street is a two lane/two way street at the subject. Both are improved with asphalt, concrete curbs, gutters and sidewalks, and street lighting. On-street parking is permitted.

## TOPOGRAPHY & DRAINAGE

The site has a moderate down-sloped topography to the north to Highway 99E. During our inspection of the site, we observed no drainage problems and assume that none exist.

## SOILS

A soil analysis for the site has not been provided for the preparation of this appraisal. In the absence of a soil report, it is a specific assumption that the site has adequate soils to support the highest and best use.

Based on information provided by Clackamas County, A 2015 seismic evaluation found the existing courthouse has numerous structural deficiencies. Soil tests indicate the ground under the building could liquefy during an earthquake. Due to the courthouse's close proximity to the Willamette River and soil quality, it cannot be seismically retrofitted or modified to modern standards.

## UTILITIES & SERVICES

The site is within the jurisdiction of the city of Oregon City and is provided all municipal services, including police, fire and refuse garbage collection. All utilities are available to the site in adequate quality and quantity to service the highest and best use as if vacant and as improved.

## EASEMENTS & ENCROACHMENTS

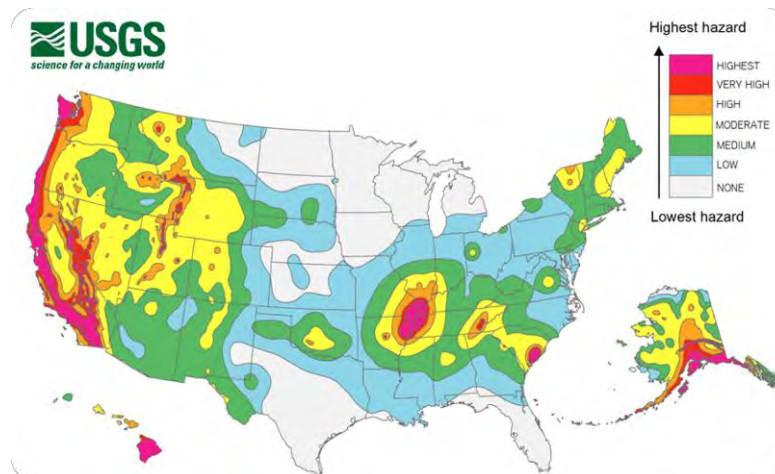
A title policy for the property has not been provided for the preparation of this appraisal. Based on our visual inspection, the property does not appear to be adversely affected by any easements or encroachments. It is recommended that the client/reader obtain a current title policy outlining all easements and encroachments on the property, if any, prior to making a business decision.

## FLOOD ZONE

The subject is located within the Zone X (unshaded) flood zone. Zones C and X (unshaded) are flood insurance rate zones used for areas outside the 0.2-percent-annual-chance floodplain. No Base Flood Elevations (BFEs) or depths are shown in this zone, and insurance purchase is not required.

## EARTHQUAKE ZONE

Based on a review of the map below, the subject is located in a high-risk area.



## ENVIRONMENTAL ISSUES

The appraisers are not qualified to detect the existence of potentially hazardous material or underground storage tanks which may be present on or near the site. The existence of hazardous materials or underground storage tanks may affect the value of the property. For this appraisal, CBRE, Inc. has specifically assumed that the property is not affected by any hazardous materials that may be present on or near the property.

## ADJACENT PROPERTIES

The adjacent land uses are summarized as follows:

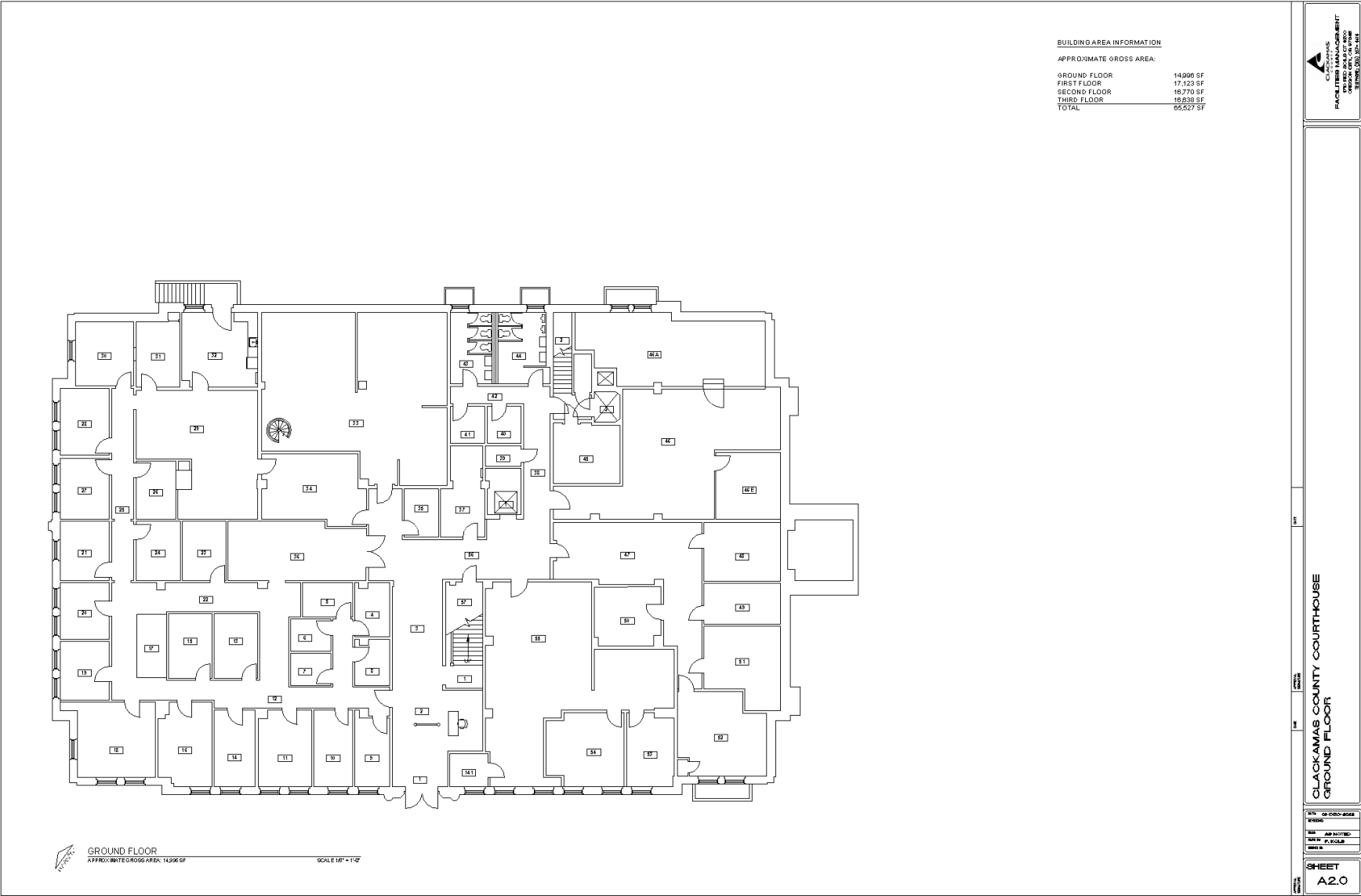
North: Highway 99E followed by the Willamette River  
South: Main Street and commercial development  
East: 8<sup>th</sup> Street and commercial development  
West: 9<sup>th</sup> Street and commercial development

## CONCLUSION

Overall, the subject site is considered to be an average/good commercial site in terms of its location, exposure, and access to various transportation routes; recognizing its location in the downtown Oregon City area.



FLOOR PLAN



**BUILDING AREA INFORMATION**

APPROXIMATE GROSS AREA:

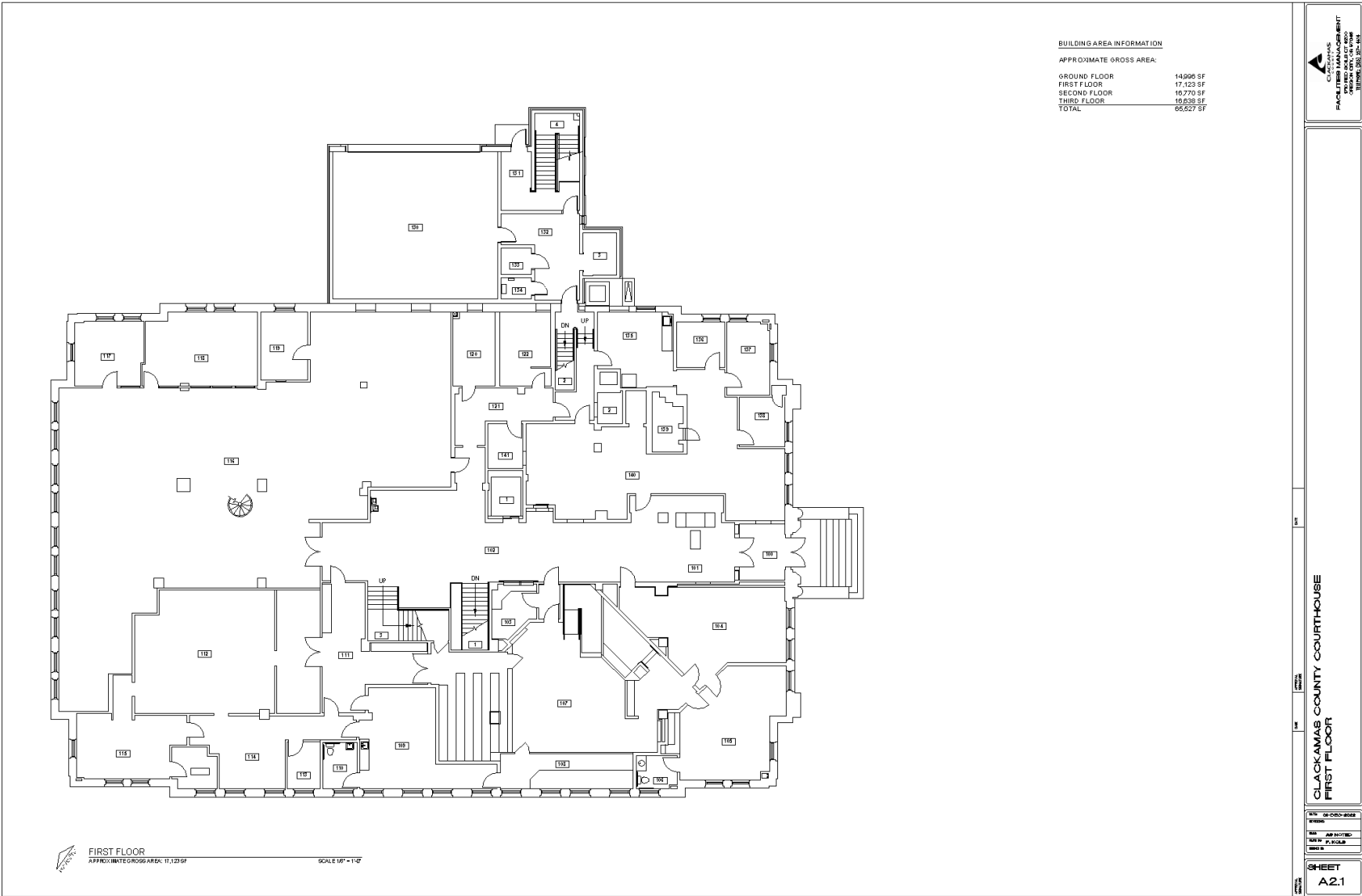
GROUND FLOOR	14,996 SF
FIRST FLOOR	17,423 SF
SECOND FLOOR	18,770 SF
THIRD FLOOR	19,238 SF
TOTAL	69,427 SF



CLACKAMAS COUNTY COURTHOUSE  
GROUND FLOOR

DATE	10/20/2022
BY	ARCHITECT
SCALE	1/8" = 1'-0"
<b>SHEET</b>	
<b>A2.0</b>	

GROUND FLOOR  
APPROXIMATE GROSS AREA: 14,996 SF  
SCALE 1/8" = 1'-0"



**BUILDING AREA INFORMATION**

APPROXIMATE GROSS AREA:

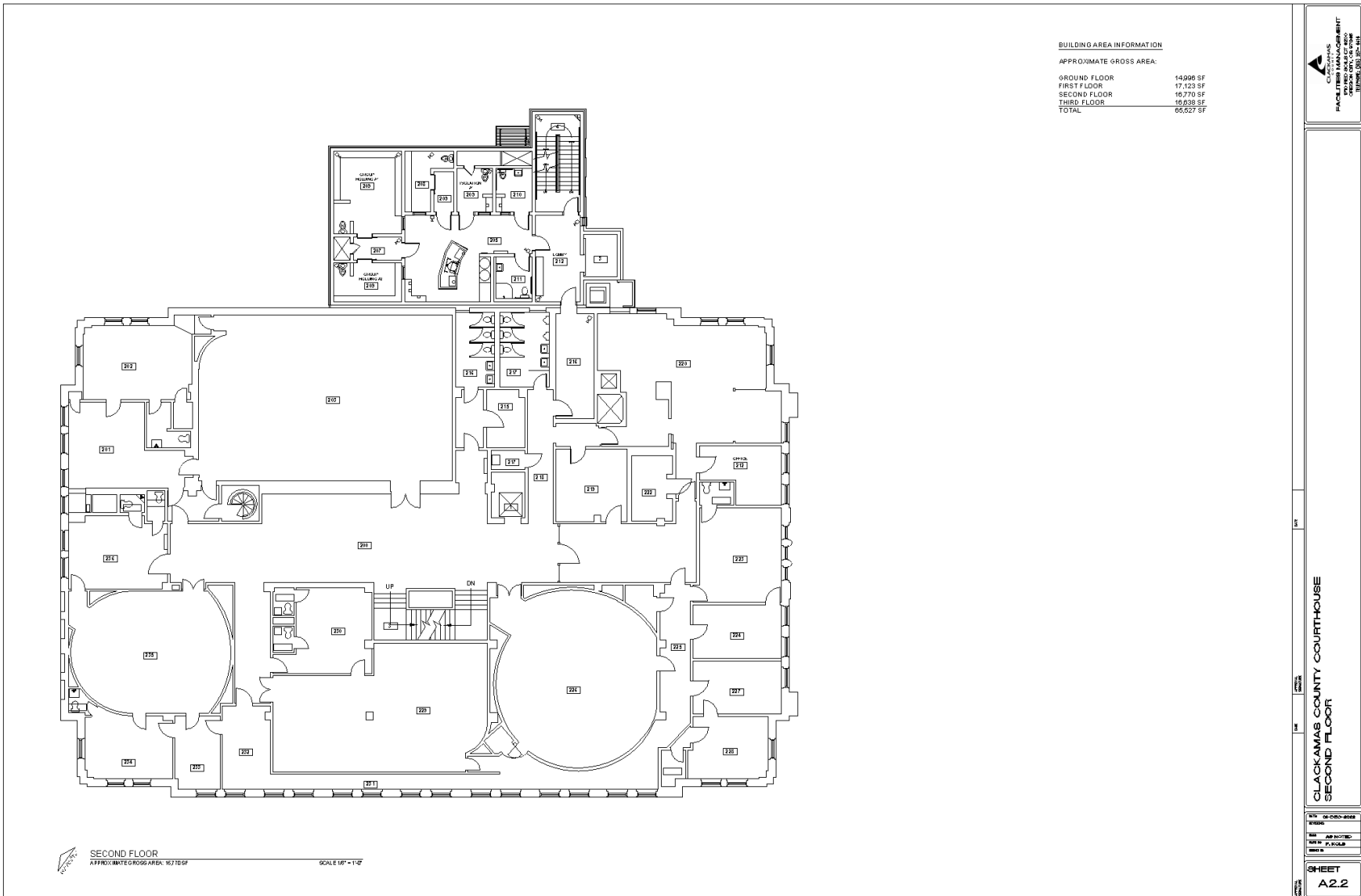
GROUND FLOOR	14990 SF
FIRST FLOOR	17,123 SF
SECOND FLOOR	16,770 SF
THIRD FLOOR	18,638 SF
TOTAL	68,521 SF



CLACKAMAS COUNTY COURTHOUSE  
FIRST FLOOR

FIRST FLOOR  
APPROXIMATE GROSS AREA: 17,123 SF  
SCALE: 1/4" = 1'-0"

NO.	22-CR-002
DATE	08/2022
BY	AS NOTED
CHK'D	FL/KLB
DATE	
SHEET	
A2.1	



**BUILDING AREA INFORMATION**

APPROXIMATE GROSS AREA:

GROUND FLOOR	14,996 SF
FIRST FLOOR	17,123 SF
SECOND FLOOR	16,770 SF
THIRD FLOOR	16,638 SF
<b>TOTAL</b>	<b>65,527 SF</b>

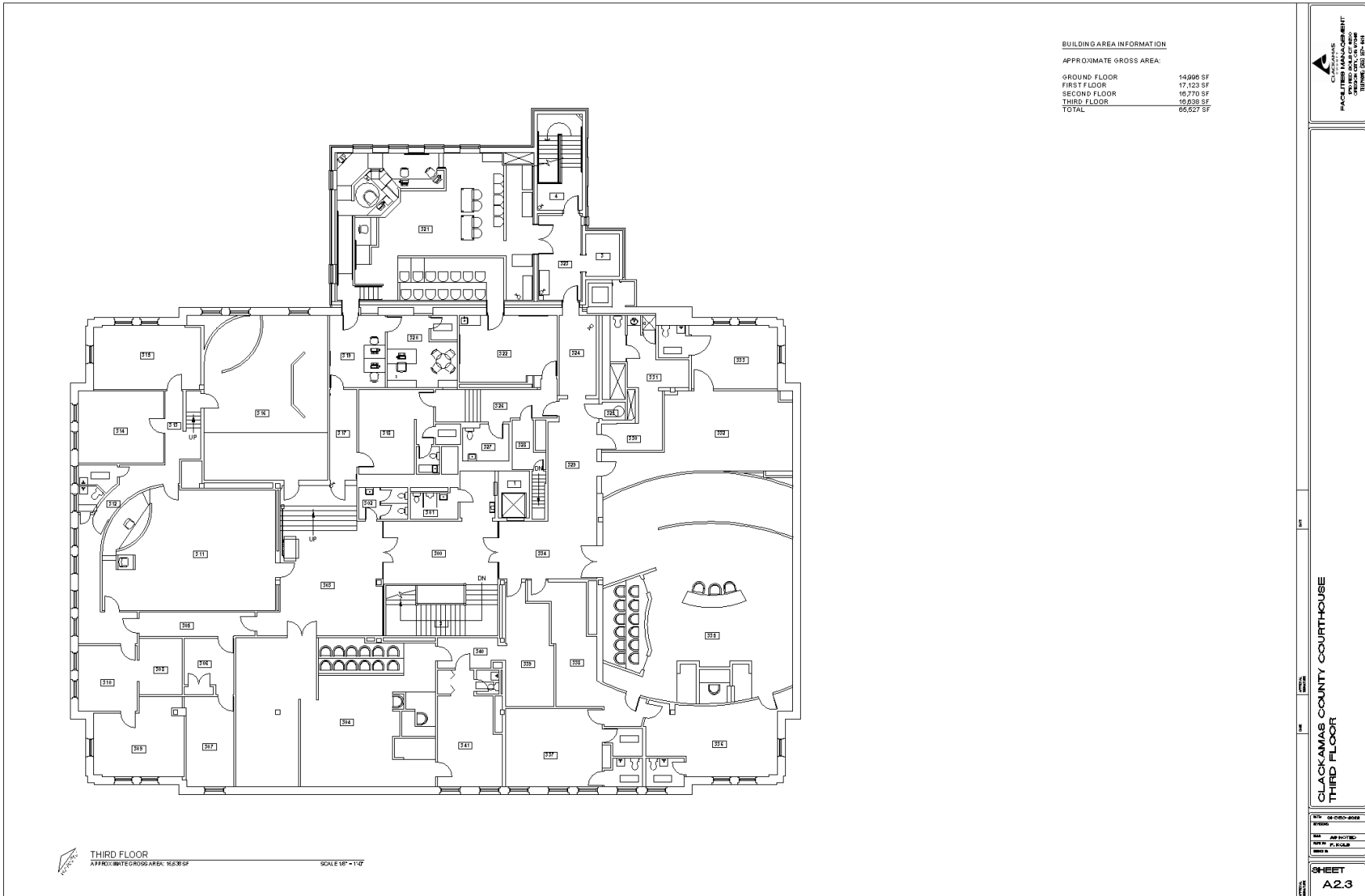
---

CLACKAMAS COUNTY COURTHOUSE  
SECOND FLOOR

---

SHEET  
A.2.2

**SECOND FLOOR**  
 APPROXIMATE GROSS AREA: 16,770 SF      SCALE: 1/8" = 1'-0"



## Improvements Analysis

The following chart shows a summary of the improvements.

<b>IMPROVEMENTS SUMMARY AND ANALYSIS</b>		
Property Type	Special Purpose	(Courthouse)
Number of Buildings	1	
Number of Stories	3	or four stories including the fully built-out partial daylight basement
Gross Building Area	65,527 SF	Including the basement
Net Rentable Area	65,527 SF	Including the basement
Site Coverage	41.8%	
Land-to-Building Ratio	0.62 : 1	
Floor Area Ratio (FAR)	1.60	
Parking Improvements	Surface	
Parking Spaces:	15	
Parking Ratio (per 1,000 SF NRA )	0.23	

<b>Component</b>	<b>GBA (SF)</b>	<b>NRA (SF)</b>
Ground Floor / Basement	14,996	14,996
First Floor	17,123	17,123
Second Floor	16,770	16,770
Third Floor	16,638	16,638
<b>Total</b>	<b>65,527</b>	<b>65,527</b>

Year Built / Renovated	1937 / 2012	Addition added in 2012
Actual Age	85 Years	
Effective Age	25 Years	
Total Economic Life	50 Years	
Remaining Economic Life	25 Years	
Age/Life Depreciation	50.0%	
Functional Utility	The subject includes an Art Deco style building and is currently configured as a courthouse. Based on a similar use, the subject would most likely be purchased for conversion to an office use. The existing improvements would be less functional for alternative uses based on the existing build-out and building design.	

Source: Various sources compiled by CBRE

### YEAR BUILT

The subject was built in 1937 and 2012 (three story addition added to the building located along the buildings westerly elevation). The overall condition of the building appears to be average to good based on the inspection.

### CONSTRUCTION CLASS

The subject is mixed-construction with the original building consisting of a concrete reinforced frame with concrete decking at each level, whereas the 2012 addition includes a steel frame with concrete decking. The exterior comprises a brick façade in an Art Deco style. The construction components are assumed to be in working condition and adequate for the building.

The overall quality of the facility is considered to be average/good for the neighborhood and age. However, CBRE, Inc. is not qualified to determine structural integrity and it is recommended that the client/reader retain the services of a qualified, independent engineer or contractor to determine the structural integrity of the improvements prior to making a business decision.

## **FOUNDATION**

The foundation is assumed to be of adequate load-bearing capacity to support the improvements. The subject has concrete foundation.

## **EXTERIOR WALLS**

The subject has a brick exterior.

## **ROOF COVER**

The building has a flat built-up roof.

## **INTERIOR FINISHES**

The typical interior finish of the property is summarized as follows:

Floor Coverings:	Flooring through the property includes marble, tile, concrete and commercial grade carpet.
Walls:	Interior walls include a combination of painted concrete block, marble, painted drywall, tile and areas of wood trim and vinyl wall base.
Ceilings:	Primarily painted drywall and ceiling tiles throughout.
Lighting:	Standard commercial light fixtures.
Summary:	The interior building finish is in good condition and mostly resembles office space.

## **ELEVATOR/STAIR SYSTEM**

There are multiple sets of interior stairwells, as well as two elevators. One of the elevators is ADA compliant.

## **HVAC**

The subject has forced air heating and cooling, which is assumed to be in good working order and adequate for the building.

## **ELECTRICAL**

It is assumed to be in good working order and adequate for the building.

## **PLUMBING**

There are multiple restrooms, including single and multi-occupant restrooms, throughout the property, as well as multiple employee break/lunchrooms with typical kitchenettes. The plumbing is assumed to be in good working order and adequate for the building.

## **LIFE SAFETY AND FIRE PROTECTION**

It is assumed the improvements have adequate fire alarm systems, fire exits, fire extinguishers, fire escapes and/or other fire protection measures to meet local fire marshal requirements. The subject is fully fire sprinklered. CBRE, Inc. is not qualified to determine adequate levels of safety & fire protection, whereby it is recommended that the client/reader review available permits, etc. prior to making a business decision.

## **PARKING / SITE IMPROVEMENTS**

The subject includes a parking lot along the eastern elevation of the building with access to 9<sup>th</sup> Street. This includes roughly 15 spaces, indicating a parking ratio of 0.23 spaces/1,000 SF. This is considered low for a commercial/office property; however, on-street parking is available.

The subject also includes a courtyard called Liberty Plaza and was the former site of the Liberty Theatre, constructed in 1920 and demolished in 2004 due to a dilapidated/unsafe building. The site was converted to community open space improved with concrete and with two pergola type structures of brick and wood construction.

## **FUNCTIONAL UTILITY**

The subject improvements offer average to good utility for the current use; however, under a potential sale of the subject the current use would be discontinued. Based on the existing building design and build-out, the most functional use would be for conversion to an office use. Furthermore, it is noted that the subject is not seismically retrofitted, nor can it become seismically retrofitted. As such, major conversions to other alternative uses appear to be less likely.

## **ADA COMPLIANCE**

The client/reader's attention is directed to the specific limiting conditions regarding ADA compliance.

## **PERSONAL PROPERTY**

Any personal property items contained in the property are excluded from this analysis.

## ENVIRONMENTAL ISSUES

The appraisers are not qualified to detect the existence of any potentially hazardous materials such as lead paint, asbestos, urea formaldehyde foam insulation, or other potentially hazardous construction materials on or in the improvements. The existence of such substances may affect the value of the property. For the purpose of this assignment, we have specifically assumed there are no hazardous materials that would cause a loss in value to the subject.

## DEFERRED MAINTENANCE

Based on our interview with the property contact and the onsite inspection by the field appraiser, no observable deferred maintenance exists for the existing building.

## ECONOMIC AGE AND LIFE

CBRE, Inc.'s estimate of the subject improvements effective age and remaining economic life is depicted in the following chart:

<b>ECONOMIC AGE AND LIFE</b>	
Actual Age	85 Years
Effective Age	25 Years
MVS Expected Life	50 Years
Remaining Economic Life	25 Years
Accrued Physical Incurable Depreciation	50.0%
Compiled by CBRE	

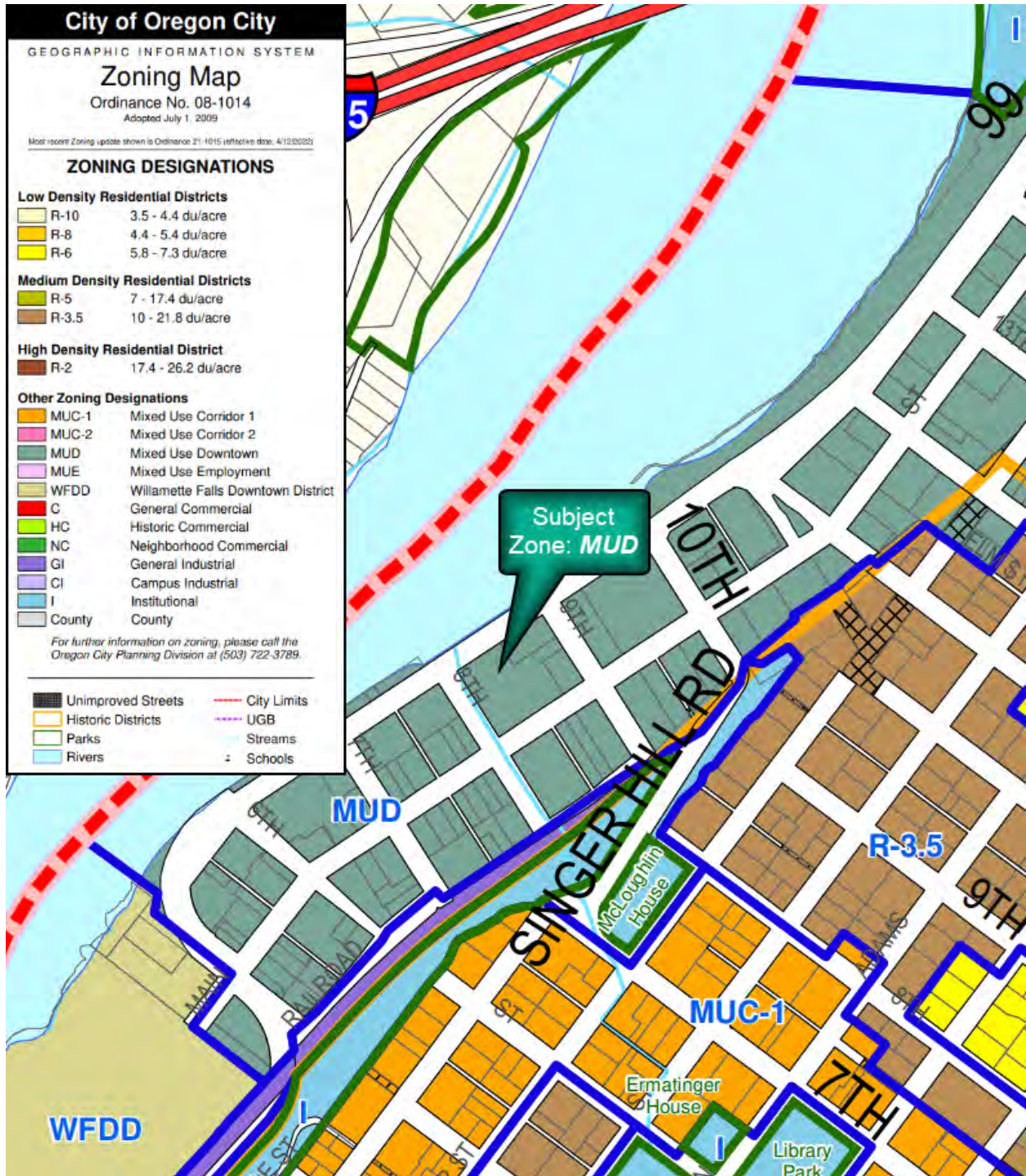
The remaining economic life is based upon our on-site observations and a comparative analysis of typical life expectancies as published by Marshall and Swift, LLC, in the Marshall Valuation Service cost guide. While CBRE, Inc. did not observe anything to suggest a different economic life, a capital improvement program could extend the life expectancy.

## CONCLUSION

The improvements are in average overall condition.



ZONING MAP



## Zoning

The following chart summarizes the subject’s zoning requirements.

<b>ZONING SUMMARY</b>	
Current Zoning	Mixed Use Downtown (MUD)
Legally Conforming	Yes
Uses Permitted	Banquet, conference facilities and meeting rooms; Bed and breakfast/boarding houses, hotels, motels, and other lodging facilities; Child care centers and/or nursery schools; Indoor entertainment centers and arcades; Health and fitness clubs; Medical and dental clinics, outpatient; infirmary services; Museums, libraries and cultural facilities; Offices, including finance, insurance, real estate and government; Outdoor markets, such as produce stands, craft markets and farmers markets that are operated on the weekends and after six p.m. during the weekday; Postal services; Repair shops, for radio and television, office equipment, bicycles, electronic equipment, shoes and small appliances and equipment; Multi-family residential, 3—4 plex residential; One or two units in conjunction with a nonresidential use provided that the residential use occupies no more than fifty percent of the total square footage of the development; Restaurants, eating and drinking establishments without a drive-through; Services, including personal, professional, educational and financial services; laundry and dry-cleaning; Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies, specialty stores provided the maximum footprint of a freestanding building with a single store does not exceed sixty thousand square feet (a freestanding building over sixty thousand square feet is allowed as long as the building contains multiple stores); Seasonal sales; Residential care facilities, assisted living facilities; nursing homes and group homes for over fifteen patients licensed by the state; Studios and galleries, including dance, art, photography, music and other arts; Utilities: Basic and linear facilities, such as water, sewer, power, telephone, cable, electrical and natural gas lines, not including major facilities such as sewage and water treatment plants, pump stations, water tanks, telephone exchanges and cell towers; Veterinary clinics or pet hospitals, pet day care; Home occupations; Research and development activities; Temporary real estate offices in model dwellings located on and limited to sales of real estate on a single piece of platted property upon which new residential buildings are being constructed; Transportation facilities; Live/work dwellings; After-hours public parking; Marinas; Religious institutions; Mobile food units outside of the downtown design district.
Zoning Change	Not likely
Category	Zoning Requirement
Minimum Lot Size	None
Minimum Bldg. Height	Twenty-five feet or two stories
Maximum Height	58 Feet
Minimum Setbacks	None
Minimum FAR	0.50 : 1
Source: Planning & Zoning Dept.	

## ANALYSIS AND CONCLUSION

The subject site is zoned Mixed Use Downtown (MUD) by the City of Oregon City. According to the Oregon City Municipal Code, the MUD district is designated for downtown areas between 5th Street and Abernethy Street, and some of the area bordering McLoughlin Boulevard. Allowed uses include “retail, service, office, multi-family residential, lodging or similar as defined by the community development director. A mix of high-density residential, office and retail uses are encouraged in this district, with retail and service uses on the ground floor and office and residential uses on the upper floors. The emphasis is on those uses that encourage pedestrian and transit use.”

This district includes a downtown design district overlay for the historic downtown area. Retail and service uses on the ground floor and office and residential uses on the upper floors are encouraged in this district. The design standards for this sub-district require a continuous storefront façade featuring streetscape amenities to enhance the active and attractive pedestrian environment.”

It is also noted that the subject is not currently listed on the National Registry of Historic Places; however, the subject is listed as being eligible for designation to the Registry. Given that the subject has an “eligible” status and noting that it is currently a publicly owned property, it was reported that any third party could apply for and have the subject added to the Registry.

It was also reported that the Oregon Conservation program would be applicable to the subject according to the Oregon City Planning Department. ORS 358.653 is a state law that requires state agencies and political subdivisions (counties, cities, universities, schools, fire districts, irrigation districts, hospital districts, and local taxing districts) of the state (public entities) to conserve “historic properties” and consult with the State Historic Preservation Office (SHPO) to, whenever possible, avoid and minimize negative impacts as a result of project actions. The public entity leads and retains full responsibility for the consultation process and final decision. Based on this, demolition of the property is less likely. Developer risk for conversion to alternative uses is also increased as this will require state approval. **It is advised that the client contact the State Historic Preservation Office (SHPO) regarding the potential sale and repurpose of the subject property.**

The subject’s existing use as a courthouse is a pre-existing non-conforming use of the MUD zone, and is therefore allowed to continue. However, if sold, alternative uses of the subject would be likely as the existing use would then be discontinued. Based on the subject’s existing use most resembling office, and considering the above legal factors and the subject’s incapability of being retrofitted, a conversion to an office use appears to be most likely.

Additional information may be obtained from the appropriate governmental authority. For purposes of this appraisal, CBRE has assumed the information obtained is correct.

## Tax and Assessment Data

The following summarizes the local assessor's estimate of the subject's market value, assessed value, and taxes, and does not include any furniture, fixtures or equipment. It is noted that the subject is owned by Clackamas County and is therefore tax exempt.

<b>AD VALOREM TAX INFORMATION</b>			
Parcel	Assessor's Parcel No.	2021/2022	2022/2023
1	00572240	\$17,161,508	\$18,201,602
	Subtotal	\$17,161,508	\$18,201,602
	% of Assessed Value	61%	60%
	Final Assessed Value	10,520,004	10,866,356
	General Tax Rate (per \$1,000 A.V.)	-	-
	General Tax:	\$0	\$0
	Effective Tax Rate (per \$1,000 A.V.)	-	-
	<b>Total Taxes</b>	<b>\$0</b>	<b>\$0</b>
	Taxes per SF	\$0.00	\$0.00

Source: Assessor's Office

<b>RMV ALLOCATION FOR 2022/2023</b>		
Component	RMV	% of Total
Land	\$1,853,852	10.2%
Improvements	\$16,347,750	89.8%
<b>Total</b>	<b>\$18,201,602</b>	<b>100.0%</b>

Compiled by CBRE

## OREGON PROPERTY TAX LAW

In Oregon, Measure 50 was passed in the May 20, 1997 special election. This measure establishes the maximum assessed value of property in Oregon for the 1997/1998 tax year as 90 percent of the property's real market value in the 1995/96 tax year. Any increases in assessed value for tax years following 1997/1998 are limited to 3 percent per year. Assessed value will be adjusted for new property or property improvements and certain other events. Certain local option taxes are permitted, if approved by voters. Measure 50 retains the existing total property tax rate for all property taxes, including local option taxes but excluding taxes for bonds at \$5 per \$1,000 of value for schools and \$10 per \$1,000 of value for non-school government. The subject property is not encumbered by bonds.

It is noted that the assessor's RMV is above the concluded value developed within this report. If sold to a non-public entity and the subject's tax exempt status was removed, a tax appeal could potentially lower taxes.

## DELINQUENCY

The assessor does not report any delinquent taxes. For purposes of this analysis, CBRE, Inc. assumes that all taxes are current.

## Market Analysis

The highest and best use of the subject property is concluded to be conversion to a commercial use, and most likely an office use based on the current building configuration/build-out. As such, the market analysis places primary emphasis on the supply/demand factors relating to the local office market.

The market analysis forms a basis for assessing market area boundaries, supply and demand factors, and indications of financial feasibility. The primary data source utilized for this analysis is CBRE's Third Quarter 2022 Office MarketView report for the Portland metro area. This is a quarterly report, which compares growth rates for the Portland metropolitan area and/or Portland metro submarkets to previous quarters. We also consider metro area market data from CBRE Econometrics via the Q3 2022 Outlook Report.

### PORTLAND OFFICE MARKET OVERVIEW



Note: Arrows indicate change from previous quarter.

### Market Summary

- The Portland metro area's overall vacancy rate grew to 20.8%, a 230-basis point (bps) increase year-over-year (YOY).
- In Q3 2022, sublease availability across the overall office market increased to 1.8 million sq. ft., up 18.3% from the previous quarter and 42.0% YOY.
- Q3 saw no significant new office construction deliveries. Two notable projects in Portland's office development pipeline, The Offices at 11W (117,285 sq. ft.) and Block 216 (158,464 sq. ft.), both in the CBD, are on target for their expected delivery dates.
- The average direct asking lease rate in the metro area was \$32.40 per sq. ft. full-service gross (FSG), for a 0.9% increase quarter-over-quarter (QOQ) and a 5.7% increase YOY.
- The Q3 Suburban average asking rental rate was \$28.47 per sq. ft. FSG, a 1.1% increase QOQ and a 5.4% increase YOY.
- The Q3 Downtown average asking rental rate was \$34.68 per sq. ft. FSG, a 1.0% increase QOQ and a 4.7% increase YOY.
- Nonfarm employment growth in Multnomah County reached 2.7% between August 2021 and August 2022. The state of Oregon saw 4.7% nonfarm employment growth in the same period.

FIGURE 1: Downtown vs Suburban Market Statistics

	NRA (SF)	Vacancy Rate (%)	Sublease Availability (SF)	Q3 Net Absorption (SF)	Average Asking Rate (\$/SF/YR FSG)	Under Construction (SF)
<b>DOWNTOWN</b>						
Class A	12,047,457	24.0%	549,975	(82,256)	\$39.89	275,749
Class B	8,417,794	26.9%	480,511	(66,295)	\$33.16	-
Class C	2,774,853	28.8%	67,702	68,098	\$29.19	-
Class D	3,274,118	29.8%	149,724	(17,373)	\$28.23	-
Total	26,514,222	26.2%	1,247,912	(97,826)	\$34.68	275,749
<b>SUBURBAN</b>						
Class A	10,844,851	17.2%	334,154	(59,516)	\$32.14	-
Class B	11,854,124	13.4%	239,734	(11,643)	\$25.82	-
Class C	2,030,559	13.2%	-	15,976	\$19.86	-
Class D	67,000	0.0%	-	-	-	-
Total	24,796,534	15.0%	573,888	(55,183)	\$28.47	-
<b>METRO TOTAL</b>	<b>51,310,756</b>	<b>20.8%</b>	<b>1,821,800</b>	<b>(153,009)</b>	<b>\$32.40</b>	<b>275,749</b>

Source: CBRE Research 2022

## Leasing Activity

Leasing activity slowed in the third quarter of 2022. Across the Portland metro area, 474,353 sq. ft. transacted. Tenant requirements continue to focus on "right-sizing" as companies explore what work from home/hybrid arrangements will suit them. Higher quality, Class A office buildings continue to attract tenants who may be willing to pay more per square foot for a smaller space than said tenants might have considered in the past.

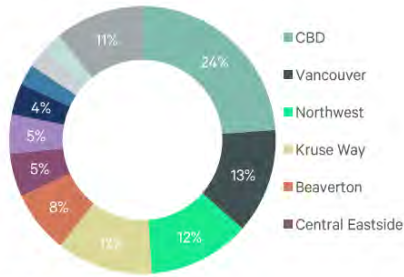
FIGURE 2: Top Lease Transactions

Tenant	Size (SF)	Location	Submarket	Lease Type	Class
Waste Connections	20,340	808 Washington St	Vancouver	New Lease	A
WCIC – NOCC	17,893	19720 NW Tanasbourne Dr	Hillsboro	Renewal	B
Propeller, Inc.	11,747	2035 NW Front Ave	Northwest	New Lease	A
Dascenzo Gates Intellectual Property Law	11,496	621 SW Morrison St	CBD	New Lease	B
TAL Holdings	10,625	203 SE Park Plaza Dr.	Vancouver	Expansion	A

Source: CBRE Research Q2 2022

Like in the previous quarter, the Central Business District was the submarket with the most office leasing activity in Q3, followed again by Vancouver submarket. Two notable Q3 signings in Vancouver, WA include the Waste Connections deal, a 20,340 sq. ft. new lease at the Upland Office building, and T AL Holdings' 10,625 sq. ft. expansion at Park Towers.

FIGURE 3: Leasing Activity by Submarket, Q4 2021-Q3 2022



Source: CBRE Research Q3 2022

FIGURE 4: Historical Leasing Activity



Source: CBRE Research Q3 2022

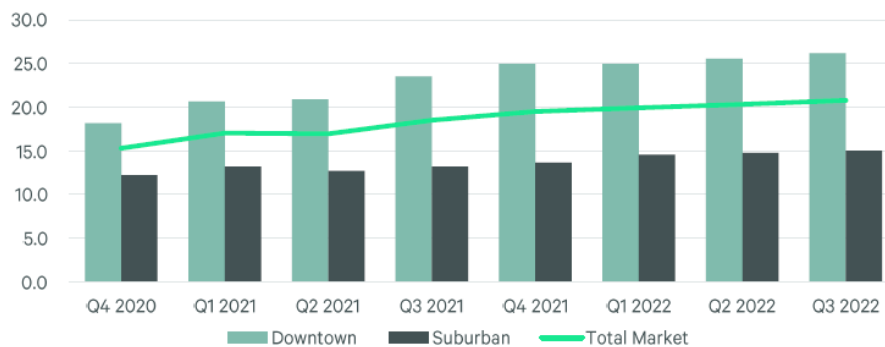
## Supply and Demand

The Portland metro area office market closed the third quarter of 2022 with an overall vacancy rate of 20.8%, up 60 bps from the 20.2% recorded in the second quarter, and up 230 bps YOY. Downtown, the office market closed the second quarter of 2022 with an overall vacancy rate of 26.2%, up 60 bps from the previous quarter and up 270 bps YOY. In the suburbs, the vacancy rate was 15.0%, up 20 bps from the previous quarter and up 180 bps YOY.

In Q3 2022, the total availability rate across the metro hit 23.9%, up 220 bps YOY, with 12.2 million sq. ft. available. Sublease availability across the overall office market increased to 1.8 million sq. ft., up 18.5% from the prior quarter. Downtown, sublease availability accounted for 15.6% of the total 8.0 million sq. ft. available at the end of the third quarter. In the suburbs, sublease availability accounted for 13.5% of the total 4.2 million sq. ft. available. Portland's office market recorded 153,009 sq. ft. of negative absorption in Q3 2022, bringing the year-to-date figure to negative 483,801 sq. ft.

Two notable projects in Portland's office development pipeline, The Offices at 11W (117,285 sq. ft.) and Block 216 (158,464 sq. ft.), both in the CBD, remain on target for their expected delivery dates and remain fully available for direct lease.

FIGURE 5: Vacancy (%)

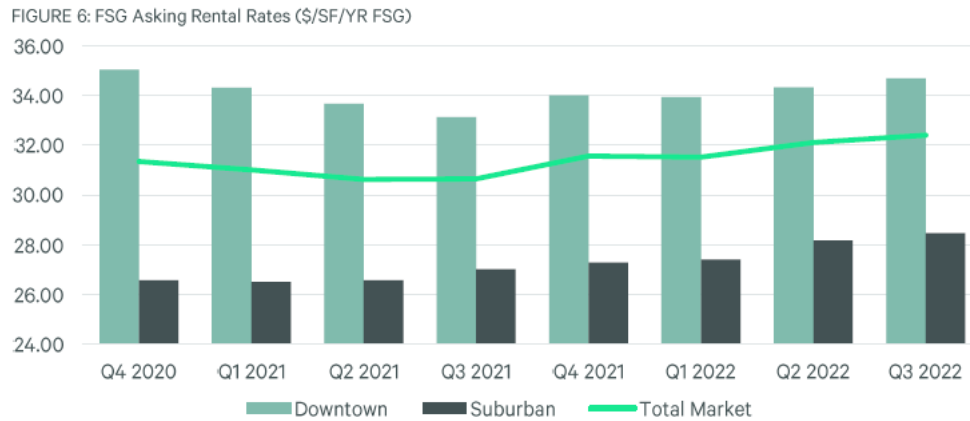


Source: CBRE Research, Q3 2022.

## Rent Trends

While average asking rental rates continue to creep up across the metro, prices are likely climbing in response to rising operating expenses rather than a tighter market. In Q3 2022, the

average Portland MSA asking rental rate hit \$32.40 per sq. ft. on a full-service gross basis (FSG). Downtown, the average asking rates hit \$34.68 per sq. ft. FSG, a 1.0% increase from the previous quarter and a 4.7% YOY increase. In the suburbs, the average asking rental rate reached \$28.47 per sq. ft. for a 1.1% increase from the previous quarter and a 5.3% YOY increase.



Source: CBRE Research, Q3 2022.

## Investment

Office investment remains muted. Growth is likely to be somewhat restrained in the near term as buyers and lenders seek to understand the emerging dynamics in a newly mobile office workforce. Nonetheless, locational trends favoring suburban assets are taking shape. Most of the metro's largest recent sales have been located outside of the urban core.

Portland saw no significant office sales within the MSA in Q3. South of the metro, however, the 233,358 sq. ft. Capitol City Business Center sold for \$34.25M (\$147 /SF) in Salem, OR.

CBRE predicts that an early 2023 contraction in the national economy will push inflation down towards 3% by year-end 2023, which should make capital markets more predictable again.

## Economic Trends

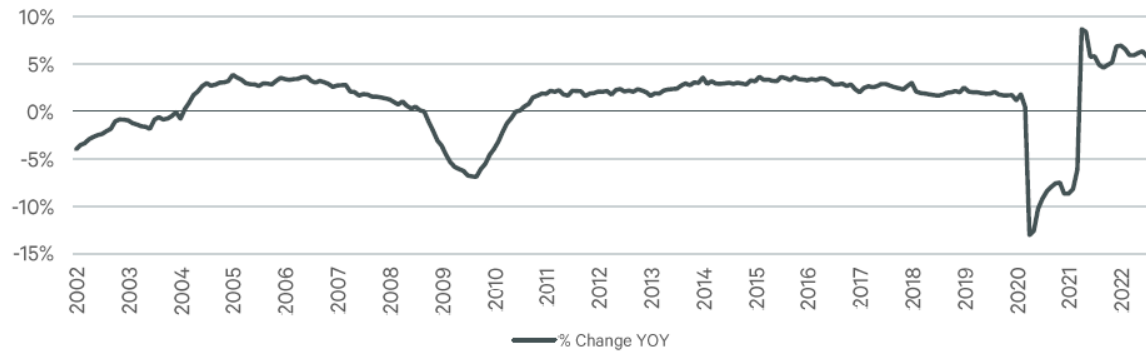
The problems associated with inflation continue to run their course. Although the pace of inflation may have started to plateau, the Federal Reserve's hawkish response has been unequivocal in a way that caught markets by surprise. Aggressive rate hikes and Fed balance sheet reductions have successfully resulted in a strong dollar and higher mortgage rates, and the beginning of a slowdown in the U.S. economy.

Higher rates are not just impeding household decisions; a higher corporate cost of capital is forcing firms to rethink hiring plans. So far resilient consumers have driven further economic growth but now the realities of lower savings rates and chronically poor sentiment suggest excess spending is coming to an end.



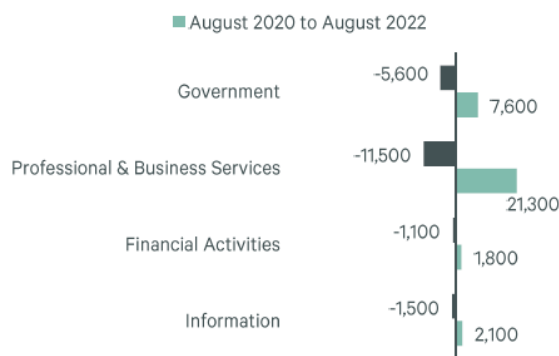
Consequently, we expect the economy to contract early next year, and unemployment to rise. This should push inflation down toward 3% by year-end 2023. It is possible the Fed may be able to reduce inflation and maintain the unemployment rate below 5%, but we should not bank on that. Once inflation is tamed, both capital and real estate markets will become more predictable again.

FIGURE 8: Portland Metro Non-Farm Employment YOY Change (% Seasonally Adjusted)



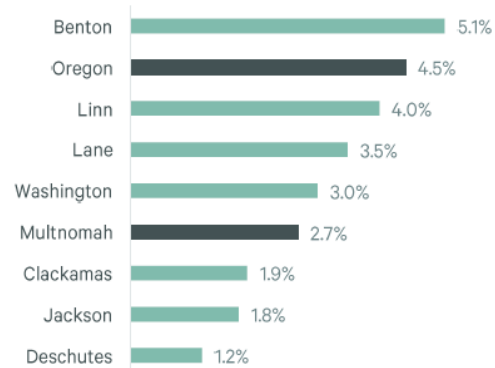
Source: Oregon Employment Department, October 2022

FIGURE 9: Employment Change by Industry (Portland MSA)



Source: Oregon Employment Department, October 2022

FIGURE 10: Employment Growth by County (August 2021-August 2022)



Source: Oregon Employment Department, October 2022

### CBRE ECONOMETRIC ADVISORS Q3 2022 OFFICE OUTLOOK

The short-term forecast calls for overall negative growth in office workers through year-end 2023. Total net absorption is forecasted to be positive 290,000 square feet out-pacing supply during the same period. By year-end 2023, the vacancy rate is expected to be 20.8% while rents are forecasted to decline to \$28.98 compared to current market rents of \$29.80.

## Portland Forecast Summary: Q3 2022

	Demand				Supply		Performance		
	New Jobs		Net Absorp (sf x 1000)	Absorp Rate (%)	Deliveries (sf x 1000)	Compl Rate (%)	Vac Rate (%)	EA Asking Rent(\$/sf)	Rent Infl (%)
	Ofc Financial	Ofc Services							
2021	-100	8,600	-2,297	-5.4	95	0.2	19.4	29.67	0.8
2022F	3,100	11,200	-519	-1.3	192	0.4	20.7	28.88	-2.7
Q1	1,900	2,900	-191	-0.5	0	0.0	19.8	29.60	-0.2
Q2	100	3,000	-364	-0.9	75	0.2	20.6	29.67	0.2
Q3	500	4,500	-187	-0.5	0	0.0	21.0	29.80	0.4
Q4F	600	800	223	0.6	117	0.2	20.7	28.88	-3.1
2023F	-1,000	-4,400	67	0.2	158	0.3	20.8	28.98	0.4
Historical Performance (1990 - Present) Annual									
Min	-4,400	-19,800	-2,297	-5.4	0	0.0	5.2	15.12	-3.2
Max	4,200	17,700	2,521	6.5	2,128	5.8	21.0	29.80	10.1
Mean	900	4,700	449	1.5	580	1.5	13.0	21.86	2.0

Historical minimum, maximum, and average values for each variable are provided to put current market performance in perspective. The time period from which these values are calculated is 1990 (or the earliest year of available data) to the current year. Net absorption is expected to remain below long-term averages during the forecast, though demand will be positive.

### THE PORTLAND ECONOMY

Over the last five years, Portland's total employment has grown at an average annual rate of 0.9% while across the U.S., employment has grown at an average annual rate of 0.8%. In the last four quarters, Portland's employment has grown at an average annual rate of 5.4%. Our forecast predicts growth of 0.7% (Annualized) in the Portland area in the next five years. Portland's hospitality & leisure employment sector will post the best job performance over the next five years.

The table below presents the current employment levels for major industry groups as well as historical growth rates over the last five years, last 12 months, and the next five years.

**Employment Levels & Growth Rates: Portland vs. Nation**

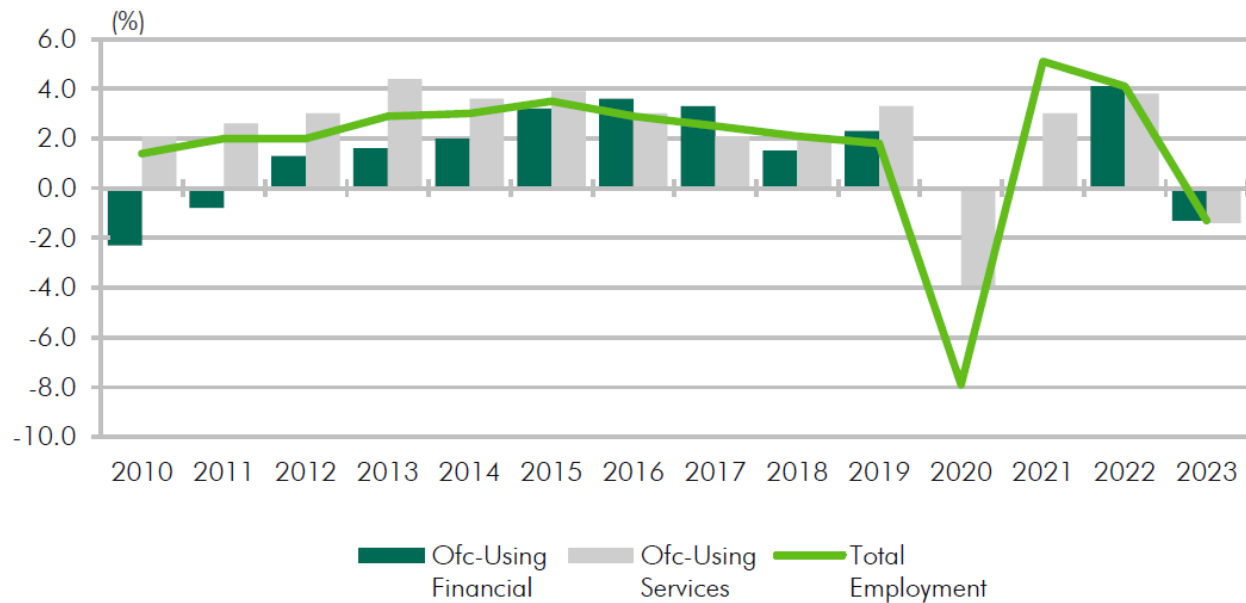
NAICS Category	Level (x 1000)	Location Quotient	Avg Annual Growth Rates (%)					
			Last 5 Years		Last 12 Mos.		Next 5 Years	
			Metro	U.S.	Metro	U.S.	Metro	U.S.
Agriculture & Mining	1	0.23	-1.6	-1.6	0.0	10.3	-3.6	-0.4
Construction	80	1.28	3.2	1.9	5.4	4.0	1.1	0.4
Manufacturing	131	1.26	1.2	0.6	7.1	3.8	0.4	0.1
Wholesale Trade	58	1.20	0.3	0.3	4.4	3.5	-0.1	-0.3
Retail Trade	118	0.92	-0.2	0.0	1.8	2.5	0.4	0.0
Transportation & Warehousing	52	0.91	5.3	4.2	4.0	6.0	0.1	0.4
Information	29	1.16	2.2	1.5	8.4	6.0	1.2	0.3
Financial Activities	77	1.06	1.6	1.1	4.7	2.0	0.4	0.2
Prof. & Business Svcs.	197	1.08	1.5	1.7	5.1	5.2	0.5	0.4
Education & Health	191	0.96	1.7	1.1	6.3	3.5	1.2	0.7
Hospitality & Leisure	119	0.93	-0.8	-0.4	15.4	9.3	1.4	1.3
Other Services	41	0.89	-0.4	-0.2	4.0	3.8	1.2	0.4
Government	149	0.82	-0.9	0.0	0.6	0.9	0.9	0.5
<b>Total</b>	<b>1,243</b>	<b>n/a</b>	<b>0.9</b>	<b>0.8</b>	<b>5.4</b>	<b>4.0</b>	<b>0.7</b>	<b>0.4</b>

Source: Oxford Economics, CBRE Econometric Advisors

**OFFICE EMPLOYMENT**

Office employment, the primary determinant of demand, is defined as certain categories within the Financial and Service employment sectors in which workers typically occupy office space. Our estimate of office employment for Portland currently stands at 380,000 workers. Over the last five years, office employment has grown by 1.6% (Annualized). Over the last 12 months, office employment has grown by 5.2%.

**Office Employment Growth vs. Total Employment Growth**



## PORTLAND OFFICE MARKET CHARACTERISTICS

The office market in Portland is comprised of multi-tenant office properties that meet the size and quality requirements specified by the local real estate professionals. The table below gives a summary of the existing, competitive office space in the Portland office market.

**Portland Office Market Statistics - by Building Class**

Building Class	Inventory		Vacancy Rate		Net Absorption		Asking Rents	
	Bldgs	NRA (sf x 1000)	Curr Qtr (%)	YTD (BPS)	Curr Qtr (sf x 1000)	YTD (sf x 1000)	Curr Qtr (\$/sf)	Net or Gross
Class A	192	21,964	23.2	220	-189	-414	34.54	Gross
Class B/C	661	28,349	19.2	110	2	-328	27.83	Gross
<b>Total</b>	<b>853</b>	<b>50,313</b>	<b>21.0</b>	<b>160</b>	<b>-187</b>	<b>-742</b>	<b>30.94</b>	<b>Gross</b>

## PORTLAND ANNUAL HISTORY & FORECAST

Presented below is our six-year forecast for the Portland office market. Historical measures are provided back to 2010. Forecasted figures for the next eight quarters for new supply are based on projects known to be currently under construction.

**Portland Annual History & Forecast: 2010 - 2027**

Year	Ofc. Empl. (ths.)		Inventory (sf x 1000)	Completions (sf x 1000)	Vacancy Rate (%)	Net Absorp. (sf x 1000)	EA Asking Rent (\$/sf)	Rent Infl. (%)
	Financial	Services						
<b>History</b>								
2010	62.7	224.5	47,068	419	14.9	592	22.62	-1.2
2011	62.2	230.4	47,116	48	14.6	214	22.65	0.1
2012	63.0	237.4	47,192	76	15.0	26	22.72	0.3
2013	64.0	247.8	47,192	0	13.3	729	23.06	1.5
2014	65.3	256.6	47,354	162	11.6	957	24.03	4.2
2015	67.4	266.5	47,509	155	10.8	506	24.69	2.7
2016	69.8	274.6	48,073	564	10.2	733	26.09	5.7
2017	72.1	280.4	48,380	307	12.6	-903	26.48	1.5
2018	73.2	285.8	49,473	1,093	11.9	1,311	28.96	9.4
2019	74.9	295.1	49,585	112	12.1	24	29.25	1.0
2020	74.9	283.7	50,143	558	14.6	-769	29.45	0.7
2021	74.8	292.3	50,238	95	19.4	-2,297	29.67	0.7
<b>Forecast</b>								
2022	77.9	303.5	50,430	192	20.7	-519	28.88	-2.7
2023	76.9	299.1	50,588	158	20.8	67	28.98	0.3
2024	77.1	298.7	50,611	23	20.5	195	29.31	1.1
2025	77.4	300.7	50,699	86	19.8	395	29.40	0.3
2026	78.3	306.1	50,785	84	18.8	574	29.46	0.2
2027	79.3	312.9	50,857	69	17.5	741	29.46	0.0

Demand from the economy peaked in 2019 with 370,000 jobs in the office-using sectors. We expect office employment to grow 1.1% per year over the next six years - and office employment will reach the previous peak in 2022. Net absorption is expected to average 242,200 sf per year while supply is expected to average 103,200 sf, lagging net absorption. Vacancy rates are forecasted to improve, dropping to 17.5% while rents are forecasted to decline to \$29.46.

## PORTLAND METRO - SUBMARKET SUMMARY – Q3 2022

Submarket	NRA (SF)	Vacant Direct (SF)	Vacant Sublease (SF)	Vacancy Rate (%)	Q2 2022 Net Absorption (SF)	YTD Net Absorption (SF)	Under Construction (SF)	Average Asking Rate (\$/SF/YR FSG)
CBD	16,314,542	3,702,012	471,958	25.6%	(109,460)	(301,573)	275,749	\$34.79
Central Eastside	2,278,740	515,541	98,124	26.9%	8,232	47,587	-	\$35.09
Lloyd Center	1,778,737	83,738	27,337	6.2%	(33,742)	(40,258)	-	\$35.41
Northwest	6,142,203	1,677,970	362,369	33.2%	37,144	73,531	-	\$34.02
<b>Total Downtown</b>	<b>26,514,222</b>	<b>5,979,261</b>	<b>959,788</b>	<b>26.2%</b>	<b>(97,826)</b>	<b>(220,713)</b>	<b>275,749</b>	<b>\$34.68</b>
Airport Way	547,741	93,558	50,974	26.4%	(2,702)	(57,046)	-	\$20.74
Barbur Blvd	425,159	51,225	20,874	17.0%	(3,216)	(1,789)	-	\$18.77
Beaverton	2,928,348	445,224	63,483	17.4%	(513)	(27,078)	-	\$24.61
Clackamas	1,179,014	102,196	-	8.7%	(3,569)	(4,517)	-	\$28.14
Hillsboro	2,239,626	350,207	11,528	16.2%	(2,894)	-37,261	-	\$24.27
John's Landing	1,717,467	425,441	24,401	26.2%	(1,374)	(115,905)	-	\$32.43
Kruse Way	2,572,050	442,395	111,405	21.5%	5,238	(105,053)	-	\$38.85
Lake Oswego	441,831	47,659	10,574	13.2%	15,651	14,337	-	\$29.48
Out of Submarket	233,122	19,200	-	8.2%	(2,882)	(5,511)	-	\$23.97
Outer Eastside	1,945,814	186,834	6,803	10.0%	15,183	21,429	-	\$21.46
Tigard	2,192,535	189,513	57,078	11.2%	(17,563)	(30,618)	-	\$25.25
Tualatin	785,315	147,322	-	18.8%	15,297	12,617	-	\$25.51
Vancouver	4,799,723	471,177	53,775	10.9%	(83,149)	(13,172)	-	\$26.50
WA Square	1,195,521	207,050	31,692	20.0%	(13,208)	(18,039)	-	\$30.70
West Hills	870,944	75,148	7,226	9.5%	15,733	18,832	-	\$22.56
Wilsonville	722,324	12,594	-	1.7%	8,785	11,164	-	\$24.36
<b>Total Suburban</b>	<b>24,796,534</b>	<b>3,266,743</b>	<b>449,813</b>	<b>15.0%</b>	<b>(55,183)</b>	<b>(263,088)</b>	-	<b>\$28.47</b>
<b>Total Market</b>	<b>51,310,756</b>	<b>9,246,004</b>	<b>1,409,601</b>	<b>20.8%</b>	<b>(153,009)</b>	<b>(483,801)</b>	<b>275,749</b>	<b>\$32.40</b>

Source: CBRE Research, Q3 2022

The subject is located within the Clackamas Submarket. As shown above, the average vacancy rate of 8.7% for the subject's Clackamas submarket is lower than that metro area total of 20.8%. The average asking market rent is currently \$28.14/SF for the most recent quarter, which is lower compared to the metro average of \$32.40/SF. There is currently 275,749 SF of office development under construction within the downtown Portland submarket. Please note, regarding vacancy versus availability, the vacancy rate only includes vacant space (no rent is being paid). The availability rate also includes sublease offerings and space occupied but offered for lease (rent is still being paid).

Of note, the vacancy rates shown are impacted by a relatively large share of new construction and full reno/redevelopment projects that were working through lease-up (primarily in the CBD and surrounding close-in neighborhoods) even prior to the additional impacts observed over 2020-present. Market participants view the market's fundamentals as likely to return to strong conditions long-term for office and are generally underwriting to 5-8% long-term, stabilized vacancy levels for Class A/B product (with near-term impacts most commonly reflected in increased effective vacancy via downtime, absorption and free rent assumptions).

### SUBJECT ANALYSIS

The market analysis has examined historical and current supply and demand trends for the subject property type on market and submarket levels. The final step will be to draw conclusions from the market data and analyses based on their perceived influence on the subject property.

The subject is located in within the Oregon City CBD, but is considered a suburban location within the larger Portland metro area. The site has good exposure/access based on its location

along Highway 99E and proximity to Interchange 205, and are projected to have good demand for office if the subject building is converted. The existing building design, configuration and build-out would suggest an office use would be most functional if converted from the existing use. The condition and quality of the existing improvements are considered to be average. Overall, based on the current design and location of the subject, an office use would be a productive use of the site with similar uses nearby. The subject's good view premium of the Willamette River would also be appealing for an office use. Based on the subject's special purpose use (courthouse), most likely use (conversion to office) and good location with demand for similar office uses, a developer would be the most likely buyer of the subject.

## Highest and Best Use

In appraisal practice, the concept of highest and best use represents the premise upon which value is based. The four criteria the highest and best use must meet are:

- legally permissible;
- physically possible;
- financially feasible; and
- maximally productive.

The highest and best use analysis of the subject is discussed below.

### AS VACANT

Permitted uses of the subject's MUD (Mixed Use Downtown) zoning were listed in the Zoning Analysis section. Please refer to the Zoning Analysis section for additional information. Regarding physical characteristics, the subject site is irregular in shape and has a moderate sloped topography with good access/exposure. The subject site has frontage on a major arterial (Highway 99E), as well as three collector streets. The immediate area is developed with office, retail, and mixed-uses within the downtown core area. Based on our observations of land development trends for sites with similar zoning and physical characteristics as the subject and analysis of current supply/demand trends, the highest and best use of the subject site as-vacant is commercial development.

### AS IMPROVED

The subject's special purpose (courthouse) use (as-is) is a pre-existing use and is permitted to continue by the base zone. The legal factors influencing the highest and best use of the subject property support the existing use. The subject's improvements were constructed in 1937, with an addition in 2012, and reflect average quality construction and average condition, with adequate service amenities. Legal, physical, and locational factors support the existing use as the highest and best use of the subject site; however, marketability factors do not support the current use (public use) as the subject's highest and best use as-improved.

In addition to legal, physical and locational considerations, analysis of the subject property as-is requires the treatment of alternative uses for the property. The five possible alternative treatments of the property are demolition, expansion, renovation, conversion, and the subject's use "as-is".

If sold on the open market, the current use as a courthouse would be discontinued as this is a public use. Therefore, demolition for redevelopment or conversion to an alternative use is most likely. Based on the legally allowed uses of the MUD zone, a wide range of commercial and residential (multi-family) uses would be allowed at the subject.

Physical characteristics would best support an office use. A multi-family conversion would require higher redevelopment costs and would likely not be the highest and best use. Furthermore, it is

noted that the subject is not seismically retrofitted, nor can it become seismically retrofitted. Based on the subject's existing use most resembling office, and considering demolition being less likely based on ORS 358.653 (reference Zoning Analysis section for details), and the subject's incapability of being retrofitted, a conversion to an office use appears to be most likely. The acquisition of similar buildings as the subject for office conversion in recent years would also suggest that an office conversion would be financially feasible and the maximally productive use. For example, the Multnomah County Courthouse located in the Portland CBD sold to a developer in 2018. At the time of purchase, it was reported that the buyer purchased the site as a speculative development. As of the effective date of this report, this building is being marketed for lease as creative office space.

It is also noted that the subject's land value is developed within this report to test the maximally productive use as land for redevelopment or for conversion. Based on a lower concluded land value as opposed to an office conversion project, demolition of the existing improvements for redevelopment is not supported as the highest and best use of the subject, as-improved.

Based on the foregoing, the highest and best use of the property, as improved, is conversion to an office use.



## Land Value

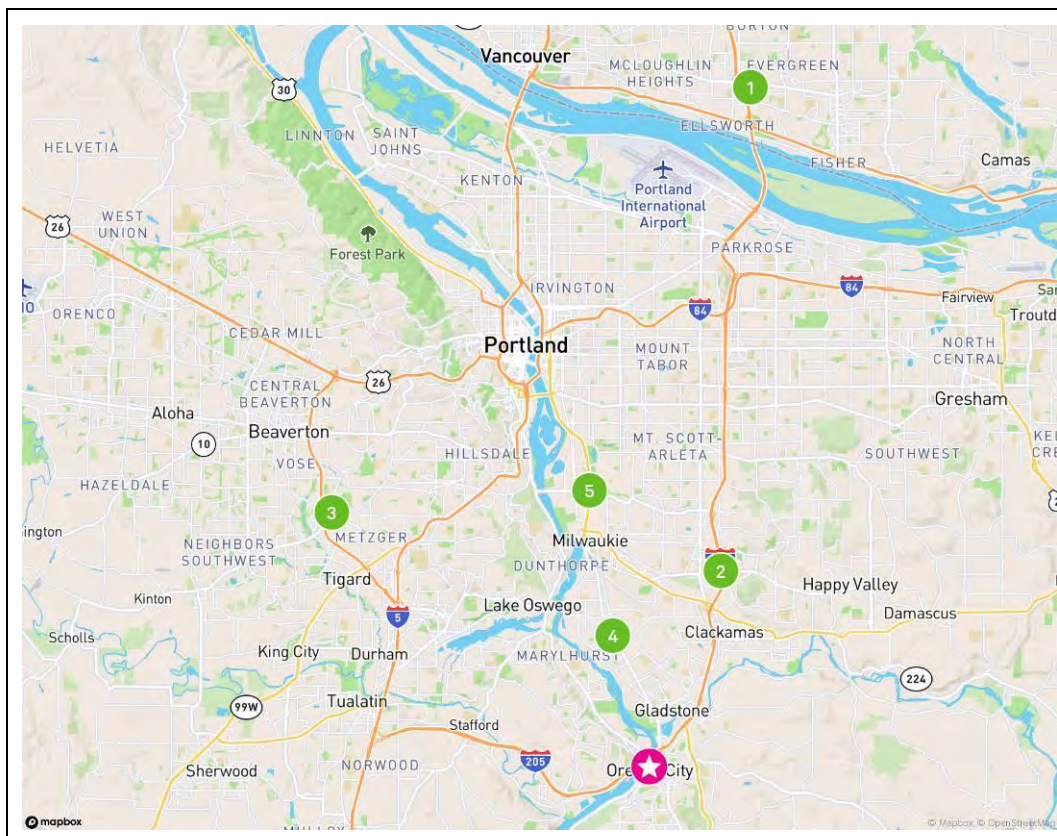
The subject's land value is concluded in this section to test the highest and best use as-improved.

Land value is influenced by a number of factors; most prominent of which is development and use potential. These factors, as well as others, are considered in the following analysis.

A thorough search was made for similar land sales in terms of proximity to the subject, size, location, development potential, and date of sale. In selecting comparables, emphasis was placed on confirming recent sales of commercial sites that are similar to the subject property in terms of location and physical characteristics. Based on limited sales of similar commercial sites within the Oregon City CBD, the comparable search was expanded beyond the immediate area. Overall, the sales selected represent the best comparables available for this analysis.

The most relevant unit of comparison is the price per square foot unit value. This indicator best reflects the analysis used by buyers and sellers in this market for land with similar utility and zoning in this marketplace.

The following map and table summarize the comparable data used in the valuation of the subject site. A detailed description of each transaction is included in the addenda.



SUMMARY OF COMPARABLE LAND SALES										
No.	Property Location	Transaction Type	Transaction Date	Interest Transferred	Zoning	Actual Sale Price	Adjusted Sale Price <sup>1</sup>	Size (Acres)	Size (SF)	Price Per SF
1	Chkalov Land 480 Southeast 117th Avenue Vancouver, WA 98683	Sale	Sep-22	Fee Simple/Freehold	CC - Community Commercial	\$1,375,000	\$1,375,000	0.78	33,977	\$40.47
2	Clackamas Town Center Pad Site 9155 SE Sunnyside Road Happy Valley, OR 97086	Sale	Jul-21	Fee Simple/Freehold	PMU1 (Planned Mixed Use)	\$3,800,000	\$3,800,000	1.96	85,378	\$44.51
3	Dental Site 8900 SW Hall Boulevard Beaverton, OR 97223	Sale	Mar-21	Fee Simple/Freehold	CS (Community Service)	\$925,000	\$935,000	0.56	24,394	\$38.33
4	Commercial Land 15701 SE McLoughlin Boulevard Milwaukie, OR 97267	Sale	Dec-20	Fee Simple/Freehold	C3	\$2,250,000	\$2,250,000	1.00	43,560	\$51.65
5	Commercial Land 2500 SE Tacoma St. Portland, OR 97202	Sale	Jul-20	Fee Simple/Freehold	CE - Commercial Employment	\$1,120,000	\$1,120,000	0.74	32,092	\$34.90
Subject	807 Main Street Oregon City, OR 97045	---	---		Mixed Use Downtown (MUD)	---	---	0.94	40,946	---

<sup>1</sup> Adjusted sale price for cash equivalency and/or development costs (where applicable)  
Compiled by CBRE

## COMPARABLE ADJUSTMENTS

### Transactional Adjustments

Dollar adjustments to the comparable sales were considered and made when warranted for transactional adjustments including property rights transferred, financing terms, conditions of sale, expenditures after purchase such as demolition costs and market conditions. The following table summarizes the market conditions adjustment applied in this analysis.

The analysis applies an upward market conditions adjustment of 3% annually reflecting the conditions between the oldest comparable sale date up through the effective valuation date. The adjustment is based on an analysis of transaction trends and input from market participants.

### Property Adjustments

As commercial real estate markets often are imperfect in nature, the comparable sales are analyzed based on qualitative comparison. The adjustments are subjective, but are based on market evidence as well as the appraiser's judgment, experience and research. The adjustments are not derived through quantitative analysis techniques, such as paired sale or regression analysis, as the data does not exist in a manner that would provide reliable results. As such, the adjustments made on a percentage basis are conveying the applied degree of subjective adjustments and are not the result of quantitative analysis.

## DISCUSSION/ANALYSIS OF LAND SALES

### Land Sale One (\$40.47/SF – unadjusted)

This comparable represents the September 2022 sale of a 0.78-acre (33,977-square foot) commercial lot/pad site currently improved with a parking lot along SE Chkalov Dr in Vancouver, Washington. The immediate area is characterized by retail development, including a Fred Meyer and the Cascade Park Plaza retail center. Access to SE Mill Plain Blvd and I-205 is provided a short distance to the north. The site includes a level topography and rectangular shape with roughly 200 feet of frontage along SE Chkalov Dr, which is a secondary arterial street providing moderate/good traffic exposure for a retail use. It is noted that this property has an access agreement with the adjacent church property to access SE Chkalov Dr. Prior to the September 2022 sale for \$1,375,000, the property sold in July 2022 for \$700,000 (similar to the list price) and was only on the market 19 days prior to selling. Reportedly, the buyer in the first transaction purchased the site for retail development. However, after closing the sale and then receiving the higher offer, the seller decided to sell rather than develop the property. The second buyer is IQ Credit Union, who plans to develop a bank branch and owner-occupy the property.

Based on a smaller size generally being offset by inferior exposure, Comparable 1 is concluded more or less a good indicator of the subject.

### Land Sale Two (\$44.51/SF – unadjusted)

This is the July 2021 sale of a 1.96-acre site located on a pad at the Clackamas Town Center, south of the Trimet park and ride structure and 117-unit Residence Inn (under construction) at the corner of the I-205 offramp and SE Sunnyside Road. The site is zoned PMU1 which allows for a wide range of residential and commercial uses. The property was listed without entitlements in place and was purchased with the intent to build a 102-room hotel, but the architectural drawings and some other development costs were included in the sale. The buyer, however, did not specify an allocation of costs relative to the sale price. The developer intends to break ground by late Spring of 2022. Assuming an 18-month construction period, the hotel would be completed by September of 2023. The buyer was attracted to the site as he resides in Happy Valley and overseeing the development of the project would be relatively easy. Further, the site is perceived as one of the best remaining undeveloped parcels along Interstate 205. The developer is an owner/operator of several hotel properties throughout the Pacific Northwest.

Based on its superior exposure, but partial offsetting due to an older sale date and larger site size, Comparable 2 is concluded a high indicator of the subject and a net downward adjustment is warranted.

### Land Sale Three (\$38.33/SF – unadjusted)

This is the March 2021 sale of a 0.56-acre site located at 8900 SW Hall Blvd near the Washington Square Mall. There is an existing dental clinic on the property; however, the buyer intends to demo the building and develop a new dental clinic for owner occupancy. \$10,000 has

been estimated for demo cost and applied to the sales price of \$925,000. According to the broker, the original asking price was \$995,000 and there was good interest for the property. The site had been marketed as redevelopment land.

Based on an older sale date and inferior access/exposure, but partial offsetting due to a smaller site size, Comparable 3 is concluded a low indicator and a net upward adjustment is warranted.

#### **Land Sale Four (\$51.65/SF – unadjusted)**

This is the December 2020 sale of a 1.0-acre commercial site located at the signalized corner of SE McLoughlin Boulevard and SE Concord Road in Milwaukie, OR. The site consists of three adjacent parcels that are rectangular in shape, has level topography and is zoned C3. It was on the market at an asking price of \$2,500,000 and included older retail improvements. According to the broker familiar with this transaction, the buyer plans on demolishing the existing improvements for a build-to-suit project for Chase Bank. Therefore, this is considered a redevelopment land sale and no value was given to the improvements at the time of sale.

Based on superior exposure (signaled corner exposure along a highway), Comparable 4 is concluded a high indicator of the subject and a net downward adjustment is warranted.

#### **Land Sale Five (\$34.90/SF – unadjusted)**

This is the July 2020 sale of a 0.75-acre, vacant commercial parcel with good frontage and visibility on SE Tacoma St., just off SE McLoughlin Blvd. in SE Portland. This is an irregular-shaped lot situated just west of the Les Schwab Tire Center and parceled off for development. Traffic counts are strong on SE McLoughlin and on SE Tacoma at 16th Ave. CE zoning supports a wide variety of medium-scale, commercial development along corridors. Development along 17th Ave (just west) is primarily commercial/retail. The property was marketed for ~7 months for a list price of \$1.2 million. The sale price represents a 7% discount to list.

Based on an older sale date and inferior exposure (set back from SE McLoughlin Blvd), Comparable 5 is concluded a low indicator and an upward net adjustment is warranted.

### **SUMMARY OF ADJUSTMENTS**

Based on our comparative analysis, the following chart summarizes the adjustments warranted to each comparable.

LAND SALES ADJUSTMENT GRID						Subject
Comparable Number	1	2	3	4	5	---
Transaction Type	Sale	Sale	Sale	Sale	Sale	---
Transaction Date	Sep-22	Jul-21	Mar-21	Dec-20	Jul-20	---
Interest Transferred	Fee	Fee	Fee	Fee	Fee	
	Simple/Freehold	Simple/Freehold	Simple/Freehold	Simple/Freehold	Simple/Freehold	
Zoning	CC - Community Commercial	PMU1 (Planned Mixed Use)	CS (Community Service)	C3	CE - Commercial Employment	Mixed Use Downtown (MUD)
Actual Sale Price	\$1,375,000	\$3,800,000	\$925,000	\$2,250,000	\$1,120,000	---
Adjusted Sale Price <sup>1</sup>	\$1,375,000	\$3,800,000	\$935,000	\$2,250,000	\$1,120,000	---
Size (Acres)	0.78	1.96	0.56	1.00	0.74	0.94
Size (SF)	33,977	85,378	24,394	43,560	32,092	40,946
Price Per SF	\$40.47	\$44.51	\$38.33	\$51.65	\$34.90	---
Price (\$ PSF)	\$40.47	\$44.51	\$38.33	\$51.65	\$34.90	
Property Rights Conveyed	0%	0%	0%	0%	0%	
Financing Terms <sup>1</sup>	0%	0%	0%	0%	0%	
Conditions of Sale	0%	0%	0%	0%	0%	
Market Conditions (Time)	1%	4%	5%	6%	7%	
Subtotal	\$40.87	\$46.29	\$40.25	\$54.75	\$37.34	
Size	-5%	5%	-10%	0%	-5%	
Shape	0%	0%	0%	0%	0%	
Access/Exposure	5%	-15%	10%	-10%	15%	
Topography	0%	0%	0%	0%	0%	
Location	0%	0%	0%	0%	0%	
Zoning/Density	0%	0%	0%	0%	0%	
Utilities	0%	0%	0%	0%	0%	
Highest & Best Use	0%	0%	0%	0%	0%	
Total Other Adjustments	0%	-10%	0%	-10%	10%	
<b>Value Indication for Subject</b>	<b>\$40.87</b>	<b>\$41.66</b>	<b>\$40.25</b>	<b>\$49.27</b>	<b>\$41.08</b>	
<i>Absolute Adjustment</i>	11%	24%	25%	16%	27%	

<sup>1</sup> Adjusted sale price for cash equivalency and/or development costs (where applicable)

Compiled by CBRE

## CONCLUSION

Unadjusted, the comparables indicate a value range of \$34.90 to \$51.65/SF, with an average of \$41.97/SF. Based on the preceding qualitative analysis, the subject site is concluded to be bracketed by Comparables 2 and 3, which indicate a narrower value range of \$38.33 to \$44.51/SF. Furthermore, Comparable 1 (\$40.87/SF) was concluded more or less a good indicator based on offsetting characteristics.

After the transaction/property adjustments have been applied, the comparables indicate a narrower value range of \$40.25 to \$49.27/SF, with an average of \$42.63/SF. Primary weight of a value conclusion is given to Comparables 1 (\$40.87/SF), as this is the most recent sale and required a lower gross adjustment, and is therefore concluded most similar. The remaining comparables are concluded secondary indicators and supporting of value.

Based on the preceding qualitative and quantitative analysis, a value range of between \$40.75 to \$41.00/SF is considered to be reasonable with a value within this range concluded for the subject.

The following table presents the valuation conclusion:

<b>CONCLUDED LAND VALUE</b>				
<b>\$ PSF</b>		<b>Subject SF</b>	<b>=</b>	<b>Total</b>
\$40.75	x	40,946	=	\$1,668,566
\$41.00	x	40,946	=	\$1,678,802
<b>Indicated Value:</b>				<b>\$1,670,000</b>
		(Rounded \$ PSF)		\$40.79
Compiled by CBRE				

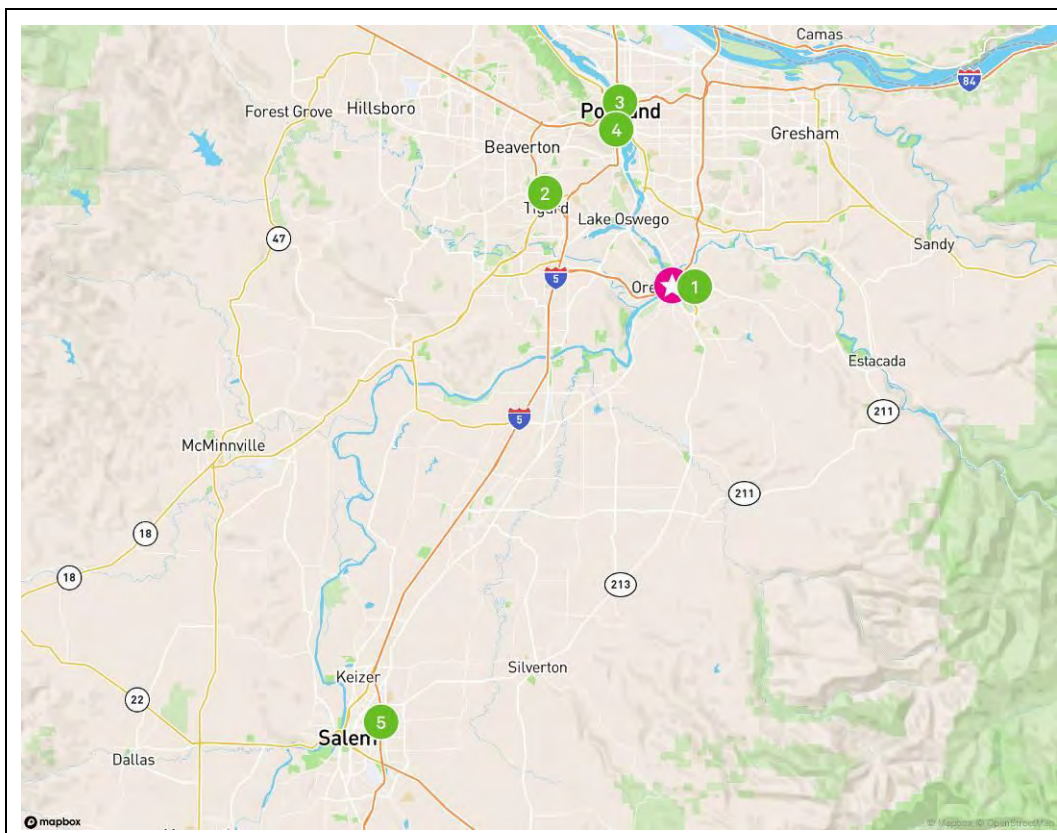
## Sales Comparison Approach

The Sales Comparison Approach is based on the principle of substitution, which asserts that a buyer would not pay more for a property than the value of similar properties in the market. This approach analyzes comparable sales by applying transactional and property adjustments to bracket the subject property within an appropriate unit value comparison.

The most relevant unit of comparison is the price per square foot of value indicator. This indicator best reflects the analysis used by buyers and sellers in this market for improved properties with similar design and utility.

We completed a thorough search for similar improved sales in terms of property type, location, physical characteristics, and date of sale. In selecting comparables, emphasis was placed on confirming recent improved sales of properties that match the highest and best use, and buyer/seller profile of the subject property, that is, older concrete reinforced buildings purchased for office conversion. Due to limited sales of similar buildings, the comparable selection was expanded to include other office type properties. Overall, the sales selected represent the best comparables available for this analysis.

The following map and table summarize the comparable data used in the valuation of the subject. A detailed description of each transaction is included in the addenda.



SUMMARY OF COMPARABLE OFFICE SALES								
No.	Property Name	Transaction Type	Transaction Date	Interest Transferred	YOC / Reno'd	NRA (SF)	Actual Sale Price	Price Per SF <sup>1</sup>
1	Multnomah Lodge No. 1 707-709 Main St Oregon City, OR 97045	Available /Listing	Dec-22	Leased Fee	1907	29,700	\$4,980,000	\$167.68
2	Atrium West 9600 SW Oak Street Tigard, OR 97223	Sale	May-20	Leased Fee	1983 / 1990	67,389	\$9,800,000	\$145.42
3	McCoy Building 426 SW Stark St. Portland, OR 97204	Sale	Dec-18	Fee Simple/Freehold	1923	97,981	\$9,850,000	\$100.53
4	Multnomah County Courthouse 1021 SW 4th Ave. Portland, OR 97204	Sale	Nov-18	Fee Simple/Freehold	1912	292,717	\$28,000,000	\$95.66
5	American Red Cross Office 1860 Hawthorne Avenue NE Salem, OR 97301	Sale	Jun-18	Fee Simple/Freehold	1995	16,567	\$2,075,000	\$125.25
Subj. Pro Forma	Clackamas County Courthouse 807 Main Street Oregon City, OR 97045	---	---	---	1937 / 2012	65,527	---	---

<sup>1</sup> Adjusted sale price for cash equivalency, lease-up and/or deferred maintenance (where applicable)  
Compiled by CBRE

## COMPARABLE ADJUSTMENTS

### Transactional Adjustments

Dollar adjustments to the comparable sales were considered and made when warranted for transactional adjustments including property rights transferred, financing terms, conditions of sale, expenditures after purchase such as demolition costs and market conditions.

The subject's fee simple value is concluded within this report. Due to a limited amount of similar fee simple sales, the analysis also includes two leased fee sales (Comparables 1 and 2). Based on our analysis, a property rights adjustment is not warranted; however, property rights of each comparable sale will be taken into consideration in the value conclusion.

There have been limited sales of conversion projects similar to the subject for which a derived market conditions adjustment can be supported. As such, within this analysis a market conditions adjustment is not concluded; however, each comparable sale date will be taken into consideration in the value conclusion.

Comparable 1 is a listing and is adjusted downward slightly for buyer/seller negotiations (typical).

### Property Adjustments

As commercial real estate markets often are imperfect in nature, the comparable sales are analyzed based on qualitative comparison. The adjustments are subjective, but are based on market evidence as well as the appraiser's judgment, experience and research. The adjustments



are not derived through quantitative analysis techniques, such as paired sale or regression analysis, as the data does not exist in a manner that would provide reliable results. As such, the adjustments made on a percentage basis are conveying the applied degree of subjective adjustments and are not the result of quantitative analysis.

## DISCUSSION/ANALYSIS OF IMPROVED SALES

### Improved Sale One (\$167.68/SF – unadjusted)

This is the listing of the Multnomah Lodge No. 1 building, a four story office building, plus a fully built-out basement, including a total net rentable area of roughly 29,700 SF. It is noted that the property is located roughly one block from the subject. The property was constructed in 1907 and includes a reinforced concrete frame with brick exterior. The property is currently 100% leased to multiple tenants with an average remaining term of roughly 2-5 years; however, roughly 59% of the NRA is occupied by Clackamas County, which will be moving to the new Clackamas County Courthouse once completed (currently under construction). As such, there is near term lease-up risk which reportedly discourage potential investors/buyers of the property. The property has been listed for roughly 8-9 months as of the date of confirmation, including investors for the current office use, as well as developers wanting to repurpose the property. It is noted that the building is not seismic reinforced and only includes one non-ADA elevator, both of which reportedly discouraged developers intending to repurpose the property. Furthermore, the listing broker indicated that if the subject included these, the property would have sold at the current list price. Based on in-place income, reported expenses and the list price, the in-place capitalization rate is reported at 6.6%. However, this did not include vacancy/credit loss or reserves. If including 5% of PGI for vacancy/credit loss and 3.5% of EGI for reserves, the implied capitalization rate decreases to 6.1%.

A downward adjustment is warranted for its listing status, for its smaller size (based on economies of scale) and for its current configuration as an already existing office building (superior to the subject as the subject will require conversion costs). Based on these factors, Comparable 1 is concluded a high indicator and a net downward adjustment is warranted.

### Improved Sale Two (\$145.42/SF – unadjusted)

This is the May 2020 sale of the Atrium West, formerly known as Plaza West, office building in Tigard, OR. The property consists of four floors of office space above one floor of structured parking. This deal was negotiated and the buyer paid hard money prior to COVID impacting the market. With consideration to COVID and revised financing terms from the buyer's lender, the price was negotiated down 'a few percent' according to a party involved in the sale (specific repricing was not disclosed). The buyer was a local investor. The broker indicated that the sale price indicated an in-place cap rate of 7.5%. All tenants had paid rent as of the time of sale and there were no specific or atypical COVID-related concerns among the rent roll relative to the larger market for this asset. Pricing and the indicated cap rate were impacted by relatively limited

on-site parking for a suburban office project and access challenges (the property is adjacent to the Hwy 217-Greenburg Rd. interchange but access off Greenburg is right in/out only and access to get back to Hwy 217 is circuitous around the Lincoln Center office park located to the north).

Based on superior condition, superior quality (existing office property not requiring conversion costs) and superior parking, Comparable 2 is concluded a high indicator of the subject and a net downward adjustment is warranted.

### **Improved Sale Three (\$100.53/SF – unadjusted)**

This is the December 2018 sale of the Glayds McCoy Building in the Portland CBD. It is a 10-story historic building that will be fully vacated by the seller (Multnomah County) after a short-term leaseback agreement. The property was marketed as a full-scope repositioning play/value-add project. The property was constructed in 1923 and includes original details on the exterior and interior. Multnomah County will lease back the property at no rent through September 2019 with two 12-month options to extend at \$150k/month then \$175k/month. Interested prospective buyers considered various redevelopment plays for the asset including office and hotel uses. The buyer will consider a creative office conversion seeking opportunistic returns on a 5-year hold. The building includes a full, unfinished basement (not included in NRA). The property does not include any on-site parking. The property went under contract at \$11,100,000 but the purchase price was reduced to \$9,850,000. Details on the buyer's budget for redevelopment were not disclosed.

Based on its superior location (downtown Portland) being partially offset by its larger size and inferior condition, Comparable 1 is concluded a slightly high to good indicator of the subject and a net downward adjustment is warranted.

### **Improved Sale Four (\$95.66/SF – unadjusted)**

This is the November 2018 sale of the Multnomah County Courthouse located in downtown Portland. It is an 8-story historic building (listed on National Register since 1979) that includes 39 courtrooms and other unique elements. It was constructed in 1909-1914 and had various renovations over the years. The county previously owner-occupied the building but completed a new construction a few blocks away and relocating in 2020. This transaction included a leaseback at no rent (county to pay for all operating costs in interim). The property was marketed over mid-2018 and went under contract in September 2018. This was an arm's length sale and other buyers were reportedly interested at generally similar pricing (including at least one higher offer), though this was the only offer that included a leaseback at no net rent. The buyer did not have specific plans for the property at the time of the purchase but felt the basis was low enough (on a \$/SF and overall basis) that the project could support redevelopment to creative office or potential other uses (a hotel conversion is unlikely but noted as a possible option). The property has large ~30,000 SF floor plates that are rare and attractive to users in the CBD. The property has a "Walk Score" of 99. The buyer will evaluate options as it proceeds with due diligence/planning, including exploring options for a headquarter redevelopment for a large

user. There is some discrepancy among sources on the building's size; 292,717 SF was used during the sale process for estimated NRA and is shown for analysis purposes here (a more conservative estimate of 235k SF would indicate a price/basis of \$119/SF). There are large common areas that could be reconfigured or loaded, depending on eventual use of the building. No specific redevelopment budget was established prior to the sale given the situation, timeline and uncertain use/design; however, as of the effective date of this report the project is being marketed as speculative creative office.

Based on its larger size being partially offset by a superior location (Portland MSA), Comparable 4 is concluded a slightly low to good indicator and a net upward adjustment is warranted.

### **Improved Sale Five (\$125.25/SF – unadjusted)**

This is the sale of an office building located at 1860 Hawthorne Avenue NE, Salem, Oregon. The property sold for \$2,075,000 in June of 2018. According to the buyer's broker, the property was purchased for owner occupancy by the American National Red Cross for a general office use. The broker indicated that the Red Cross intended to renovate the building, but did not know the amount of the renovations. The building is four-stories and has exposure along the Interstate-5 freeway.

An upward adjustment is warranted for an inferior location (Salem), whereas a downward adjustment is warranted for a smaller building size, superior condition, superior quality (functional office) and superior parking. Based on its superior characteristics, Comparable 5 is concluded a high indicator and a net downward adjustment is warranted.

## **SUMMARY OF ADJUSTMENTS**

Based on our comparative analysis, the following chart summarizes the adjustments warranted to each comparable.

OFFICE SALES ADJUSTMENT GRID						
Comparable Number	1	2	3	4	5	Subj. Pro Forma
Transaction Type	Available/Listing	Sale	Sale	Sale	Sale	---
Transaction Date	Dec-22	May-20	Dec-18	Nov-18	Jun-18	---
Interest Transferred	Leased Fee	Leased Fee	Fee	Fee	Fee	---
			Simple/Freehold	Simple/Freehold	Simple/Freehold	
Year Built/Renovated	1907	1983 / 1990	1923	1912	1995	1937 / 2012
Property Type	Office	Office	Office	Office	Office	Office
NRA (SF)	29,700	67,389	97,981	292,717	16,567	65,527
Actual Sale Price	\$4,980,000	\$9,800,000	\$9,850,000	\$28,000,000	\$2,075,000	---
Adjusted Sale Price <sup>1</sup>	\$4,980,000	\$9,800,000	\$9,850,000	\$28,000,000	\$2,075,000	---
Price Per SF <sup>1</sup>	\$167.68	\$145.42	\$100.53	\$95.66	\$125.25	---
Adj. Price Per SF	\$167.68	\$145.42	\$100.53	\$95.66	\$125.25	
Property Rights Conveyed	0%	0%	0%	0%	0%	
Financing Terms <sup>1</sup>	0%	0%	0%	0%	0%	
Conditions of Sale	0%	0%	0%	0%	0%	
Market Conditions (Time)	-15%	0%	0%	0%	0%	
Subtotal - Price Per SF	\$142.53	\$145.42	\$100.53	\$95.66	\$125.25	
Location	0%	0%	-15%	-15%	15%	
Size	-10%	0%	10%	35%	-15%	
Age/Condition	0%	0%	5%	0%	0%	
Quality of Construction	5%	-10%	5%	0%	-10%	
Parking	0%	-5%	0%	0%	-5%	
Tenancy	0%	0%	0%	0%	0%	
Amenities	0%	0%	0%	0%	0%	
Other	0%	0%	0%	0%	0%	
Total Other Adjustments	-5%	-15%	5%	20%	-15%	
<b>Indicated Value Per SF</b>	<b>\$135.40</b>	<b>\$123.61</b>	<b>\$105.56</b>	<b>\$114.79</b>	<b>\$106.46</b>	
<i>Absolute Adjustment</i>	30%	15%	35%	50%	45%	

<sup>1</sup> Adjusted for cash equivalency, lease-up and/or deferred maintenance (where applicable)  
Compiled by CBRE

## SALE PRICE PER SQUARE FOOT CONCLUSION

Unadjusted, the comparables indicate a value range from \$95.66 to \$167.68/SF, with an average of \$126.91/SF. Based on the preceding qualitative analysis, the subject is concluded to be bracketed by Comparables 3 and 4, which indicate a narrower range of \$95.66 to \$100.53/SF. Furthermore, it is noted that these are most similar to the subject as they were purchased for office conversion similar to the subject's highest and best use.

After the transaction/property quantitative adjustments have been applied, the comparables indicate a narrower value range of \$95.50 to \$116.34/SF, with an average of \$105.30/SF. Primary emphasis of a value conclusion is given to Comparables 3 and 4 as these are most similar as they were purchased for conversion to office. These indicate a narrower range of \$95.50 to \$100.44/SF. The remaining comparables are considered secondary and supporting of value.

Based on the above qualitative and quantitative analysis, but also considering current market conditions and the subject's suburban location, a value range of \$95.00 to \$100.00/SF is

considered reasonable with a value within this range concluded for the subject. The following chart presents the valuation conclusion:

<b>SALES COMPARISON APPROACH</b>				
<b>NRA (SF)</b>	<b>X</b>	<b>Value Per SF</b>	<b>=</b>	<b>Value</b>
65,527	X	\$95.00	=	\$6,225,065
65,527	X	\$100.00	=	\$6,552,700
<b>VALUE CONCLUSION</b>				
As Is Market Value				<b>\$6,400,000</b>
Value Per SF				<b>\$97.67</b>
Compiled by CBRE				

## Reconciliation of Value

The subject's as-is value was developed by the sales comparisons approach within this analysis. In the sales comparison approach, the subject is compared to similar properties that have been sold recently or for which listing prices or offers are known. The sales used in this analysis are considered comparable to the subject, and the required adjustments were based on reasonable and well-supported rationale. Therefore, the sales comparison approach is considered to provide a reliable value indication, but has been given secondary emphasis in the final value reconciliation.

Based on the foregoing, the market value of the subject has been concluded as follows:

<b>SUMMARY OF VALUE CONCLUSIONS</b>			
Appraisal Premise	As of Date	Sales Comparison Approach	Reconciled Value
As-Is Market Value	November 30, 2022	\$6,400,000	\$6,400,000
Compiled by CBRE			

## Assumptions and Limiting Conditions

1. CBRE, Inc. through its appraiser (collectively, "CBRE") has inspected through reasonable observation the subject property. However, it is not possible or reasonably practicable to personally inspect conditions beneath the soil and the entire interior and exterior of the improvements on the subject property. Therefore, no representation is made as to such matters.
2. The report, including its conclusions and any portion of such report (the "Report"), is as of the date set forth in the letter of transmittal and based upon the information, market, economic, and property conditions and projected levels of operation existing as of such date. The dollar amount of any conclusion as to value in the Report is based upon the purchasing power of the U.S. Dollar on such date. The Report is subject to change as a result of fluctuations in any of the foregoing. CBRE has no obligation to revise the Report to reflect any such fluctuations or other events or conditions which occur subsequent to such date.
3. Unless otherwise expressly noted in the Report, CBRE has assumed that:
  - (i) Title to the subject property is clear and marketable and that there are no recorded or unrecorded matters or exceptions to title that would adversely affect marketability or value. CBRE has not examined title records (including without limitation liens, encumbrances, easements, deed restrictions, and other conditions that may affect the title or use of the subject property) and makes no representations regarding title or its limitations on the use of the subject property. Insurance against financial loss that may arise out of defects in title should be sought from a qualified title insurance company.
  - (ii) Existing improvements on the subject property conform to applicable local, state, and federal building codes and ordinances, are structurally sound and seismically safe, and have been built and repaired in a workmanlike manner according to standard practices; all building systems (mechanical/electrical, HVAC, elevator, plumbing, etc.) are in good working order with no major deferred maintenance or repair required; and the roof and exterior are in good condition and free from intrusion by the elements. CBRE has not retained independent structural, mechanical, electrical, or civil engineers in connection with this appraisal and, therefore, makes no representations relative to the condition of improvements. CBRE appraisers are not engineers and are not qualified to judge matters of an engineering nature, and furthermore structural problems or building system problems may not be visible. It is expressly assumed that any purchaser would, as a precondition to closing a sale, obtain a satisfactory engineering report relative to the structural integrity of the property and the integrity of building systems.
  - (iii) Any proposed improvements, on or off-site, as well as any alterations or repairs considered will be completed in a workmanlike manner according to standard practices.
  - (iv) Hazardous materials are not present on the subject property. CBRE is not qualified to detect such substances. The presence of substances such as asbestos, urea formaldehyde foam insulation, contaminated groundwater, mold, or other potentially hazardous materials may affect the value of the property.
  - (v) No mineral deposit or subsurface rights of value exist with respect to the subject property, whether gas, liquid, or solid, and no air or development rights of value may be transferred. CBRE has not considered any rights associated with extraction or exploration of any resources, unless otherwise expressly noted in the Report.
  - (vi) There are no contemplated public initiatives, governmental development controls, rent controls, or changes in the present zoning ordinances or regulations governing use, density, or shape that would significantly affect the value of the subject property.
  - (vii) All required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state, nor national government or private entity or organization have been or can be readily obtained or renewed for any use on which the Report is based.
  - (viii) The subject property is managed and operated in a prudent and competent manner, neither inefficiently or super-efficiently.
  - (ix) The subject property and its use, management, and operation are in full compliance with all applicable federal, state, and local regulations, laws, and restrictions, including without limitation environmental laws, seismic hazards, flight patterns, decibel levels/noise envelopes, fire hazards, hillside ordinances, density, allowable uses, building codes, permits, and licenses.
  - (x) The subject property is in full compliance with the Americans with Disabilities Act (ADA). CBRE is not qualified to assess the subject property's compliance with the ADA, notwithstanding any discussion of possible readily achievable barrier removal construction items in the Report.

- (xi) All information regarding the areas and dimensions of the subject property furnished to CBRE are correct, and no encroachments exist. CBRE has neither undertaken any survey of the boundaries of the subject property nor reviewed or confirmed the accuracy of any legal description of the subject property.

Unless otherwise expressly noted in the Report, no issues regarding the foregoing were brought to CBRE's attention, and CBRE has no knowledge of any such facts affecting the subject property. If any information inconsistent with any of the foregoing assumptions is discovered, such information could have a substantial negative impact on the Report. Accordingly, if any such information is subsequently made known to CBRE, CBRE reserves the right to amend the Report, which may include the conclusions of the Report. CBRE assumes no responsibility for any conditions regarding the foregoing, or for any expertise or knowledge required to discover them. Any user of the Report is urged to retain an expert in the applicable field(s) for information regarding such conditions.

4. CBRE has assumed that all documents, data and information furnished by or behalf of the client, property owner, or owner's representative are accurate and correct, unless otherwise expressly noted in the Report. Such data and information include, without limitation, numerical street addresses, lot and block numbers, Assessor's Parcel Numbers, land dimensions, square footage area of the land, dimensions of the improvements, gross building areas, net rentable areas, usable areas, unit count, room count, rent schedules, income data, historical operating expenses, budgets, and related data. Any error in any of the above could have a substantial impact on the Report. Accordingly, if any such errors are subsequently made known to CBRE, CBRE reserves the right to amend the Report, which may include the conclusions of the Report. The client and intended user should carefully review all assumptions, data, relevant calculations, and conclusions of the Report and should immediately notify CBRE of any questions or errors within 30 days after the date of delivery of the Report.
5. CBRE assumes no responsibility (including any obligation to procure the same) for any documents, data or information not provided to CBRE, including without limitation any termite inspection, survey or occupancy permit.
6. All furnishings, equipment and business operations have been disregarded with only real property being considered in the Report, except as otherwise expressly stated and typically considered part of real property.
7. Any cash flows included in the analysis are forecasts of estimated future operating characteristics based upon the information and assumptions contained within the Report. Any projections of income, expenses and economic conditions utilized in the Report, including such cash flows, should be considered as only estimates of the expectations of future income and expenses as of the date of the Report and not predictions of the future. Actual results are affected by a number of factors outside the control of CBRE, including without limitation fluctuating economic, market, and property conditions. Actual results may ultimately differ from these projections, and CBRE does not warrant any such projections.
8. The Report contains professional opinions and is expressly not intended to serve as any warranty, assurance or guarantee of any particular value of the subject property. Other appraisers may reach different conclusions as to the value of the subject property. Furthermore, market value is highly related to exposure time, promotion effort, terms, motivation, and conclusions surrounding the offering of the subject property. The Report is for the sole purpose of providing the intended user with CBRE's independent professional opinion of the value of the subject property as of the date of the Report. Accordingly, CBRE shall not be liable for any losses that arise from any investment or lending decisions based upon the Report that the client, intended user, or any buyer, seller, investor, or lending institution may undertake related to the subject property, and CBRE has not been compensated to assume any of these risks. Nothing contained in the Report shall be construed as any direct or indirect recommendation of CBRE to buy, sell, hold, or finance the subject property.
9. No opinion is expressed on matters which may require legal expertise or specialized investigation or knowledge beyond that customarily employed by real estate appraisers. Any user of the Report is advised to retain experts in areas that fall outside the scope of the real estate appraisal profession for such matters.
10. CBRE assumes no responsibility for any costs or consequences arising due to the need, or the lack of need, for flood hazard insurance. An agent for the Federal Flood Insurance Program should be contacted to determine the actual need for Flood Hazard Insurance.
11. Acceptance or use of the Report constitutes full acceptance of these Assumptions and Limiting Conditions and any special assumptions set forth in the Report. It is the responsibility of the user of the Report to read in full, comprehend and thus become aware of all such assumptions and limiting conditions. CBRE assumes no responsibility for any situation arising out of the user's failure to become familiar with and understand the same.
12. The Report applies to the property as a whole only, and any pro ration or division of the title into fractional interests will invalidate such conclusions, unless the Report expressly assumes such pro ration or division of interests.



13. The allocations of the total value estimate in the Report between land and improvements apply only to the existing use of the subject property. The allocations of values for each of the land and improvements are not intended to be used with any other property or appraisal and are not valid for any such use.
14. The maps, plats, sketches, graphs, photographs, and exhibits included in this Report are for illustration purposes only and shall be utilized only to assist in visualizing matters discussed in the Report. No such items shall be removed, reproduced, or used apart from the Report.
15. The Report shall not be duplicated or provided to any unintended users in whole or in part without the written consent of CBRE, which consent CBRE may withhold in its sole discretion. Exempt from this restriction is duplication for the internal use of the intended user and its attorneys, accountants, or advisors for the sole benefit of the intended user. Also exempt from this restriction is transmission of the Report pursuant to any requirement of any court, governmental authority, or regulatory agency having jurisdiction over the intended user, provided that the Report and its contents shall not be published, in whole or in part, in any public document without the written consent of CBRE, which consent CBRE may withhold in its sole discretion. Finally, the Report shall not be made available to the public or otherwise used in any offering of the property or any security, as defined by applicable law. Any unintended user who may possess the Report is advised that it shall not rely upon the Report or its conclusions and that it should rely on its own appraisers, advisors and other consultants for any decision in connection with the subject property. CBRE shall have no liability or responsibility to any such unintended user.

**ADDENDA**

Addendum A

**LAND SALE DATA SHEETS**

Property Name	Chkalov Land
Address	480 Southeast 117th Avenue Vancouver, WA 98683
County	Clark
Govt./Tax ID	165956001
Land Area Net	0.780 ac/ 33,977 sf
Land Area Gross	0.780 ac/ 33,977 sf
Site Development Status	Finished
Utilities	All to Site
Maximum FAR	N/A
Min Land Bldg Ratio	N/A
Shape	Rectangular
Topography	Generally Level
Flood Zone Class	Zone X (Unshaded)
Flood Panel No./ Date	53011C0506D/ Sep 2012
Zoning	CC - Community Commercial
Entitlement Status	None



### Transaction Details

Type	Sale	Primary Verification	Ashton Summers, knowledgeable third party/broker, 503.972.5406, confirmed 9/29/2022
Interest Transferred	Fee Simple	Transaction Date	09/02/2022
Condition of Sale	Arm's Length	Recording Date	09/02/2022
Recorded Buyer	IQ Credit Union	Sale Price	\$1,375,000
Buyer Type	End User	Financing	Cash to Seller
Recorded Seller	MAJ CHKALOV LLC	Cash Equivalent	\$1,375,000
Marketing Time	N/A	Capital Adjustment	\$0
Listing Broker	N/A	Adjusted Price	\$1,375,000
Doc #	870646	<b>Adjusted Price / ac and / sf</b>	<b>\$1,762,821 / \$40.47</b>
		<b>Adjusted Price/ FAR</b>	<b>N/A</b>
		<b>Adjusted Price/ Unit</b>	<b>N/A</b>

### Comments

This comparable represents the September 2022 sale of a 0.78-acre (33,977-square foot) commercial lot/pad site currently improved with a parking lot along SE Chkalov Dr in an area characterized by retail development, including a Fred Meyer and the Cascade Park Plaza retail center. Access to SE Mill Plain Blvd and I-205 is provided a short distance to the north. The site includes a level topography and rectangular shape with roughly 200 feet of frontage along SE Chkalov Dr, which is a secondary arterial street providing moderate/good traffic exposure for a retail use. It is noted that this property has an access agreement with the adjacent church property to access SE Chkalov Dr. Prior to the September 2022 sale for \$1,375,000, the property sold in July 2022 for \$700,000 (similar to the list price) and was only on the market 19 days prior to selling. Reportedly, the buyer in the first transaction purchased the site for retail development. However, after closing the sale and then receiving the higher offer, the seller decided to sell rather than develop the property. The second buyer is IQ Credit Union, who plans to develop a bank branch and owner-occupy the property. The sale was confirmed with the listing broker of the first transaction, who was aware of the details of the second sale which followed.

Property Name	Clackamas Town Center Pad Site
Address	9155 SE Sunnyside Road Happy Valley, OR 97086
County	Clackamas County
Govt./Tax ID	00116984
Land Area Net	1.960 ac/ 85,378 sf
Land Area Gross	1.960 ac/ 85,378 sf
Site Development Status	Semi-Finished
Utilities	All Available
Maximum FAR	N/A
Min Land Bldg Ratio	N/A
Shape	Irregular
Topography	Generally Level
Flood Zone Class	N/A
Flood Panel No./ Date	N/A
Zoning	PMU1 (Planned Mixed Use)
Entitlement Status	None



### Transaction Details

Type	Sale	Primary Verification	Harj Singh, Buyer
Interest Transferred	Fee Simple	Transaction Date	07/01/2021
Condition of Sale	Arm's Length	Recording Date	07/07/2021
Recorded Buyer	VIRK Properties Clackamas, LLC	Sale Price	\$3,800,000
Buyer Type	Developer	Financing	Market Rate Financing
Recorded Seller	Heritage Inn 2/Happy Valley LLC	Cash Equivalent	\$3,800,000
Marketing Time	N/A	Capital Adjustment	\$0
Listing Broker	Nicholas Diamond, Capacity Commercial	Adjusted Price	\$3,800,000
Doc #	65661	<b>Adjusted Price / ac and / sf</b>	<b>\$1,938,776 / \$44.51</b>
		<b>Adjusted Price/ FAR</b>	<b>N/A</b>
		<b>Adjusted Price/ Unit</b>	<b>\$37,255</b>

### Comments

This is the July 2021 sale of a 1.96-acre site located on a pad at the Clackamas Town Center, south of the Trimet park and ride structure and 117-unit Residence Inn (under construction) at the corner of the I-205 offramp and SE Sunnyside Road. The site is zoned PMU1 which allows for a wide range of residential and commercial uses. The property was listed without entitlements in-place and was purchased with the intent to build a 102-room hotel, but the architectural drawings and some other development costs were included in the sale. The buyer, however, did not specify an allocation of costs relative to the sale price. The developer intends to break ground by late Spring of 2022. Assuming an 18-month construction period, the hotel would be completed by September of 2023. The buyer was attracted to the site as he resides in Happy Valley and overseeing the development of the project would be relatively easy. Further, the site is perceived as one of the best remaining undeveloped parcels along Interstate 205. The developer is an owner/operator of several hotel properties throughout the Pacific Northwest. The sale price was \$3.8 million, or \$37,255 per unit.

Property Name	Dental Site
Address	8900 SW Hall Boulevard Beaverton, OR 97223
County	Washington County
Govt./Tax ID	R235631
Land Area Net	0.560 ac/ 24,394 sf
Land Area Gross	0.560 ac/ 24,394 sf
Site Development Status	Finished
Utilities	N/A
Maximum FAR	N/A
Min Land Bldg Ratio	N/A
Shape	Irregular
Topography	Generally Level
Flood Zone Class	Zone X (Unshaded)
Flood Panel No./ Date	41067C0534E/ Nov 2016
Zoning	CS (Community Service)
Entitlement Status	N/A



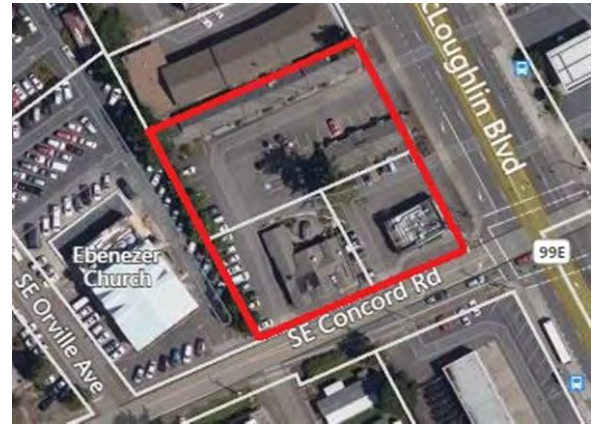
**Transaction Details**

Type	Sale	Primary Verification	Brian Norton, CBRE & Dave Shuster
Interest Transferred	Fee Simple	Transaction Date	03/03/2021
Condition of Sale	None	Recording Date	03/03/2021
Recorded Buyer	PJN Holdings LLC	Sale Price	\$925,000
Buyer Type	Developer	Financing	Market Rate Financing
Recorded Seller	Harbour Neff Family	Cash Equivalent	\$935,000
Marketing Time	8 Month(s)	Capital Adjustment	\$0
Listing Broker	Brian North, CBRE	Adjusted Price	\$935,000
Doc #	N/A	<b>Adjusted Price / ac and / sf</b>	<b>\$1,669,643 / \$38.33</b>
		<b>Adjusted Price/ FAR</b>	<b>N/A</b>
		<b>Adjusted Price/ Unit</b>	<b>N/A</b>

**Comments**

This is the sale of a 0.56-acre site located at 8900 SW Hall Blvd near the Washington Square Mall. There is an existing dental clinic on the property; however, the buyer intends to demo the building and develop a new dental clinic for owner occupancy. \$10,000 has been estimated for demo cost and applied to the sales price of \$925,000. According to the broker, the original asking price was \$995,000 and there was good interest for the property. The site had been marketed as redevelopment land.

Property Name	Commercial Land
Address	15701 SE McLoughlin Boulevard Milwaukie, OR 97267
County	Clackamas
Govt./Tax ID	21E12DB00800, 21E12DB01000, 21E12DB00900
Land Area Net	1.000 ac/ 43,560 sf
Land Area Gross	1.000 ac/ 43,560 sf
Site Development Status	Other(See Comments)
Utilities	Public
Maximum FAR	N/A
Min Land Bldg Ratio	N/A
Shape	Rectangular
Topography	Level, At Street Grade
Flood Zone Class	Zone X (Unshaded)
Flood Panel No./ Date	41005C0017D/ Jun 2008
Zoning	C3
Entitlement Status	N/A



### Transaction Details

Type	Sale	Primary Verification	Sandra McLeod - Trident - market participant
Interest Transferred	Fee Simple	Transaction Date	12/22/2020
Condition of Sale	None	Recording Date	12/22/2020
Recorded Buyer	McLoughlin Investors LLC	Sale Price	\$2,250,000
Buyer Type	Private Investor	Financing	Cash to Seller
Recorded Seller	McNerthney Properties	Cash Equivalent	\$2,250,000
Marketing Time	12 Month(s)	Capital Adjustment	\$0
Listing Broker	Clayton Madey / Macadam Forbes	Adjusted Price	\$2,250,000
Doc #	N/A	<b>Adjusted Price / ac and / sf</b>	<b>\$2,250,000 / \$51.65</b>
		<b>Adjusted Price/ FAR</b>	<b>N/A</b>
		<b>Adjusted Price/ Unit</b>	<b>N/A</b>

### Comments

This is the sale of a 1.0-acre commercial site located at the signalized corner of SE McLoughlin Boulevard and SE Concord Road in Milwaukie, OR. The consists of three adjacent parcels that are rectangular in shape, has level topography and is zoned C3. It was on the market at an asking price of \$2,500,000 and included older retail improvements. It sold in December 2020 for \$2,250,000 or \$51.65/SF. According the broker familiar with this transaction, the buyer plans on demolishing the existing improvements for a build-to-suit project for Chase Bank. Therefore, this is considered a redevelopment land sale and no value was given to the improvements at the time of sale.

Property Name	Commercial Land
Address	2500 SE Tacoma St. Portland, OR 97202
County	Multnomah
Govt./Tax ID	R645907
Land Area Net	0.737 ac/ 32,092 sf
Land Area Gross	0.737 ac/ 32,092 sf
Site Development Status	Raw
Utilities	All to Site
Maximum FAR	4.00
Min Land Bldg Ratio	0.25:1
Shape	Irregular
Topography	Generally Level
Flood Zone Class	Zone X (Shaded)
Flood Panel No./ Date	41051C0360H
Zoning	CE - Commercial Employment
Entitlement Status	None



### Transaction Details

Type	Sale	Primary Verification	Alex Martinac, Broker, Commercial Realty Advisors
Interest Transferred	Fee Simple	Transaction Date	07/06/2020
Condition of Sale	Development	Recording Date	07/06/2020
Recorded Buyer	SELLWOOD TACOMA LLC	Sale Price	\$1,120,000
Buyer Type	Developer	Financing	Cash to Seller
Recorded Seller	Ls Inv Prop Llc	Cash Equivalent	\$1,120,000
Marketing Time	7 Month(s)	Capital Adjustment	\$0
Listing Broker	Alex Martinac, Broker, Commercial Realty Advisors	Adjusted Price	\$1,120,000
Doc #	20081030	<b>Adjusted Price / ac and / sf</b>	<b>\$1,520,293 / \$34.90</b>
		<b>Adjusted Price/ FAR</b>	<b>\$8.72</b>
		<b>Adjusted Price/ Unit</b>	<b>N/A</b>

### Comments

This is the sale of a 0.75 acre, vacant commercial parcel with good frontage and visibility on SE Tacoma St., just off SE McLoughlin Blvd. in SE Portland. This is an irregular-shaped lot situated just west of the Les Schwab Tire Center and parceled off for development. Traffic counts are strong on SE McLoughlin and on SE Tacoma at 16th Ave. CE zoning supports a wide variety of medium-scale, commercial development along corridors. Development along 17th Ave (just west) is primarily commercial/retail. The property was marketed for ~7 months for a list price of \$1.2 million. The sale price represents a 7% discount to list. Public records may indicate that the site size differs from the figure contained herein. Upon further research by the appraiser, there was a lot line adjustment that reduced the property size to 32,092 SF (as shown on the survey map and listing brochure). Therefore, we have relied on this figure in our analysis.



Addendum B

**IMPROVED SALE DATA SHEETS**

Property Name	Multnomah Lodge No. 1
Address	707-709 Main St Oregon City, OR 97045
County	Clackamas
Govt./Tax ID	N/A
Net Rentable Area (NRA)	29,700 sf
Condition	Average
Number of Buildings	1
Parking Type/Ratio	None/ N/A
Year Built/Renovated	1907/ N/A
Floor Count	4
Occupancy Type	Multi-tenant
Land Area Net	0.160 ac/ 6,970 sf
Actual FAR	4.26
Zoning	MUD
Construction Class/ Type	B/ Average
External Finish	Brick
Amenities	N/A



### Transaction Details

Type	Available/Listing	Primary Verification	Matt Lyman, listing broker
Interest Transferred	Leased Fee	Transaction Date	12/13/2022
Condition of Sale	None	Recording Date	N/A
Remaining Lease Term	N/A	Avg. Credit Rating	N/A
Recorded Buyer	N/A	Sale Price	\$4,980,000
Buyer Type	N/A	Financing	N/A
Recorded Seller	T5 EQUITIES LLC	Cash Equivalent	\$4,980,000
Marketing Time	9 Month(s)	Capital Adjustment	\$0
Listing Broker	Matt Lyman, Norris & Stevens	Adjusted Price	\$4,980,000
Doc #	N/A	<b>Adjusted Price / sf</b>	<b>\$167.68</b>

Buyer's Primary Analysis	Static Capitalization Analysis	Occupancy at Sale	N/A
Static Analysis Method	N/A	Underwritten Occupancy	Static Analysis-N/A
Source	Static Analysis-N/A	Potential Gross Income	Static Analysis-N/A
NOI / sf	Static Analysis-N/A	Vacancy/Collection Loss	Static Analysis-N/A
IRR	N/A	Effective Gross Income	Static Analysis-N/A
OER	Static Analysis-N/A	Expenses	Static Analysis-N/A
Expenses /sf	Static Analysis-N/A	Net Operating Income	Static Analysis-N/A
Cap Rate	Static Analysis-N/A		

### Comments

This is the listing of the Multnomah Lodge No. 1 building, a four story office building, plus a fully built-out basement, including a total net rentable area of roughly 29,700 SF. The property was constructed in 1907 and includes a reinforced concrete frame with brick exterior. The property is currently 100% leased to multiple tenants with an average remaining term of roughly 2-5 years; however, roughly 59% of the NRA is occupied by Clackamas County, which will be moving to the new Clackamas County Courthouse once completed (currently under construction). As such, there is near term lease-up risk which reportedly discourages potential investors/buyers of the property. The property has been listed for roughly 8-9 months as of the date of confirmation, including investors for the current office use, as well as developers wanting to repurpose the property. It is noted that the building is not seismic reinforced and only includes one non-ADA elevator, both of which reportedly discouraged developers intending to repurpose the property. Furthermore, the listing broker indicated that if the subject included these, the property would have sold at the current list price. Based on in-place income, reported expenses and the list price, the in-place capitalization rate is reported at 6.6%. However, this did not include vacancy/credit loss or reserves. If including 5% of PGI for vacancy/credit loss and 3.5% of EGI for reserves, the implied capitalization rate decreases to 6.1%.

Property Name	Atrium West
Address	9600 SW Oak Street Tigard, OR 97223
County	Washington
Govt./Tax ID	N/A
Net Rentable Area (NRA)	67,389 sf
Condition	Average
Number of Buildings	1
Parking Type/Ratio	Surface/ 2.52:1,000 sf
Year Built/Renovated	1983/ 1990
Floor Count	4
Occupancy Type	Multi-tenant
Land Area Net	3.030 ac/ 131,987 sf
Actual FAR	0.51
Zoning	N/A
Construction Class/ Type	B/ Average
External Finish	Cedar
Amenities	N/A



### Transaction Details

Type	Sale	Primary Verification	Broker involved in transaction
Interest Transferred	Leased Fee	Transaction Date	05/22/2020
Condition of Sale	hard money pre-COVID; slight re-price	Recording Date	N/A
Remaining Lease Term	N/A	Avg. Credit Rating	N/A
Recorded Buyer	King Capital Investments LLC	Sale Price	\$9,800,000
Buyer Type	Private Investor	Financing	Market Rate Financing
Recorded Seller	Plaza West Owner LLC	Cash Equivalent	\$9,800,000
Marketing Time	6 Month(s)	Capital Adjustment	\$0
Listing Broker	John Sedar, Palmer Capital	Adjusted Price	\$9,800,000
Doc #	2020-044042	<b>Adjusted Price / sf</b>	<b>\$145.42</b>

Buyer's Primary Analysis	Static Capitalization Analysis	Occupancy at Sale	75%
Static Analysis Method	Vacant at Zero	Underwritten Occupancy	75%
Source	N/A	Potential Gross Income	N/A
NOI / sf	\$10.91	Vacancy/Collection Loss	N/A
IRR	N/A	Effective Gross Income	N/A
OER	N/A	Expenses	N/A
Expenses /sf	\$0.00	Net Operating Income	\$735,000
Cap Rate	7.50%		

### Comments

This is the May 2020 sale of the Atrium West, formerly known as Plaza West, office building in Tigard, OR. The property consists of four floors of office space above one floor of structured parking. This deal was negotiated and the buyer paid hard money prior to COVID impacting the market. With consideration to COVID and revised financing terms from the buyer's lender, the price was negotiated down 'a few percent' according to a party involved in the sale (specific repricing was not disclosed). The buyer was a local investor. The broker indicated that the sale price indicated an in-place cap rate of 7.5%. All tenants had paid rent as of the time of sale and there were no specific or atypical COVID-related concerns among the rent roll relative to the larger market for this asset. Pricing and the indicated cap rate were impacted by relatively limited on-site parking for a suburban office project and access challenges (the property is adjacent to the Hwy 217-Greenburg Rd. interchange but access off Greenburg is right in/out only and access to get back to Hwy 217 is circuitous around the Lincoln Center office park located to the north).

Property Name	McCoy Building
Address	426 SW Stark St. Portland, OR 97204
County	Multnomah
Govt./Tax ID	R246124
Net Rentable Area (NRA)	97,981 sf
Condition	Fair
Number of Buildings	1
Parking Type/Ratio	None/ 0.00:1,000 sf
Year Built/Renovated	1923/ N/A
Floor Count	10
Occupancy Type	Single Tenant
Land Area Net	0.230 ac/ 10,000 sf
Actual FAR	11.23
Zoning	CX-d
Construction Class/ Type	B/ Average
External Finish	Masonry
Amenities	N/A



### Transaction Details

Type	Sale	Primary Verification	Confidential
Interest Transferred	Fee Simple	Transaction Date	12/12/2018
Condition of Sale	short-term leaseback at \$0 rent thru Sept. 2019	Recording Date	N/A
Recorded Buyer	Urban Renaissance Group LLC	Sale Price	\$9,850,000
Buyer Type	Developer	Financing	Cash to Seller
Recorded Seller	Multnomah County	Cash Equivalent	\$9,850,000
Marketing Time	6 Month(s)	Capital Adjustment	\$0
Listing Broker	CBRE - Charles Safely	Adjusted Price	\$9,850,000
Doc #	2018-130146	<b>Adjusted Price / sf</b>	<b>\$100.53</b>
Buyer's Primary Analysis	Price (Primary Unit of Comparison)	Occupancy at Sale	100%
Static Analysis Method	N/A	Underwritten Occupancy	Static Analysis-N/A
Source	Static Analysis-N/A	Potential Gross Income	Static Analysis-N/A
NOI / sf	Static Analysis-N/A	Vacancy/Collection Loss	Static Analysis-N/A
IRR	N/A	Effective Gross Income	Static Analysis-N/A
OER	Static Analysis-N/A	Expenses	Static Analysis-N/A
Expenses /sf	Static Analysis-N/A	Net Operating Income	Static Analysis-N/A
Cap Rate	Static Analysis-N/A		

### Comments

This is the December 2018 sale of the Glayds McCoy Building in the Portland CBD. It is a 10-story historic building that will be fully vacated by the seller (Multnomah County) after a short-term leaseback agreement. The property was marketed as a full-scope repositioning play/value-add project. The property was constructed in 1923 and includes original details on the exterior and interior. Multnomah County will lease back the property at no rent through September 2019 with two 12-month options to extend at \$150k/month then \$175k/month. Interested prospective buyers considered various redevelopment plays for the asset including office and hotel uses. The buyer will consider a creative office conversion seeking opportunistic returns on a 5-year hold. The building includes a full, unfinished basement (not included in NRA). The property does not include any on-site parking.

The property went under contract at \$11,100,000 but the purchase price was reduced to \$9,850,000.

Details on the buyer's budget for redevelopment were not disclosed.

Property Name	Multnomah County Courthouse
Address	1021 SW 4th Ave. Portland, OR 97204
County	Multnomah
Govt./Tax ID	R246104
Net Rentable Area (NRA)	292,717 sf
Condition	Fair
Number of Buildings	1
Parking Type/Ratio	None/ N/A
Year Built/Renovated	1912/ N/A
Floor Count	8
Occupancy Type	Single Tenant
Land Area Net	0.918 ac/ 40,000 sf
Actual FAR	8.09
Zoning	CX-d
Construction Class/ Type	C/ Average
External Finish	N/A
Amenities	N/A



### Transaction Details

Type	Sale	Primary Verification	Seller's Broker
Interest Transferred	Fee Simple	Transaction Date	11/09/2018
Condition of Sale	Multnomah County leaseback ~2 years @ \$0	Recording Date	11/14/2018
Recorded Buyer	NBP 1021 SW 4th LLC	Sale Price	\$28,000,000
Buyer Type	Developer	Financing	Cash to Seller
Recorded Seller	Multnomah County	Cash Equivalent	\$28,000,000
Marketing Time	6 Month(s)	Capital Adjustment	\$0
Listing Broker	CBRE - Charles Safely	Adjusted Price	\$28,000,000
Doc #	2018-117712	<b>Adjusted Price / sf</b>	<b>\$95.66</b>
Buyer's Primary Analysis	Price (Primary Unit of Comparison)	Occupancy at Sale	100%
Static Analysis Method	N/A	Underwritten Occupancy	Static Analysis-N/A
Source	Static Analysis-N/A	Potential Gross Income	Static Analysis-N/A
NOI / sf	Static Analysis-N/A	Vacancy/Collection Loss	Static Analysis-N/A
IRR	N/A	Effective Gross Income	Static Analysis-N/A
OER	Static Analysis-N/A	Expenses	Static Analysis-N/A
Expenses /sf	Static Analysis-N/A	Net Operating Income	Static Analysis-N/A
Cap Rate	Static Analysis-N/A		

### Comments

This is the November 2018 sale of the Multnomah County Courthouse project located in downtown Portland. It is an 8-story historic building (listed on National Register since 1979) that includes 39 courtrooms and other unique elements. It was constructed in 1909-1014 and had various renovations over the years. The county previously owner-occupied the building but is completing new construction a few blocks away and will be relocating in 2020. This transaction included a leaseback at no rent (county to pay for all operating costs in interim). The property was marketed over mid-2018 and went under contract in September 2018. This was an arm's length sale and other buyers were reportedly interested at generally similar pricing (including at least one higher offer), though this was the only offer that included a leaseback at no net rent. The buyer did not have specific plans for the property at the time of the purchase but felt the basis was low enough (on a \$/SF and overall basis) that the project could support redevelopment to creative office or potential other uses (a hotel conversion is unlikely but noted as a possible option).

The property has large ~30,000 SF floor plates that are rare and attractive to users in the CBD. The property has a "Walk Score" of 99. The buyer will evaluate options as it proceeds with due diligence/planning, including exploring options for a headquarter redevelopment for a large user. There is some discrepancy among sources on the building's size; 292,717 SF was used during the sale process for estimated NRA and is shown for analysis purposes here (a more conservative estimate of 235k SF would indicate a price/basis of \$119/SF). There are large common areas that could be reconfigured or loaded, depending on eventual use of the building. No specific redevelopment budget was established prior to the sale

given the situation, timeline and uncertain use/design.

Property Name	American Red Cross Office
Address	1860 Hawthorne Avenue NE Salem, OR 97301
County	Marion
Govt./Tax ID	R26992
Net Rentable Area (NRA)	16,567 sf
Condition	Average
Number of Buildings	1
Parking Type/Ratio	Surface/ 3.98:1,000 sf
Year Built/Renovated	1995/ N/A
Floor Count	4
Occupancy Type	Owner/User
Land Area Net	1.010 ac/ 43,996 sf
Actual FAR	0.38
Zoning	CR
Construction Class/ Type	C/ Average
External Finish	Concrete
Amenities	N/A



### Transaction Details

Type	Sale	Primary Verification	Tom Hendrie, SVN, 503.588.7397
Interest Transferred	Fee Simple	Transaction Date	06/14/2018
Condition of Sale	None	Recording Date	06/14/2018
Recorded Buyer	American Red Cross	Sale Price	\$2,075,000
Buyer Type	End User	Financing	N/A
Recorded Seller	Honey LLC / DJ Guild	Cash Equivalent	\$2,075,000
Marketing Time	N/A	Capital Adjustment	\$0
Listing Broker	Joe Kappler, Macadam Forbes	Adjusted Price	\$2,075,000
Doc #	N/A	<b>Adjusted Price / sf</b>	<b>\$125.25</b>

Buyer's Primary Analysis	N/A	Occupancy at Sale	N/A
Static Analysis Method	N/A	Underwritten Occupancy	Static Analysis-N/A
Source	Static Analysis-N/A	Potential Gross Income	Static Analysis-N/A
NOI / sf	Static Analysis-N/A	Vacancy/Collection Loss	Static Analysis-N/A
IRR	N/A	Effective Gross Income	Static Analysis-N/A
OER	Static Analysis-N/A	Expenses	Static Analysis-N/A
Expenses /sf	Static Analysis-N/A	Net Operating Income	Static Analysis-N/A
Cap Rate	Static Analysis-N/A		

### Comments

This is the sale of an office building located at 1860 Hawthorne Avenue NE, Salem, Oregon. The property sold for \$2,075,000 in June of 2018. According to the buyer's broker, the property was purchased for owner occupancy by the American National Red Cross for a general office use. The broker indicated that the Red Cross intended to renovate the building, but did not know the amount of the renovations. The building is four-stories and has exposure along the Interstate-5 freeway.

Addendum C

**QUALIFICATIONS**



# Nick Anderson, MAI, R/W-AC

Vice President, Portland OR

CBRE



T + 1 503.946.4941  
Nick.anderson2@cbre.com

1300 SW Fifth Avenue  
Suite 3500  
Portland, OR 97201

## Experience

Nick Anderson is a Vice President with CBRE Valuation & Advisory Services in Portland, Oregon. Mr. Anderson is a designated member of the Appraisal Institute (MAI) and is licensed as a Certified General Real Estate Appraiser in the States of Oregon and Washington. He specializes in performing appraisal and consultation services for investment, mortgage lending, trust, estate tax, feasibility studies and right-of-way assignments.

Located in the Portland office since 2018, Nick has experience providing valuation services in a wide range of property types in Oregon and SW Washington, including the valuation of subdivisions, development land, industrial, office, retail, self-storage, manufactured home communities/RV parks, mixed-use properties, agricultural land and rock quarry/sand and gravel pit properties. Nick also has experience providing right-of-way valuation services, including partial acquisitions including fee, permanent, and temporary easements.

Prior to pursuing a career as a real estate appraiser, Nick served on active duty in the United States Marine Corps.

## Professional Affiliations / Accreditations

- Designation Member of the Appraisal Institute
- IRWA Member of Chapter 3
  - Right of Way Appraisal Certification (R/W-AC)
- Certified General Appraiser in the following states:
  - Oregon License No: C001242
  - Washington License No: 1102430

## Education

- University of Oregon, Eugene, Oregon
  - Cum Laude, B.S. Economics, B.S. Statistics
- Appraisal Institute Courses:
  - Advanced Income Approach
  - Advanced Market Analysis and Highest & Best Use
  - Advanced Concepts and Case Studies
  - Quantitative Analysis
  - Qualifying Education for Certification
  - Contract or Effective Rent – Finding the Real Rent
  - Commercial Appraisal Review
  - Expert Witness for Commercial Appraisals
  - Subdivision Valuation
- International Right of Way Association (IRWA) Courses:
  - Easement Valuation, Course 403
  - The Valuation of Partial Acquisitions, Course 421
  - Problems in the Valuation of Partial Acquisitions, Course 431



**Appraiser Certification and Licensure Board**  
**State Certified General Appraiser**  
*28 hours of continuing education required*

NICHOLAS J ANDERSON  
CBRE  
1300 SW 5TH AVENUE, SUITE 3500  
PORTLAND, OR 97201

License No.: C001242

Issue Date: July 01, 2022

Expiration Date: June 30, 2024

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**Chad Koch, Administrator**



# Clackamas County Courthouse Evaluation: MEP Building Assessment

**DRAFT**

October 2, 2015

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## Project Directory

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## 1.0 Project Description

### 1.1 Executive Summary

The existing mechanical and electrical systems were found to be severely lacking for the continued use of the current Clackamas County Courthouse. Much of the mechanical equipment is beyond the end of its useful life and is unreliable. Maintenance personnel are required to work excessive hours in order to keep the **building's systems running to an evenly moderately acceptable degree and those hours are expected to only increase as the equipment ages further.** The electrical systems face similar problems in that they are old, outdated, and unreliable. Continued use and maintenance of all these systems is not recommended as it will be expensive and ultimately serve only as a stopgap before complete failure. Replacing any of these systems will be significantly intrusive and potentially infeasible in the existing courthouse and for the occupants. It is expected that when, rather than if, the equipment fails to the point of becoming non-operational, court operations will be detrimentally impacted before repairs can take place. Such repairs would potentially impact the courthouse beyond its capacity to efficiently operate while under such a large overhaul of building systems.

### 1.2 General Building Description

The Clackamas County Courthouse is located in Oregon City, Oregon. It is approximately 65,000 sq. ft. and was originally constructed in 1936.

Consisting of three stories above grade and a basement level the courthouse contains 8 primary **court rooms, District Attorney's offices, State Court offices, and** other circuit court support functions.

Main building utilities are located within the basement and penthouse levels of the building.

### 1.3 PAE Scope

PAE toured the existing courthouse with SERA Architects and courthouse maintenance staff on September 1, 2015.

Basement and penthouse mechanical, electrical and telecommunication rooms were reviewed with maintenance staff to understand current operational and maintenance issues with these systems and their components.

In addition to equipment spaces, general areas of the building were reviewed and assessed. PAE has summarized operational and maintenance issues as well as any code deficiencies observed at the building.

The courtrooms and associated **judges' chambers were not accessible at the time of** the tour and were not assessed in the descriptions below.

## 2.0 Mechanical Systems



## 2.1 HVAC

### 2.1.1 Cooling System

#### Description

The courthouse cooling plant consists of a chiller, cooling tower and pumps. The equipment was installed in 1986.

The chiller (Photo #M1) is a 140-ton water-cooled, reciprocating unit that is located in the basement.

The cooling tower (Photo #M2) is a matching centrifugal, counterflow unit that is located on the roof. The tower is served by an automatic chemical feed system (Photo #M3) located in the basement.

Two constant speed chilled water pumps (Photo #M4) circulate chilled water to two air handling units. One pump serves an air handling unit located in the basement. The other pump serves an air handling unit located in the penthouse.

A single, constant speed condenser water pump circulates water between the chiller and the cooling tower.

The cooling plant operates whenever the outside air temperature is above approximately 62 °F. When temperatures are below that point the air handling units are capable of providing "economizer" cooling with outside air.

#### General Condition

The chiller, cooling tower and associated pumps are operational but are beyond the end of their useful lives. Equipment of this age can be expected to require excessive maintenance, use more energy than more efficient modern equipment, and be unreliable.

The chiller main control module is not operable, requiring the chiller to be operated manually.

A visual inspection of the cooling tower casing, frame and internal parts indicate the unit is significantly corroded.

The chilled water and condenser water piping appears to be in fair condition, but are also showing signs of aging and can be expected to be unreliable and require excessive maintenance.

The chemical feed system appears relatively new and in good condition.

#### Operational and Maintenance Issues

The chiller main control module has recently failed and the chiller is being controlled manually.

Cooling plant equipment is not energy efficient. A modern cooling plant would be approximately 30% more efficient.





Cooling plant equipment is not reliable in day-to-day operation and has many "single points of failure" that will result in loss of cooling to the entire building.

**Code Issues**

None noted.

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## Recommendations

The chiller, cooling tower and pumps should be replaced with new, energy efficient, reliable machines before the current dilapidated equipment becomes non-operational.

The chilled water and condenser water piping should be replaced with new, reliable piping with energy efficient insulation.

### 2.1.2 Heating Systems

#### Description

The heating plant consists of a boiler, feedwater System and condensate pump set.

The boiler (Photo #M5) is a low pressure, natural gas-fired, forced-draft, cast iron sectional unit that is located in the basement mechanical room.

The feedwater System (Photo #M6) is located in the basement, adjacent to the Boiler, and includes a vented receiver, duplex feedwater pumps and related controls.

The condensate pump set (Photo #M7) is located in the basement, adjacent to the boiler, and includes a vented receiver, duplex transfer pumps and related controls.

Additionally, there is a remote condensate pump set located in the penthouse, adjacent to the air handling unit. This unit includes a vented receiver, simplex transfer pump and related controls.

Low pressure steam (8 PSIG) is distributed to convectors located in the basement and on the first Floor, and to the air handling unit located in the penthouse. There is one convector located on the second floor. The air handling unit located in the basement was originally equipped with a steam heating coil; however, that coil failed and has been disconnected and removed. (For more detail on the coil, refer to Ventilation Systems below.)

The heating plant operates whenever the outside air temperature is below approximately 68 °F.

#### General Condition

The boiler, feedwater system and condensate pump sets are operational but are beyond the end of their useful lives. Equipment of this age can be expected to require excessive maintenance, use more energy than more efficient modern equipment, and be unreliable.

The steam piping appears to be in fair condition, but is showing signs of aging and can be expected to be unreliable and require excessive maintenance. Some of the steam piping is embedded within the brick and concrete structure and will be very difficult and expensive to replace.

Condensate piping is corroded and in poor condition, and according to facilities representatives requires excessive maintenance. The steam traps



are also in poor condition. All but one are original to the building and can be expected to fail at any time.

### **Operational and Maintenance Issues**

Excessive maintenance is required.

Equipment is not energy efficient.

Equipment is not reliable in day-to-day operation, and the system has many "single points of failure" that will result in loss of heat to the entire building when they fail.

The convectors are blocked in many areas by the interior furnishings and prevent proper heating throughout the building.

### **Code Issues**

None noted.

### **Recommendations**

The boiler, feedwater system and condensate pump sets should be replaced with new, energy efficient, reliable machines.

Since steam, condensate piping, and steam traps are in poor condition, they should be completely replaced.

Since floor space is at a premium in the building integrating floor/wall convectors is not an efficient use of space. The convectors should be replaced with heating units located within the ceiling to allow proper and even heating of the building.

## **2.1.3 Ventilation Systems**

### **Description**

The building is served by two primary air handling units.

A single zone, variable volume air handling unit is located in the basement and serves the basement and first floor. It is equipped with two return fans, a cooling coil, outside air damper and relief air damper. The capacity is reported to be approximately 13,500 CFM.

A multi-zone, constant volume air handling unit is located in the penthouse. This unit serves the second and third floors. It is equipped with a return air fan, cooling coil, heating coil, outside air damper, return air damper, relief air damper, and zone mixing dampers. The capacity is reported to be approximately 23,500 CFM.

Air is delivered from the air handling units through low pressure ductwork to grilles and diffusers located in the ceilings; the return air system is ducted.

Several exhaust fans serve toilet rooms and janitor's closets.



### **General Condition**

The air handling units are in fair condition, but are showing signs of aging and can be expected to be unreliable and require excessive maintenance.

### **Operational and Maintenance Issues**

An air handling unit located in the basement supplies cooling and ventilation air to the basement and first floors. The unit no longer contains a heating coil, so the air is relatively cool during cold weather. The lack of a heating coil creates drafty conditions within occupied spaces.

The air handling unit located in the penthouse has limited capacity and is equipped with a limited number of zones, making it difficult to maintain comfort conditions in all areas of the second and third floors. It is estimated that approximately 10% of the spaces are uncomfortable at any point in time. In addition, ceiling space for ductwork is very limited and some of the ductwork is not adequately sized to deliver the required amount of air to all areas.

The air handling unit located in the penthouse is a constant volume, multi-zone type of unit, which is a very inefficient design that has been prohibited by the Oregon Energy Code for decades.

Many of the hallways and corridors are not ventilated and have poor air quality and no temperature control.

### **Code Issues**

None noted, other than current system would not meet current Oregon Energy Code requirements.

### **Recommendations**

The air handling unit located in the basement should be replaced with a modern unit that can provide temperature control for all the zones served by the unit. Extensive ductwork modifications will be required to provide adequate temperature control.

The air handling unit located in the penthouse should be replaced with a modern, energy efficient unit. Some ductwork modifications will be required to increase cooling capacity in some of the zones. Architectural modifications such as lowered ceilings, shafts and soffits will be required to accommodate larger ductwork.

## **2.1.4 HVAC Control System**

### **Description**

A Johnson Controls Metasys DDC control system was installed at the building in 2013. This system controls all HVAC equipment and provides remote monitoring and alarm functions for maintenance staff.

### **General Condition**

The control system is in good condition.



### **Operational and Maintenance Issues**

None noted.

### **Code Issues**

None noted.

### **Recommendations**

None.

## **2.2 Plumbing Systems**

### **2.2.1 Domestic Water, Storm Drain, Sanitary Sewer**

#### **Description**

Domestic water piping serves fixtures in toilet rooms and break rooms throughout the building. Piping material appears to be primarily galvanized steel.

Domestic hot water is provided by several electric, tank-type hot water heaters (Photo #M9).

Storm drain piping serves roof drains and area drains. The material appears to be cast iron.

Sanitary sewer piping serves fixtures in toilet rooms and break rooms throughout the building. The material appears to be cast iron.

#### **General Condition**

The domestic water piping is in very poor condition (Photo #M8) and can be expected to fail in various locations at any time.

Hot water heaters appear to be in good condition.

The storm drain piping appears to be in fair condition but is showing signs of aging and can be expected to be unreliable and require excessive maintenance.

The sanitary sewer piping appears to be in fair condition but is showing signs of aging and can be expected to be unreliable and require excessive maintenance.

### **2.2.2 Operational and Maintenance Issues**

Excessive maintenance is required.

Piping is not reliable in day-to-day operation.

#### **Code Issues**

None noted.



## **Recommendations**

The domestic water piping should be completely replaced.

The storm drain piping should be further tested to determine whether a partial or complete replacement is warranted.

The sanitary sewer piping should be investigated and tested more completely to determine whether a complete replacement is warranted.

### **2.2.3 Plumbing Fixtures**

#### **Description**

Plumbing fixtures include lavatories, water closets, sinks and mop sinks. The material appears to be vitreous china and stainless steel.

#### **General Condition**

The plumbing fixtures appear to be in fair condition, but are showing signs of aging and can be expected to be unreliable and require excessive maintenance.

#### **Operational and Maintenance Issues**

Excessive maintenance is required.

Fixtures use excessive amounts of water.

Fixtures are not reliable in day-to-day operation.

#### **Code Issues**

None noted.

#### **Recommendations**

The plumbing fixtures should be replaced with modern, low water-use fixtures.

### **2.3 Fire Protection Systems**

#### **Description**

The building is equipped with an automatic sprinkler system (Photo #M10), which was installed throughout the building in 2007.

#### **General Condition**

The automatic sprinkler system appears to be in good condition.

#### **Operational and Maintenance Issues**

None noted.

**Code Issues**

None noted.

**Recommendations**

None.

**3.0 Electrical****3.1 Service and Distribution****Description**

There are two metered PGE services entering the courthouse from pole mounted transformers located on north side of property. Service feeders are routed underground to east side of building and terminate in CT enclosures in basement. PGE meters are located outside of building on east side. One service is 1200 amps, 120/240 – 3 phase – 4 wire and serves a main distribution panel (Panel MDP) in basement. Second service is 400 amp, 120/208 volt – 3 phase – 4 wire and serves 400 amp – 3 pole main circuit breaker in basement to support added program in 2013.

**General Condition**

The majority of electrical equipment is located within the basement shared mechanical/electrical room. Additional electrical equipment is located on upper floors as described below.

Record documents and drawings indicating when the MDP was installed could not be located, however, it appears it was prior to 1974. The MDP appears to be in good working order, but is at the end of its life expectancy.

A 600 amp subdistribution panel (Panel S) was installed in 1974 and is served from MDP. MDP serves branch panelboards on first floor through the penthouse. The MDP also serves a wire gutter with circuit breakers located in basement main electrical room that serve additional branch panelboards in basement thru third floor.

Panelboards throughout the building have been installed at various times, so the degree of life expectancy and reliability vary. However, the majority of panelboards appear to have been installed at same time as MDP, therefore, reaching life expectancy.

Panel DA, served by 400 amp – 3 pole service circuit breaker in basement, was installed in 2013 and is in good working order. All branch panelboards served from panel DA were installed in 2013 and are in good working order.

The MDP and the miscellaneous circuit breakers that serve branch panelboards appear to have been in service near or beyond their life expectancy. Sourcing replacement parts for these breakers will likely be difficult.



The interiors of MDPs and branch panelboards were not visually inspected because the service disconnects must be switched off to safely allow removal of the equipment covers for inspection.

### **Operational and Maintenance Issues**

The electrical equipment, to include individual circuit breakers (Photo #E1), for the building distribution system have not been located in an orderly fashion over the years and as a result, does not provide for easy maintenance or functionality for building operation.

### **Code Issues**

A utility current transformer enclosure for the 120/208 volt service appears to contain water inside from service entrance conduits penetrating the basement wall. This is an unsafe condition as the water pools on the floor and within the CT enclosure and could create a shock hazard for maintenance personnel. Provide main disconnect labeling for MDP per NEC 230.70B (Photo #E2).

Mechanical ductwork and piping are routed over the top panels P and CP in penthouse in violation of the NEC 110.26-F-1a.

### **Recommendations**

To consolidate and cleanup electrical service to the building, PAE would recommend providing a single PGE metered 1600 amp 120/208 volt – 3 phase – 4 wire service to serve new 1600 amp MDP to include 25% capacity for future growth in compliance with General Facilities Design Assessment Criteria.

Additional recommendations include locating the utility meter in same location as existing. Remove all miscellaneous circuit breakers located in electrical room and consolidate all into MDP. Provide new branch panelboards and associated feeders. Arrange equipment to provide NEC clearances and working space.

## **3.2 Emergency Power**

### **Description**

The courthouse does not have any emergency generation or battery inverter equipment. The only designated emergency power is an original 40 amp circuit breaker located in basement electrical room served from an undetermined normal utility power. Emergency egress and security lighting is provided through integral luminaire battery packs or lamp head emergency units.

### **General Condition**

Luminaires with integral battery pack appear in good working order, only a small portion of luminaires were tested during the tour.

### **Operational and Maintenance Issues**

Individual luminaire battery packs require monthly testing per code requirements. They also require routine maintenance throughout the courthouse and there is no indication to facilities as to when a battery ballast is failing or has failed.





### **Code Issues**

All paths of egress will need to be verified to comply with OSSC 106 and NEC 700.16 requirements. Lighting levels along the path of egress were not evaluated at the tour.

### **Recommendations**

Provide centralized battery inverter or generator for all emergency egress, security lighting to include all associated requirements in compliance with General Facilities Design Assessment Criteria.

## **3.3 Grounding**

### **Description**

Ground bus is located under 400 amp, 120/208 volt service CT enclosure.

### **General Condition**

Ground bus appears in good condition.

### **Operational and Maintenance Issues**

None noted.

### **Code Issues**

None noted.

### **Recommendations**

Provide new ground system per NEC 250 with new MDP distribution described above.

## **3.4 Branch Circuits**

### **Description**

Branch circuit wiring consists of conductors routed in conduit. Some older branch circuits do not contain a ground conductor and utilize conduit as ground path. All newer branch circuits contain a ground conductor.

### **General Condition**

Branch circuits appeared to be in good condition and functional.

### **Operational and Maintenance Issues**

It was noted by maintenance personnel that use of individual space heaters at workstations in Room 104 creates an electrical overload on branch circuits and causes nuisance tripping. Space heaters are used by employees since the heating system is perceived as not functioning appropriately.

Receptacles in first floor Breakroom are overloaded with number of appliances being utilized.



### **Code Issues**

GFCI type receptacles installed in branch circuits not containing ground conductor are required to be installed per NEC 406.4D2b.

Grounding type receptacles installed in branch circuits not containing ground conductor are required to be installed per NEC 406.4D2c.

### **Recommendations**

Provide new branch wiring with ground conductor and connect to ground type and GFCI type receptacles. Provide receptacles at all workstations, courtrooms, associated spaces and located in compliance with General Facilities Design Assessment Criteria. Provide Breakroom receptacles for dedicated equipment to run concurrently (i.e. microwave, refrigerators,).

## **3.5 Lighting**

### **Description**

Interior lights are predominately fluorescent with T8, 28 watt lamps and some downlights with compact fluorescent lamps. Most interior luminaires are outdated, but appear to be in good working order. Exterior lighting consists of building mounted luminaires and pole mounted luminaires in parking area.

### **General Condition**

Circulation areas are surface mounted fluorescent luminaires of various sizes. Courtrooms 1, 2, 3, 4, 6, 7, 8 and 9 have fluorescent luminaires with on-off controls only. Courtroom 5 and 10 have recessed indirect fluorescent luminaires with preset Unison dimming controls. Per discussion with maintenance staff, individual Unison dimming modules are periodically failing in these units.

Courtroom 11 has recessed fluorescent luminaires and downlights with switches for fluorescent luminaires and wall dimmers for downlights.

Exterior lighting on the east side of building and in parking area appear to have been added in 2013.

### **Operational and Maintenance Issues**

There appears to be no building lighting control system, therefore, no energy management. Many luminaires appear to be operating 24/7. Lighting controls for the courtrooms are not consistent with one another.

### **Code Issues**

The lighting system does not appear to be energy code compliant.

### **Recommendations**

Provide new lighting and controls in compliance with General Facilities Design Assessment Criteria and the Oregon Energy Efficiency Specialty Code 505.



### 3.6 Fire Alarm

#### Description

The courthouse has initiating, audible and ADA devices located throughout building. The Silent Knight main fire alarm control panel is located in the main electrical room in basement. The fire alarm system monitors a Potter PFC series dry pre-action fire protection system for the Data Room.

#### General Condition

The equipment in the building appears to be relatively new and in good condition and functional.

#### Operational and Maintenance Issues

None noted.

#### Code Issues

None noted.

#### Recommendations

Maintain existing fire alarm control panel, initiating, audible, ADA devices, associated NAC panels, fire alarm connections to elevator equipment and pre-action sprinkler systems. Add additional devices if required to meet OSSC 907 and Fire Code.

### 3.7 Telephone/Data

#### Description

Existing telephone/data service enters courthouse underground and enters building on east side and then routes across basement to main telephone/data room in basement. The main telephone/data room contains cable trays, communication racks and associated components. There is also communication rack and associated components in penthouse.

#### General Condition

Communication racks (Photo #E3) and associated components appear in good working order. Many cables in main telephone/data room are not routed in cable tray and/or properly supported (Photo #E4). Rack in penthouse is located in such a manner that is subject to damage (Photo #E5). There are cables in the main telephone/data room that appear are no longer utilized.

#### Operational and Maintenance Issues

None noted.

#### Code Issues

Abandoned telecommunications cabling should be removed per NEC requirements.



## **Recommendations**

Provide new racks, associated components, rack mounted UPS and cable trays to include 20% future capacity for a complete functioning system. Provide sufficient cooling system and controlled access into room. Remove all abandoned cables in telephone room and building. Provide voice/data outlets at all workstations, courtrooms and associated spaces. All recommendations shall be in compliance with General Facilities Design Assessment Criteria.

### **3.8 Security**

#### **Description**

The existing security system consists of door access, door security and CCTV. The new panels are located in multiple locations throughout building. CCTV is controlled and operated by the County Sheriff's office.

#### **General Condition**

Security system appears in good condition and functional.

#### **Operational and Maintenance Issues**

The existing door security and access panels are presently being reconnected to a new Johnson Control system (Photo #E6).

#### **Code Issues**

None noted.

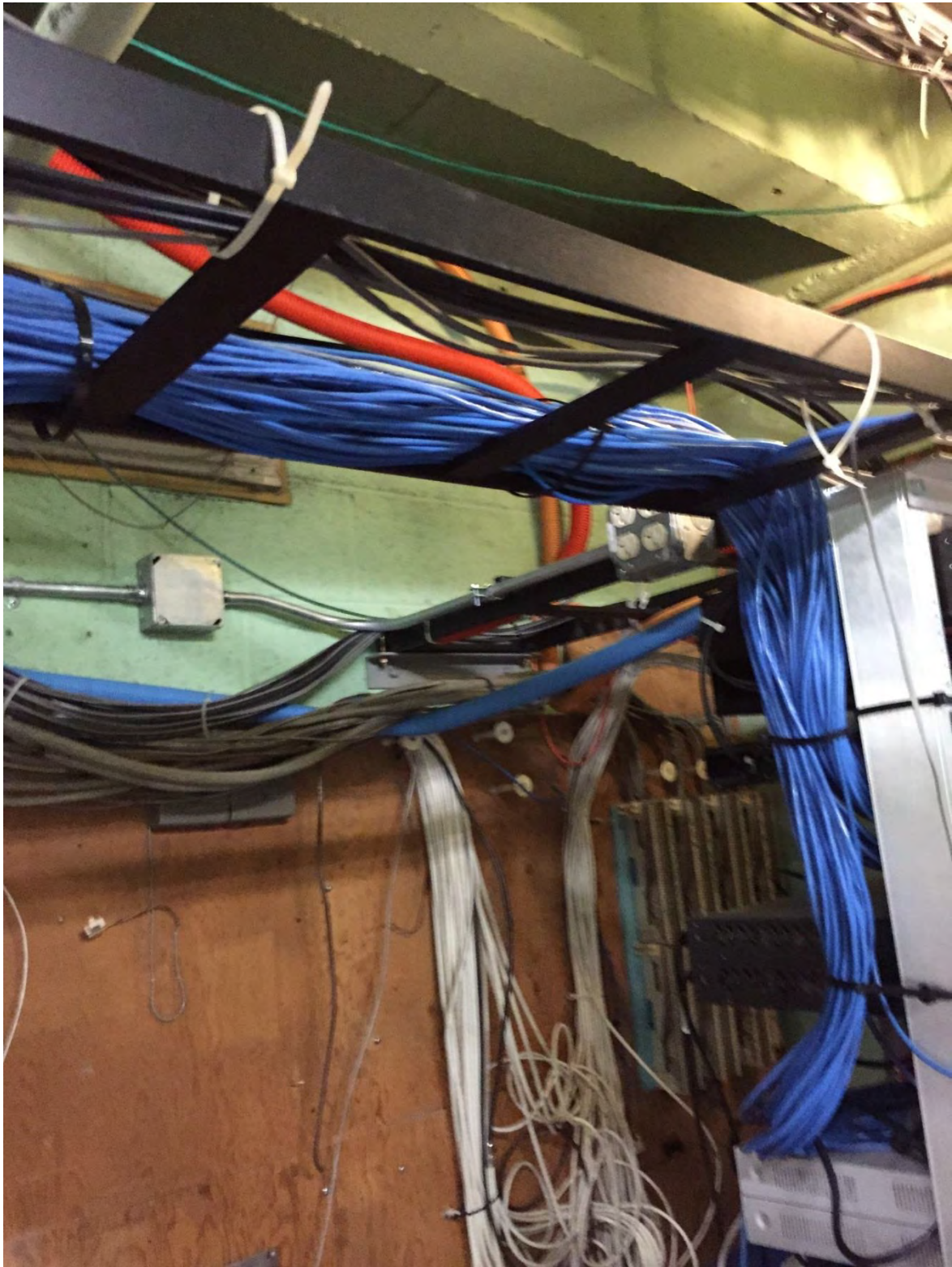
#### **Recommendations**

It appears the courthouse is undergoing an access control/security upgrade during the time of tour. Review of final installation is recommended to ensure the complete security system (including door access, intrusion detection alarms, CCTV surveillance, intercom and duress alarms) is in compliance with current General Facilities Design Assessment Criteria.



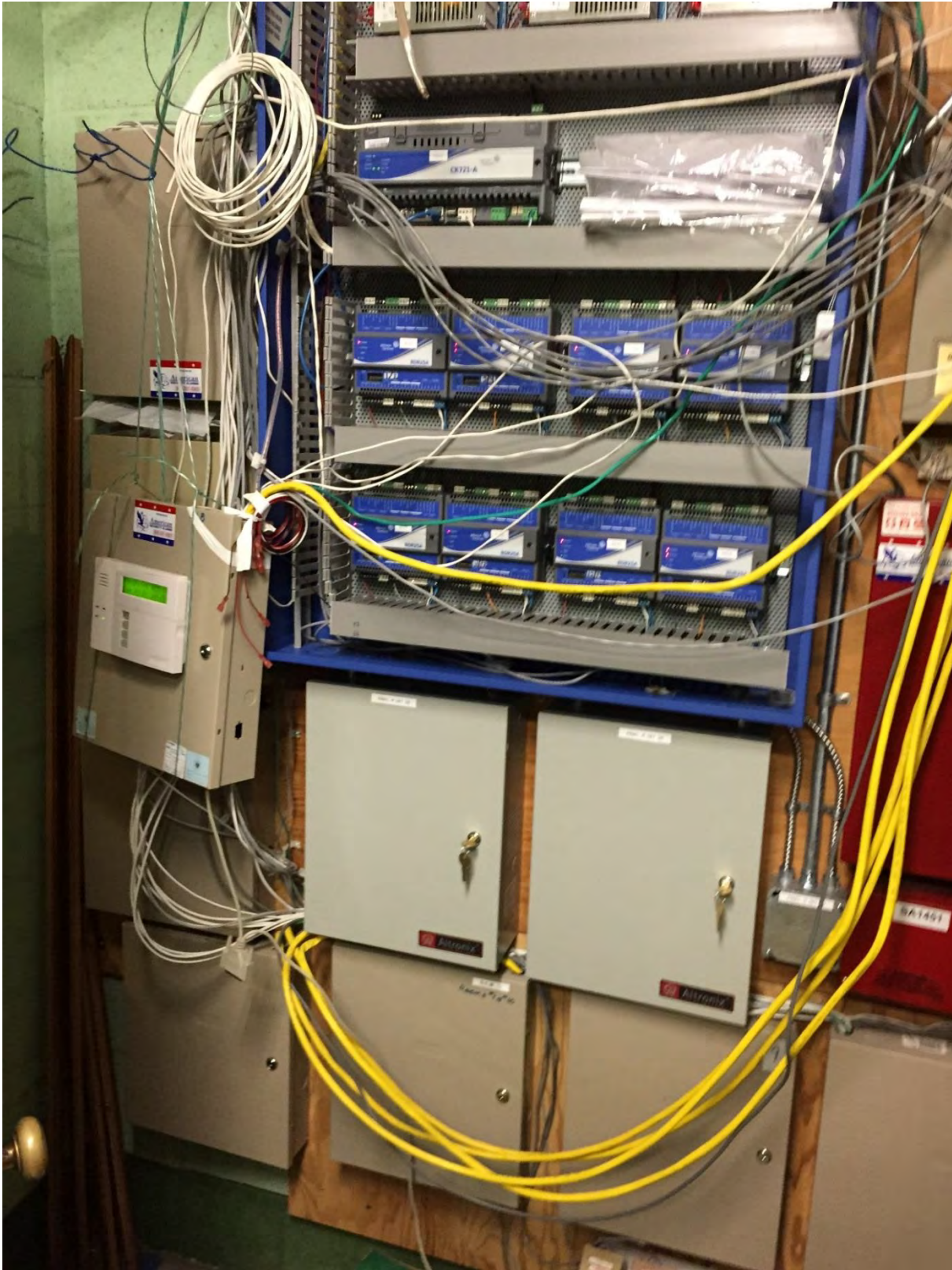
## 4.0 Appendix

### 4.1 Photo #E1: Cable distribution in basement tele/data room.





**4.2 Photo #E2: New Johnson Controls door security system transition.**





**4.3 Photo #M1: Chiller**



October 15, 2015

**Report of Geotechnical Engineering Services**  
Red Soils Master Plan Update: Existing Building Assessment  
of the Clackamas County Courthouse  
807 Main Street  
Oregon City, Oregon  
GeoDesign Project: SERA-24-01

## **INTRODUCTION**

GeoDesign, Inc. is pleased to provide this report that presents results of our geotechnical engineering services for the Red Soils Master Plan Update: Existing Building Assessment of the Clackamas County Courthouse located at 807 Main Street in Oregon City, Oregon. We understand that an assessment of the existing building is required as part of funding. The location of the site relative to existing features is shown on Figure 1.

## **SCOPE OF SERVICES**

The purpose of this evaluation was to provide geotechnical engineering recommendations for use in design and construction of the proposed improvements. Specifically, we completed the following scope of services:

- Reviewed readily available published geologic data and our in-house files for existing information on subsurface conditions in the site vicinity.
- Reviewed geotechnical information for a previous study conducted for an addition at the site.
- Coordinated and managed the field investigation (including locating utilities and scheduling subcontractors). A private utility locator was utilized to locate underground utilities at the cone penetration test (CPT) location.



- Coordinated CPT location with facility representatives prior to the field investigation.
- Conducted one CPT to refusal at a depth of 24.8 feet below ground surface (BGS). The CPT was completed adjacent to the southwest corner of the building.
- Evaluated the potential seismic hazards at the site.
- Evaluated the potential liquefaction at the site or impact from the adjacent river.
- Prepared this report summarizing our explorations, findings, conclusions, and recommendations.

## DOCUMENT REVIEW

We reviewed the following document for our further evaluation of subsurface conditions and development of recommendations:

- *Report of Geotechnical Investigation & Site-Specific Seismic Hazard Study; Clackamas Courthouse Addition; 807 Main Street; Oregon City, Oregon, prepared by Carlson Geotechnical dated October 20, 2011*

## SUBSURFACE CONDITIONS

Our understanding of the subsurface conditions was obtained by reviewing previous subsurface information completed by others for an addition to the existing building and conducting one CPT (CPT-1) at the southwest corner of the building. The location of the exploration is shown on Figure 2. The CPT logs and a description of the testing program are presented in Attachment A. A site plan, boring logs, and dynamic cone penetrometer (DCP) test data is presented as Attachment B.

Based on our review of boring logs from previous studies at the site, subsurface conditions generally consist of fill to depths of up to 12 feet BGS. The fill is comprised of medium stiff to stiff, sandy silt and loose to medium dense, silty sand with varying amounts of gravel, brick, and plastic debris. The fill is generally underlain by native medium stiff to stiff silt to depths of 14.0 to 17.0 feet BGS and is in turn underlain by medium dense to dense sand with varying amounts of gravel to depths of 19.5 to 27.0 feet BGS. The sand is underlain by hard to very hard basalt to the total depths explored of 27.0 to 34.0 feet BGS.

Groundwater was measured at a depth of approximately 17 feet beneath site grades in 2010 during a geotechnical investigation conducted by others. Groundwater was also encountered in borings at depths of 12.0 to 15.0 feet below site grades during a September 24, 2011 investigation for the addition. Groundwater levels may rise during extended periods of wet weather or during periods of high levels in the adjacent Willamette River. Zones of perched groundwater may also be present at shallower depths.

## CONCLUSIONS

Based on results of our study, the site is susceptible to liquefaction and lateral spreading during design levels of ground shaking. The following sections provide a summary of geologic seismic hazards considered in this study.

## **SEISMIC HAZARDS**

### ***LIQUEFACTION AND LATERAL SPREADING***

Liquefaction is caused by a rapid increase in pore water pressure that reduces the effective stress between soil particles to near zero. Granular soil, which relies on interparticle friction for strength, is susceptible to liquefaction until the excess pore pressures can dissipate. In general, loose, saturated sand soil with low silt and clay content is the most susceptible to liquefaction. Silty soil with low plasticity is moderately susceptible to liquefaction under relatively higher levels of ground shaking.

Groundwater was measured at depths of approximately 12 to 17 feet beneath site grades during prior geotechnical studies conducted by others at the site. Site soil below these depths is susceptible to liquefaction under design levels of ground shaking. Several inches of liquefaction-induced settlement are possible. In addition, we expect lateral spreading toward the river. The magnitude of the lateral movement could be on the order of several inches to several feet due to a design earthquake.

### ***GROUND MOTION AMPLIFICATION***

Soil capable of significantly amplifying ground motions beyond the levels determined by the building code was not encountered during previous subsurface investigations or the CPT exploration. We anticipate that a detailed ground response study will not exceed the levels of ground shaking that the building code prescribes.

### ***FAULT SURFACE RUPTURE***

Faults are not mapped beneath the site. We conclude that the probability of surface fault rupture beneath site is low.

### ***SUBSIDENCE/UPLIFT***

Subduction zone earthquakes can cause vertical tectonic movements. The movements reflect coseismic strain release accumulation associated with interplate coupling in the subduction zone. An interplate event would occur at a distance in excess of 100 kilometers of the site. Consequently, we do not anticipate that subsidence or uplift is a significant design concern.

### ***LURCHING***

Lurching is a phenomenon generally associated with very high levels of ground shaking, which causes localized failures and distortion of the soil. The anticipated site ground accelerations are below the threshold required to induce lurching of the site soil.

## **LIMITATIONS**

We have prepared this report for use by SERA Architects and members of the design and construction team for the proposed building assessment. The data and report may be used for bidding or estimating purposes, but our report, conclusions, and interpretations should not be construed as a warranty of the subsurface conditions.

We have made recommendation based on a subsurface exploration completed at the site that indicates the soil conditions at only the specific location and only to the depths penetrated. These observations do not necessarily reflect soil types, strata thickness, or water level variations that may exist away from the exploration. If subsurface conditions differing from those described are observed during the course of excavation and construction, re-evaluation will be necessary.

When the design has been finalized, we recommend that the final design and specifications be reviewed by our firm to see that our recommendations have been interpreted and implemented as intended. If there are changes in the grades, location, configuration, or type of construction for the buildings, the conclusions and recommendations presented may not be applicable. If design changes are made, we request that we be retained to review our conclusions and recommendations and to provide a written modification or verification.

The scope of our services does not include services related to construction safety precautions, and our recommendations are not intended to direct the contractor's methods, techniques, sequences or procedures, except as specifically described in our report for consideration in design.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with the generally accepted practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

◆ ◆ ◆

We appreciate the opportunity to be of continued service to you. Please call if you have questions concerning this report or if we can provide additional services.

Sincerely,

GeoDesign, Inc.



Tacia C. Miller, P.E., G.E.  
Senior Associate Engineer



Brett A. Shipton, P.E., G.E.  
Principal Engineer



cc: Mr. Mark Tobin, KPFF Consulting Engineers (via email only)

TCM:BAS:kt

Attachments

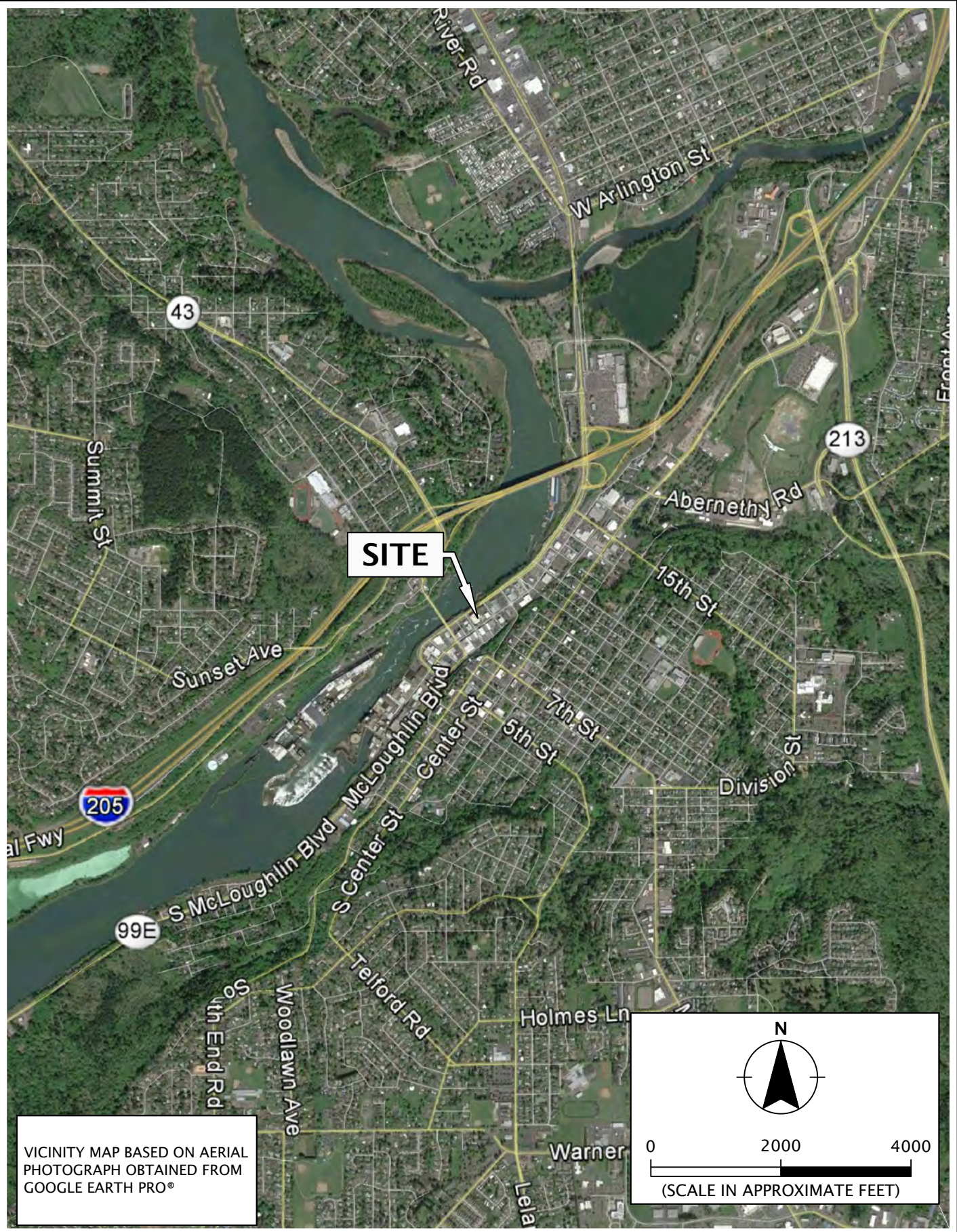
One copy submitted (via email only)

Document ID: SERA-24-01-101515-geolr.docx

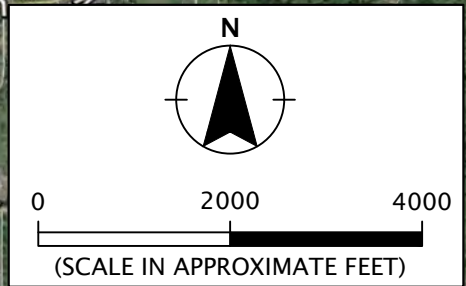
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## FIGURES

Printed By: aday | Print Date: 9/30/2015 2:55:34 PM  
 File Name: J:\S-Z\SERA\SERA-24\SERA-24-01\Figures\CAD\SERA-24-01-VM01.dwg | Layout: FIGURE 1



VICINITY MAP BASED ON AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO®



**GEODESIGN**  
 15575 SW Sequoia Parkway - Suite 100  
 Portland OR 97224  
 Off 503.968.8787 Fax 503.968.3068

SERA-24-01

OCTOBER 2015

VICINITY MAP


CLACKAMAS COUNTY COURTHOUSE  
 OREGON CITY, OR

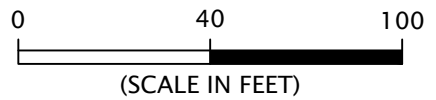
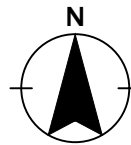
FIGURE 1

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**LEGEND:**

**CPT-1**  CONE PENETROMETER



SITE PLAN BASED ON AERIAL PHOTOGRAPH  
 OBTAINED FROM GOOGLE EARTH PRO®,  
 SEPTEMBER 30, 2015

**GEODESIGN**  
 15575 SW Sequoia Parkway - Suite 100  
 Portland OR 97224  
 Off 503.968.8787 Fax 503.968.3068

SERA-24-01

**SITE PLAN**

OCTOBER 2015

CLACKAMAS COUNTY COURTHOUSE  
 OREGON CITY, OR

**FIGURE 2**

**ATTACHMENT A**



## ATTACHMENT A

### CONE PENETROMETER TESTING

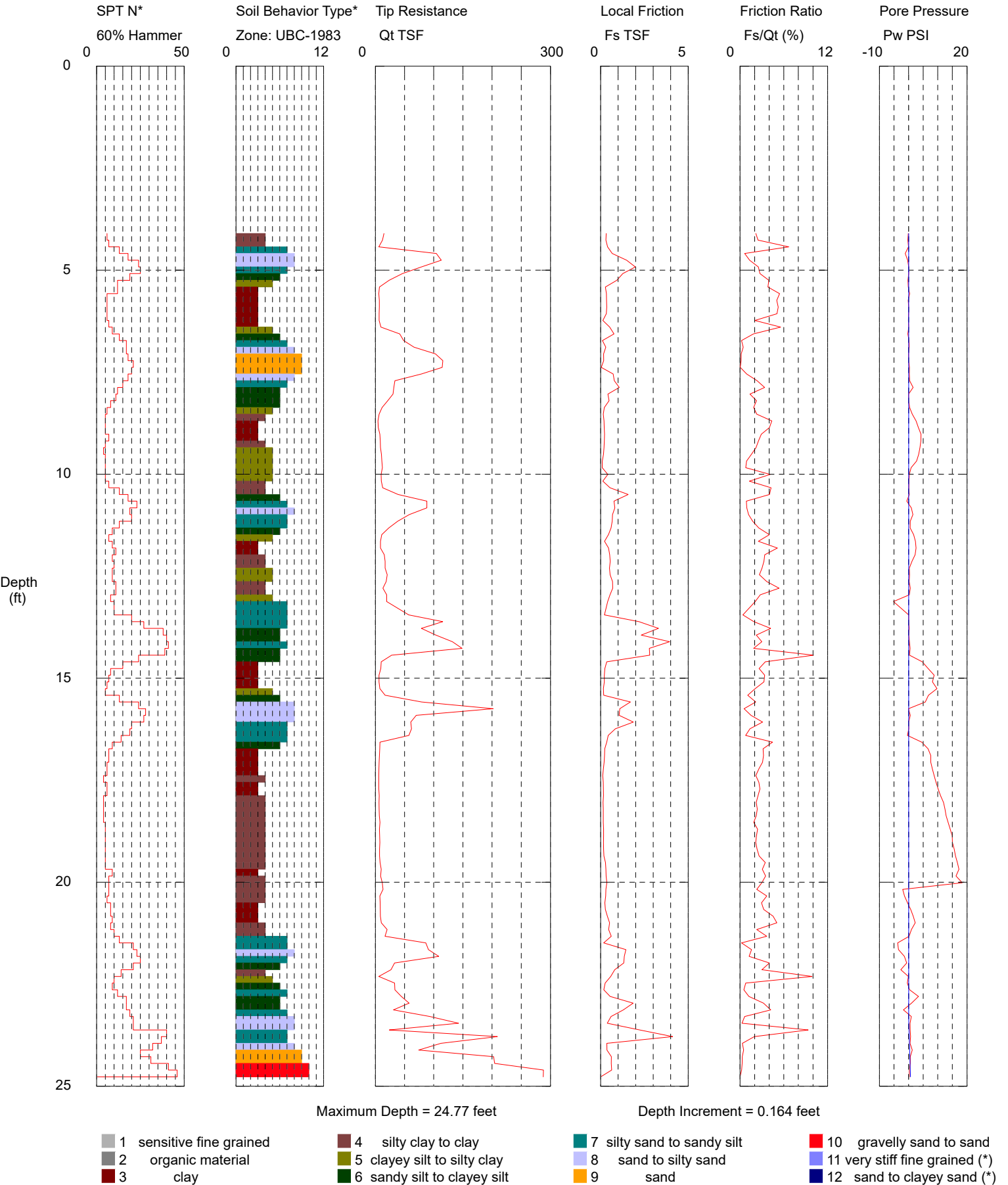
Our subsurface exploration program included one CPT (CPT-1) to a depth of 24.8 feet BGS. The CPT exploration was conducted at the southwest corner of the existing building. Figure 2 shows the location of the CPT relative to existing site features. The CPT was performed in general accordance with ASTM D 5778 by Oregon Geotechnical Explorations of Keizer, Oregon, on September 12, 2015.

The CPT is an in situ test that provides characterizes subsurface stratigraphy. The testing includes advancing a 35.6-millimeter-diameter cone equipped with a load cell and a friction sleeve through the soil profile. The cone is advanced at a rate of approximately 2 centimeters per second. Tip resistance, sleeve friction, and pore pressure at are typically recorded at 0.1-meter intervals. At selected depths, the advancement of the cone was suspended and pore water dissipation rates measured to estimate the groundwater level.

# GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City

Operator: OGE TAJ  
 Sounding: CPT-1a  
 Cone Used: DPG1211

CPT Date/Time: 9/12/2015 3:49:02 PM  
 Location: GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City  
 Job Number: 15065 / GeoDesign / CPT-1a / Clackamas County Courthouse



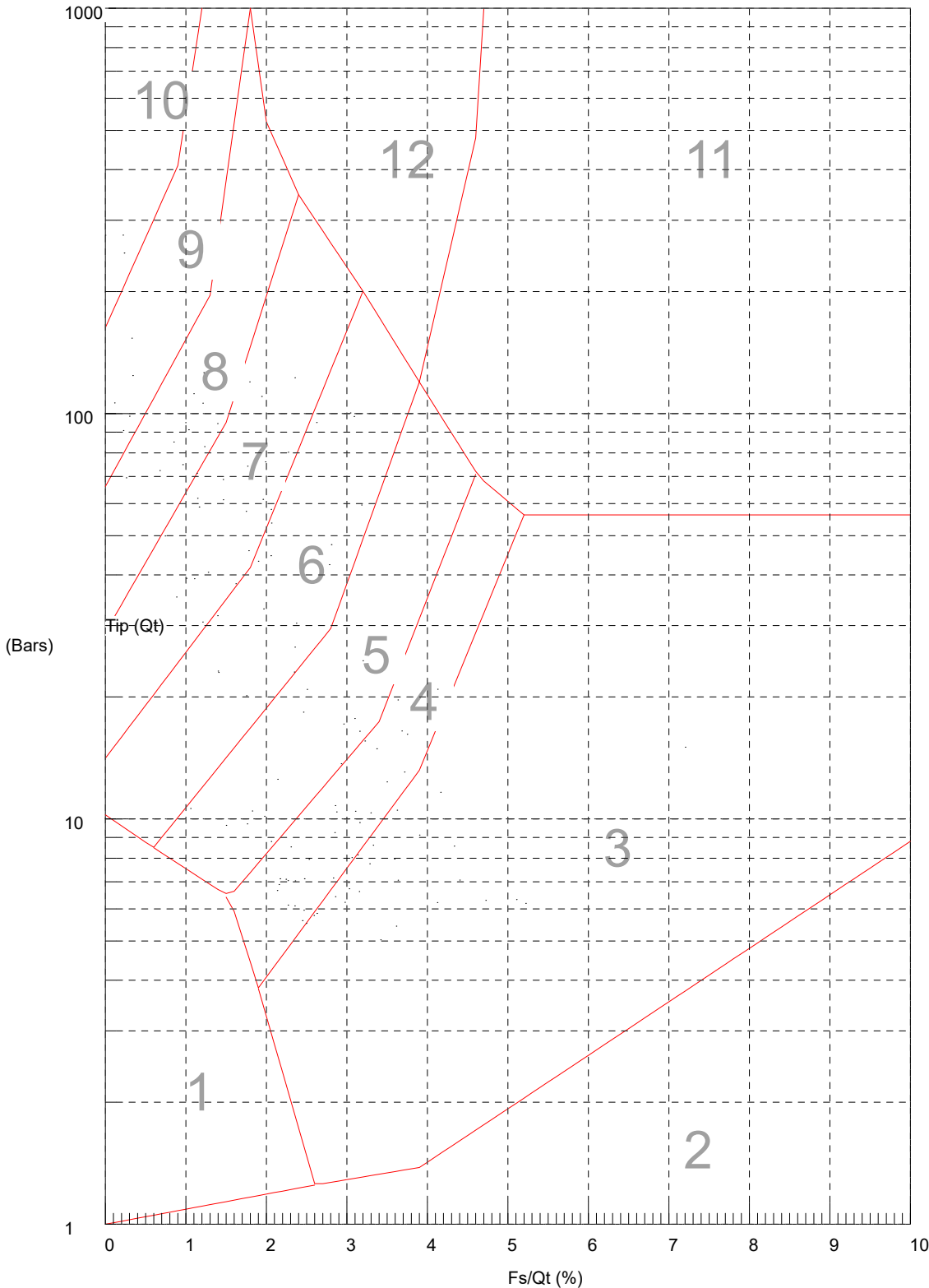
\*Soil behavior type and SPT based on data from UBC-1983

# GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City

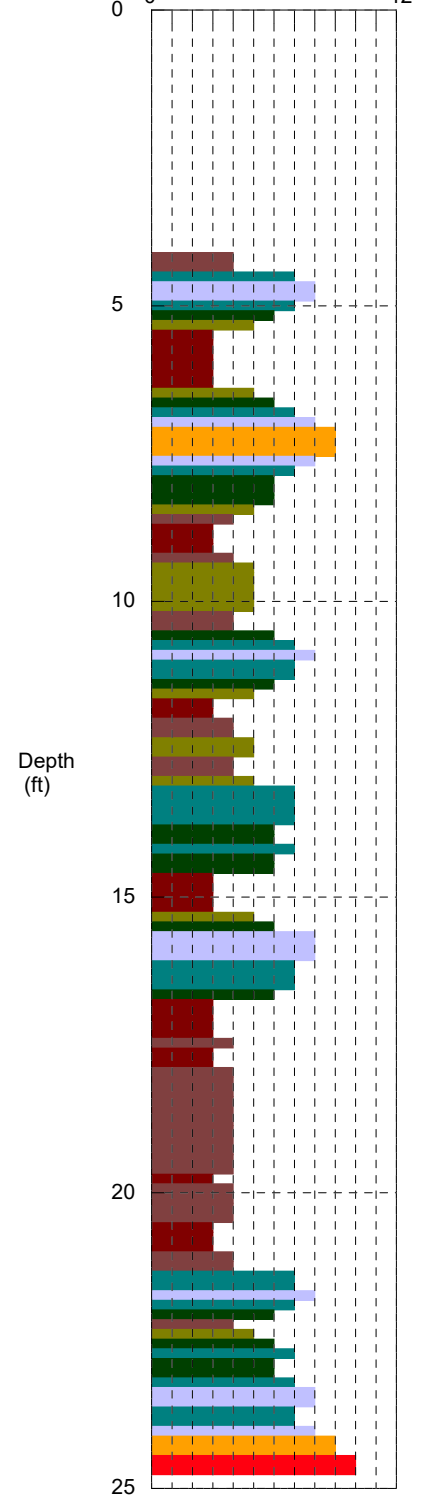
Operator: OGE TAJ  
 Sounding: CPT-1a  
 Cone Used: DPG1211

CPT Date/Time: 9/12/2015 3:49:02 PM  
 Location: GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City  
 Job Number: 15065 / GeoDesign / CPT-1a / Clackamas County Courthouse

Classification Data:  
 Robertson and Campanella UBC-1983



Soil Behavior Type\*  
 Zone: UBC-1983

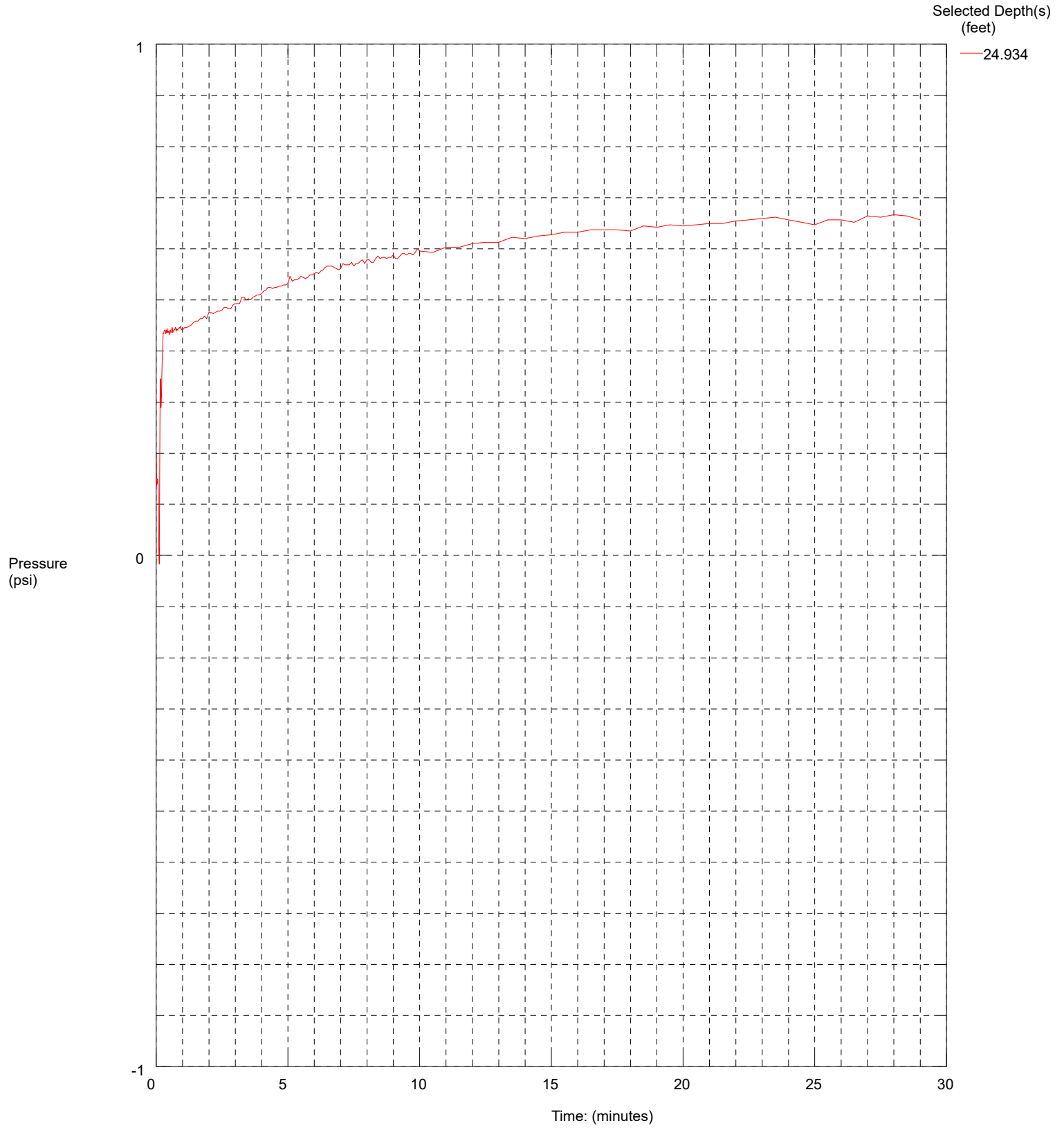


- |                          |                             |                            |                                |
|--------------------------|-----------------------------|----------------------------|--------------------------------|
| 1 sensitive fine grained | 4 silty clay to clay        | 7 silty sand to sandy silt | 10 gravelly sand to sand       |
| 2 organic material       | 5 clayey silt to silty clay | 8 sand to silty sand       | 11 very stiff fine grained (*) |
| 3 clay                   | 6 sandy silt to clayey silt | 9 sand                     | 12 sand to clayey sand (*)     |

# GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City

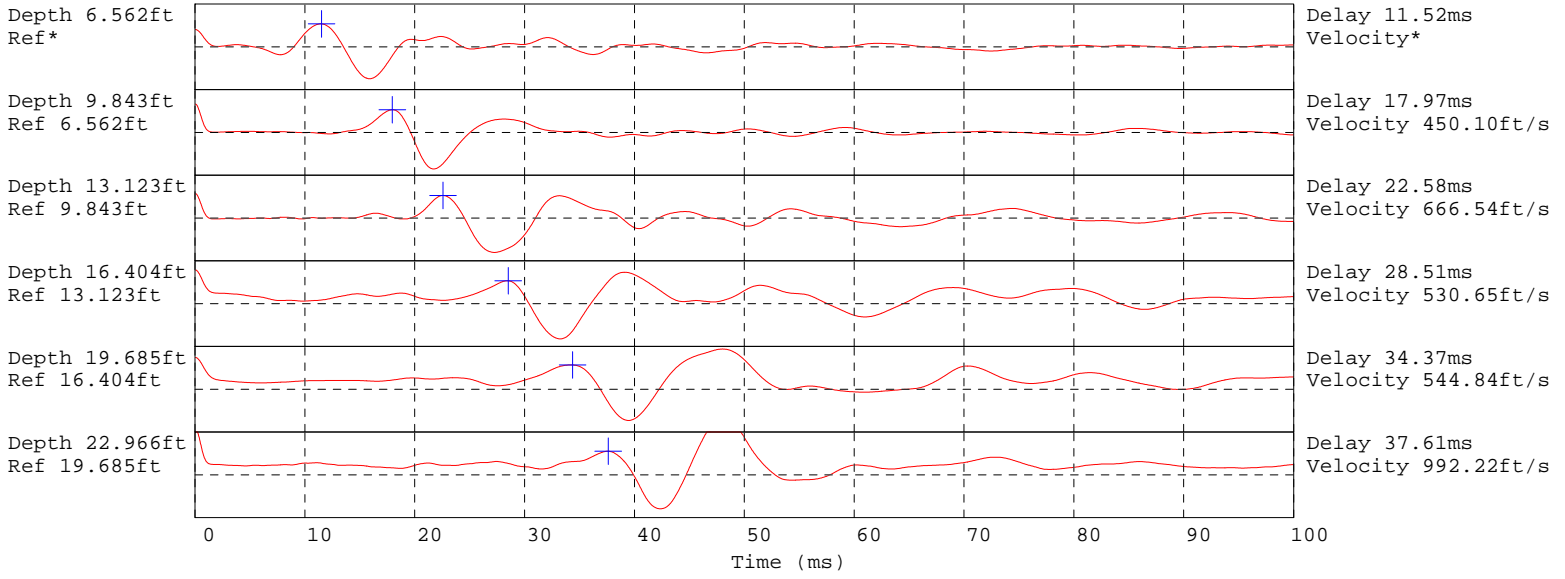
Operator OGE TAJ  
Sounding: CPT-1a  
Cone Used: DPG1211

CPT Date/Time: 9/12/2015 3:49:02 PM  
Location: GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City  
Job Number: 15065 / GeoDesign / CPT-1a / Clackamas County Courthouse



Maximum Pressure = 0.666 psi

# GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City



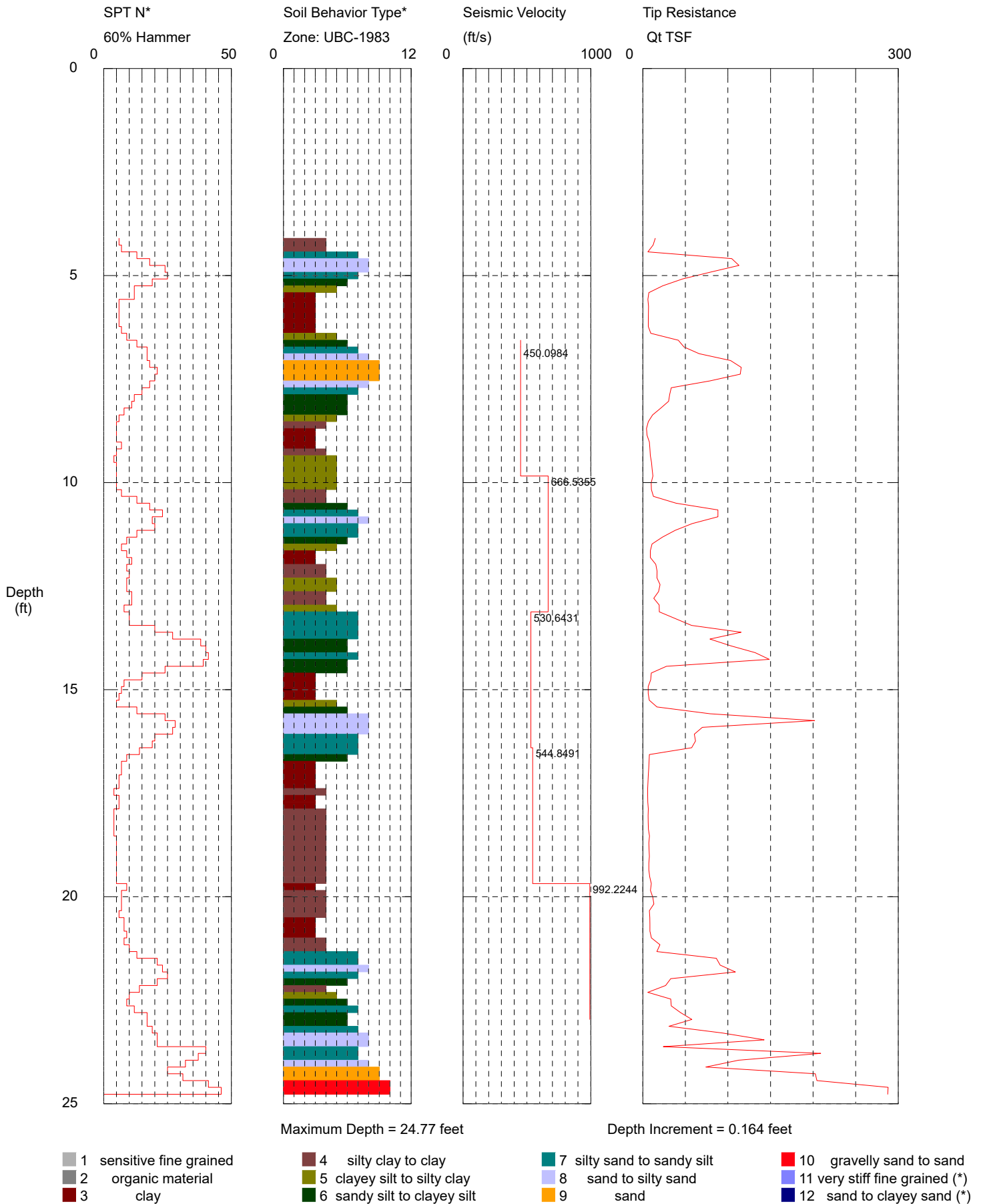
Hammer to Rod String Distance 1.3 (m)

\* = Not Determined

# GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City

Operator: OGE TAJ  
 Sounding: CPT-1a  
 Cone Used: DPG1211

CPT Date/Time: 9/12/2015 3:49:02 PM  
 Location: GeoDesign / CPT-1a / Clackamas Co Courthouse Oregon City  
 Job Number: 15065 / GeoDesign / CPT-1a / Clackamas County Courthouse



\*Soil behavior type and SPT based on data from UBC-1983

Data File:CPT-1a  
Operator:OGE TAJ  
Cone ID:DPG1211  
Customer:

9/12/2015 3:49:02 PM  
Location:GeoDesign / CPT-1a / Clackamas Co Courthouse Oreg  
Job Number:15065 / GeoDesign / CPT-1a / Clackamas County Co

Units:

Depth (ft)	Qt TSF	Fs TSF	Fs/Qt (%)	Pw PSI	SPT N* 60% Hammer	Zone	Soil Behavior Type UBC-1983
4.10	14.57	0.3161	2.170	-0.093	6	4	silty clay to clay
4.27	12.17	0.3003	2.467	-0.267	7	4	silty clay to clay
4.43	6.00	0.4003	6.675	-0.042	13	7	silty sand to sandy silt
4.59	104.43	0.6557	0.628	-1.161	18	8	sand to silty sand
4.76	112.88	1.4836	1.314	-0.343	24	8	sand to silty sand
4.92	78.82	1.9842	2.517	0.000	25	7	silty sand to sandy silt
5.09	46.54	1.2695	2.728	0.010	19	6	sandy silt to clayey silt
5.25	23.45	0.9248	3.944	-0.240	12	5	clayey silt to silty clay
5.41	7.00	0.2680	3.826	-0.098	12	3	clay
5.58	6.00	0.3257	5.425	0.345	6	3	clay
5.74	6.72	0.3385	5.035	-0.147	6	3	clay
5.91	6.68	0.3489	5.227	0.044	6	3	clay
6.07	6.42	0.3250	5.060	-0.002	6	3	clay
6.23	6.38	0.1296	2.031	-0.083	7	3	clay
6.40	9.34	0.5201	5.571	0.047	9	5	clayey silt to silty clay
6.56	41.72	0.7635	1.830	-0.265	13	6	sandy silt to clayey silt
6.73	48.35	0.1029	0.213	0.132	17	7	silty sand to sandy silt
6.89	66.23	0.2929	0.442	0.211	17	8	sand to silty sand
7.05	103.00	0.1687	0.164	-0.027	18	9	sand
7.22	115.48	0.1732	0.150	0.032	21	9	sand
7.38	114.50	0.0378	0.033	0.296	20	9	sand
7.55	78.80	0.7135	0.905	0.245	18	8	sand to silty sand
7.71	33.45	0.7826	2.339	0.340	15	7	silty sand to sandy silt
7.87	31.57	1.0649	3.373	1.560	12	6	sandy silt to clayey silt
8.04	30.25	0.4129	1.365	-0.002	11	6	sandy silt to clayey silt
8.20	21.30	0.4785	2.247	0.054	8	6	sandy silt to clayey silt
8.37	11.55	0.2150	1.863	0.345	6	5	clayey silt to silty clay
8.53	6.39	0.1461	2.288	1.259	5	4	silty clay to clay
8.69	4.37	0.1902	4.354	2.574	5	3	clay
8.86	5.01	0.2027	4.043	3.363	5	3	clay
9.02	7.66	0.2230	2.911	4.257	7	3	clay
9.19	8.40	0.2128	2.534	4.225	5	4	silty clay to clay
9.35	8.86	0.1947	2.198	3.899	4	5	clayey silt to silty clay
9.51	10.30	0.1602	1.555	3.453	5	5	clayey silt to silty clay
9.68	11.06	0.0988	0.894	2.738	5	5	clayey silt to silty clay
9.84	11.89	0.0929	0.781	0.867	5	5	clayey silt to silty clay
10.01	9.83	0.4062	4.131	0.255	5	5	clayey silt to silty clay
10.17	10.08	0.1297	1.286	0.145	7	4	silty clay to clay
10.33	12.51	0.5330	4.262	0.078	13	4	silty clay to clay
10.50	39.02	1.5761	4.039	0.267	18	6	sandy silt to clayey silt
10.66	88.27	0.7658	0.868	-0.629	23	7	silty sand to sandy silt
10.83	88.21	0.8090	0.917	0.923	19	8	sand to silty sand
10.99	58.00	0.6796	1.172	1.474	20	7	silty sand to sandy silt
11.15	38.14	0.6603	1.731	0.595	13	7	silty sand to sandy silt
11.32	23.09	0.5918	2.563	0.517	9	6	sandy silt to clayey silt
11.48	10.95	0.4408	4.027	1.724	7	5	clayey silt to silty clay
11.65	8.82	0.2224	2.521	2.314	9	3	clay
11.81	8.82	0.4522	5.128	2.562	11	3	clay
11.98	15.29	0.5185	3.391	2.239	9	4	silty clay to clay
12.14	16.81	0.5500	3.271	1.149	10	4	silty clay to clay
12.30	16.69	0.5047	3.024	0.247	9	5	clayey silt to silty clay
12.47	20.25	0.5367	2.650	0.313	9	5	clayey silt to silty clay
12.63	18.50	0.6758	3.653	0.223	11	4	silty clay to clay
12.80	12.89	0.6893	5.348	0.551	11	4	silty clay to clay
12.96	19.29	0.5351	2.774	0.250	8	5	clayey silt to silty clay
13.12	19.39	0.4044	2.086	-5.200	10	7	silty sand to sandy silt
13.45	57.20	0.2201	0.385	0.054	20	7	silty sand to sandy silt
13.62	115.41	2.1859	1.894	0.042	27	7	silty sand to sandy silt

\*Soil behavior type and SPT based on data from UBC-1983

Depth (ft)	Qt	Fs	Fs/Qt	Pw	SPT N*	Zone	Soil Behavior Type UBC-1983
	TSF	TSF	(%)	PSI 60%	Hammer		
13.78	78.88	3.3071	4.193	0.228	38	6	sandy silt to clayey silt
13.94	103.61	2.3219	2.241	0.064	40	6	sandy silt to clayey silt
14.11	131.96	3.9408	2.986	0.299	41	7	silty sand to sandy silt
14.27	148.53	2.7785	1.871	0.487	39	6	sandy silt to clayey silt
14.44	27.87	2.8056	10.068	0.321	24	6	sandy silt to clayey silt
14.60	9.99	0.3459	3.464	4.668	15	3	clay
14.76	9.25	0.2418	2.614	6.713	8	3	clay
14.93	6.29	0.2126	3.379	8.756	7	3	clay
15.09	6.30	0.2058	3.268	8.197	6	3	clay
15.26	7.56	0.1574	2.083	9.706	5	5	clayey silt to silty clay
15.42	16.62	0.1743	1.049	6.801	13	6	sandy silt to clayey silt
15.58	79.15	1.7003	2.148	5.712	24	8	sand to silty sand
15.75	201.83	1.0920	0.541	-0.032	28	8	sand to silty sand
15.91	70.01	1.0594	1.513	0.568	27	8	sand to silty sand
16.08	60.56	1.8703	3.088	0.047	20	7	silty sand to sandy silt
16.24	61.96	0.8407	1.357	0.073	19	7	silty sand to sandy silt
16.40	57.40	0.4351	0.758	-0.394	14	7	silty sand to sandy silt
16.57	7.82	0.3490	4.462	4.502	9	6	sandy silt to clayey silt
16.73	7.36	0.2318	3.150	6.645	7	3	clay
16.90	6.93	0.2232	3.219	7.605	7	3	clay
17.06	6.45	0.1992	3.087	7.583	6	3	clay
17.22	6.13	0.1584	2.581	8.168	6	3	clay
17.39	5.74	0.1242	2.162	8.753	4	4	silty clay to clay
17.55	5.71	0.1480	2.591	9.427	6	3	clay
17.72	5.86	0.1599	2.728	10.140	6	3	clay
17.88	6.54	0.1614	2.467	10.941	4	4	silty clay to clay
18.04	6.26	0.1390	2.219	11.957	4	4	silty clay to clay
18.21	6.32	0.1496	2.369	12.449	4	4	silty clay to clay
18.37	6.63	0.1473	2.223	12.863	4	4	silty clay to clay
18.54	7.92	0.1485	1.875	13.534	5	4	silty clay to clay
18.70	7.04	0.1696	2.410	14.279	5	4	silty clay to clay
18.86	7.34	0.1658	2.258	14.935	5	4	silty clay to clay
19.03	7.70	0.1650	2.144	15.021	5	4	silty clay to clay
19.19	7.20	0.1682	2.337	15.633	5	4	silty clay to clay
19.36	7.14	0.1862	2.608	16.067	5	4	silty clay to clay
19.52	8.06	0.2796	3.470	16.701	5	4	silty clay to clay
19.69	9.97	0.3049	3.059	17.259	9	3	clay
19.85	8.96	0.3134	3.497	16.253	7	4	silty clay to clay
20.01	11.77	0.3515	2.985	18.362	7	4	silty clay to clay
20.18	13.05	0.2997	2.297	-2.040	7	4	silty clay to clay
20.34	7.79	0.2855	3.665	-1.408	6	4	silty clay to clay
20.51	8.17	0.2415	2.955	-0.375	8	3	clay
20.67	8.32	0.2706	3.254	0.703	8	3	clay
20.83	8.46	0.3838	4.535	1.582	9	3	clay
21.00	10.07	0.5091	5.054	2.270	8	4	silty clay to clay
21.16	20.12	0.4593	2.283	0.985	10	4	silty clay to clay
21.33	16.50	0.6056	3.670	0.167	13	7	silty sand to sandy silt
21.49	86.34	0.1743	0.202	-3.769	21	7	silty sand to sandy silt
21.65	90.90	1.4375	1.581	-3.473	23	8	sand to silty sand
21.82	108.67	1.3487	1.241	-1.460	25	7	silty sand to sandy silt
21.98	32.82	1.3190	4.019	-0.654	21	6	sandy silt to clayey silt
22.15	26.76	0.8025	2.999	-2.643	14	4	silty clay to clay
22.31	5.86	0.5788	9.880	-0.081	10	5	clayey silt to silty clay
22.47	32.78	0.2586	0.789	-0.448	9	6	sandy silt to clayey silt
22.64	33.40	0.1765	0.528	0.333	12	7	silty sand to sandy silt
22.80	44.38	0.5417	1.220	3.373	17	6	sandy silt to clayey silt
22.97	57.67	1.8554	3.217	0.992	17	6	sandy silt to clayey silt
23.13	30.81	1.2988	4.216	-1.798	19	7	silty sand to sandy silt
23.29	93.46	0.5911	0.632	0.958	21	8	sand to silty sand
23.46	142.44	0.3757	0.264	0.507	21	8	sand to silty sand
23.62	23.93	2.2356	9.341	0.527	40	7	silty sand to sandy silt
23.79	209.07	4.1154	1.968	0.674	37	7	silty sand to sandy silt
23.95	112.37	0.3541	0.315	0.495	32	8	sand to silty sand

\*Soil behavior type and SPT based on data from UBC-1983



Depth (ft)	Qt TSF	Fs TSF	Fs/Qt (%)	Pw PSI	SPT N* 60% Hammer	Zone	Soil Behavior Type UBC-1983
24.11	74.08	0.3591	0.485	1.242	25	9	sand
24.28	202.56	0.6118	0.302	0.583	31	9	sand
24.44	204.48	0.6095	0.298	0.576	41	10	gravelly sand to sand
24.61	288.11	0.6319	0.219	0.252	46	10	gravelly sand to sand
24.77	287.59-327	67.9700	-11393.910	0.252	0	0	<out of range>

\*Soil behavior type and SPT based on data from UBC-1983

**ATTACHMENT B**

## ATTACHMENT B

### PREVIOUS STUDIES FOR BUILDING ADDITION

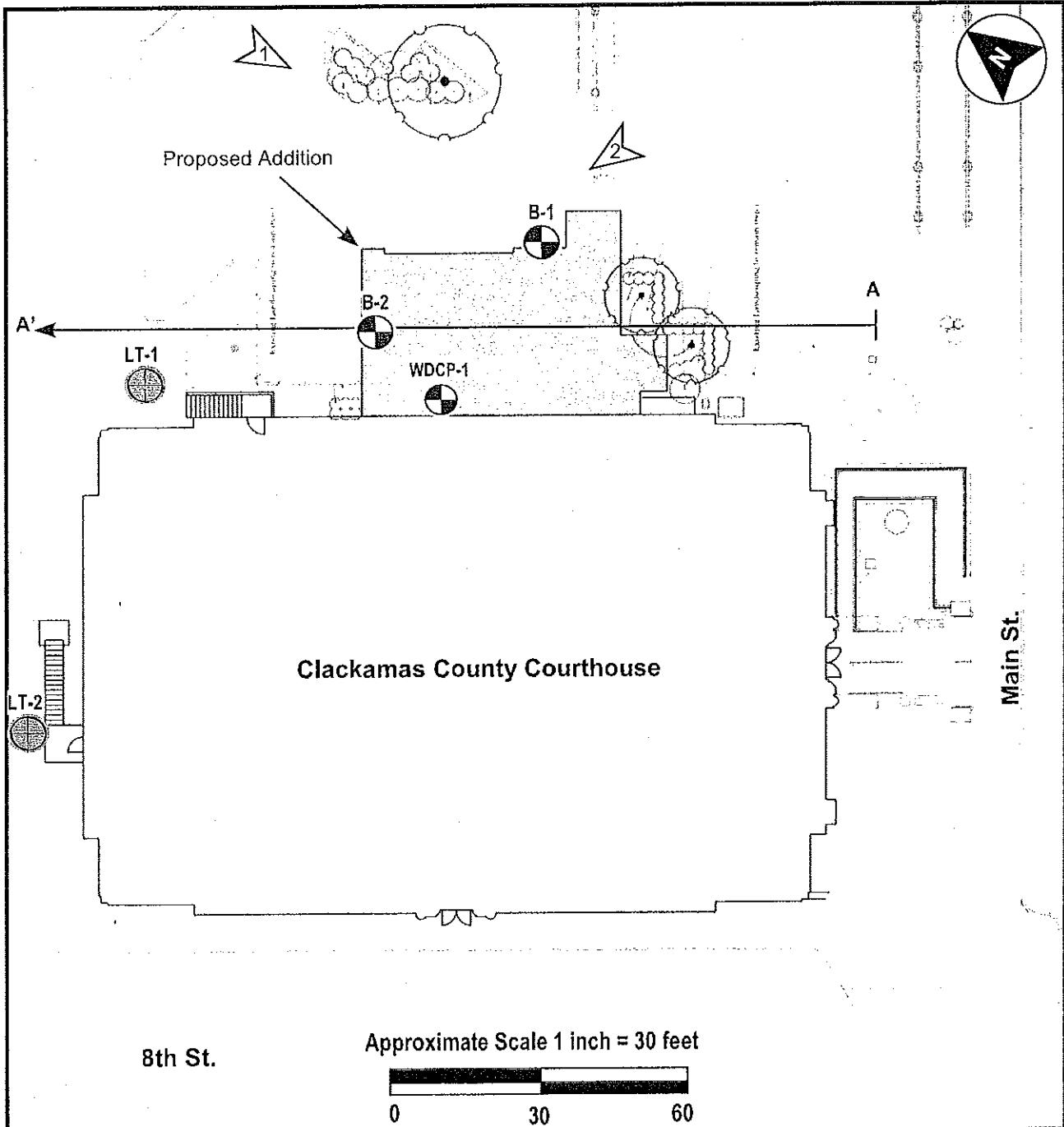
We reviewed the following report for an addition to the existing building to help develop conclusions regarding the site:

- *Report of Geotechnical Investigation & Site-Specific Seismic Hazard Study; Clackamas Courthouse Addition; 807 Main Street; Oregon City, Oregon, prepared by Carlson Geotechnical dated October 20, 2011*

The relevant explorations logs as well as applicable DCP test results from these explorations are presented in this attachment.

# SITE PLAN

## CLACKAMAS COUNTY COURTHOUSE ADDITION- OREGON CITY, OREGON



NOTES: Drawing based on site plan prepared by LRS Architects and observations made while on site.

<b>LEGEND</b>	
WDCP-1 	Approximate cone penetrometer test location.
B-1 	Approximate auger boring location.
LT-1 	Approximate previous boring locations by Landslide Technology.
	Number, location, and direction of site photographs shown on Figure 3.

CGT Job No.  
G1103625

**Carlson Geotechnical**  
 P.O. Box 23814  
 Tigard, Oregon 97281  
 503-601-8250

FIGURE 2



Carlson Geotechnical  
 PO Box 23814  
 Tigard, OR 97281

**FIGURE 6**

**Boring B1**

CLIENT Clackamas County Courthouse PROJECT NAME Clackamas County Courthouse  
 PROJECT NUMBER G1103625 PROJECT LOCATION Oregon City, OR  
 DATE STARTED 9/24/11 ELEVATION DATUM Feet MSL  
 DRILLING CONTRACTOR Subsurface Technologies GROUND ELEVATION 65.5 ft  
 DRILLING METHOD Hollow Stem Auger & NX Core GROUND WATER LEVELS:  
 LOGGED BY Jeff Jones CHECKED BY \_\_\_\_\_  $\nabla$  AT TIME OF DRILLING 12.0 ft / Elev 53.5 ft  
 AFTER DRILLING \_\_\_\_\_

ELEVATION (ft)	GRAPHIC LOG	U.S.C.S.	MATERIAL DESCRIPTION	GROUNDWATER	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	
											PL	LL
												MC
												□ FINES CONTENT (%) □
65		GP	AC - 3 inches thick Base rock - 6 inches thick SANDY SILT FILL - brown, moist, with rounded gravel and brick debris.		0							
60		ML Fill	Minimal sample return - plastic debris stuck in tip.		5	SPT 1	44	4-4-5 (9)				15
						SPT 2	33	4-5-7 (12)				
						SPT 3	6	4-4-6 (10)				
55					10	SPT 4	6	4-6-6 (12)				
		ML	SANDY SILT - stiff, mottled brown and red-brown, wet to saturated. With layers of fine, silty sand.			SPT 5	56	4-4-5 (9)				34
50			POORLY GRADED SAND - dense, gray-brown, saturated, fine- to medium-grained with rounded gravel.		15	ST 6	0					
		SP	Gravelly below 19 feet bgs.			SPT 7	44	5-15-24 (39)				24
45					20	SPT 8	93	45-50/5"				>>
40			BASALT - hard to very hard (R4 to R5), fresh, dark gray, aphanitic, with minor vesicles. Note: No water circulation during coring. Compressive Strength: 20,450 psi Compressive Strength: 10,350 psi		25	RCN 9	102 (85)					
35	<p>Auger refusal at 22 feet, switched to rock coring.          Boring terminated at an approximate depth of 27 feet.          Groundwater encountered at an approximate depth of 12 feet.          Boring backfilled with bentonite and asphalt surface patched upon completion.</p>											
30												

CGT BOREHOLE - GRAPHIC LOG - GINT U.S. GDT - 10/20/11



Carlson Geotechnical  
PO Box 23814  
Tigard, OR 97281

# FIGURE 7

## Boring B2

PAGE 1 OF 1

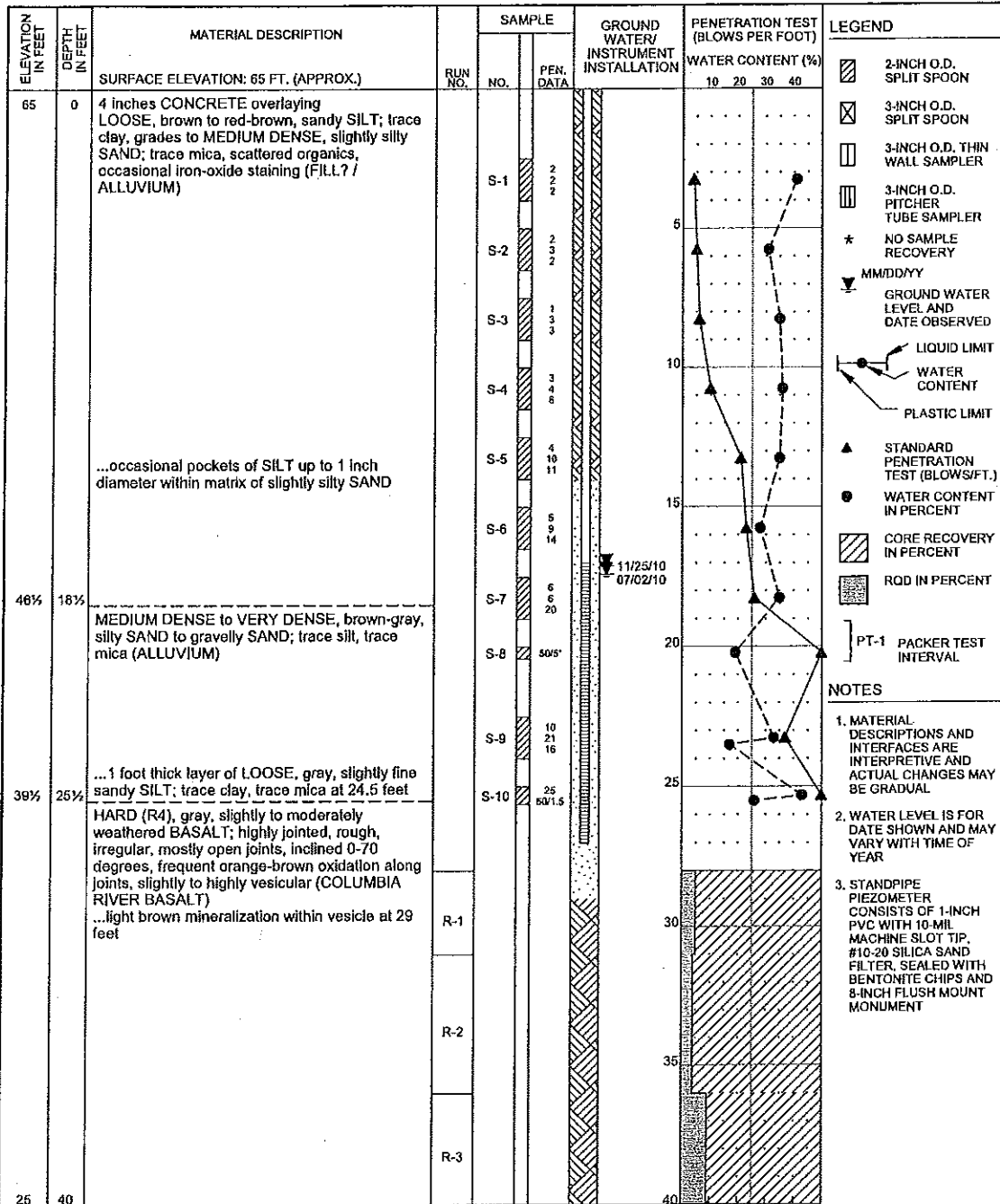
CLIENT Clackamas County Courthouse PROJECT NAME Clackamas County Courthouse  
 PROJECT NUMBER G1103625 PROJECT LOCATION Oregon City, OR  
 DATE STARTED 9/24/11 ELEVATION DATUM Feet MSL  
 DRILLING CONTRACTOR Subsurface Technologies GROUND ELEVATION 65.5 ft  
 DRILLING METHOD Hollow Stem Auger & NX Core GROUND WATER LEVELS:  
 LOGGED BY Jeff Jones CHECKED BY \_\_\_\_\_  $\nabla$  AT TIME OF DRILLING 15.0 ft / Elev 50.5 ft  
 NOTES \_\_\_\_\_ AFTER DRILLING \_\_\_\_\_

ELEVATION (ft)	GRAPHIC LOG	U.S.C.S.	MATERIAL DESCRIPTION	GROUNDWATER	DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	
											PL	LL
												MC
												□ FINES CONTENT (%) □
65	GP		AC - 3 inches thick Base rock - 6 inches thick SANDY SILT - medium stiff, brown, moist to wet, with interbedded, fine-grained, silty sand.		0							
						X SPT 1	44	2-3-3 (6)				
60						X SPT 2	78	3-3-4 (7)				28
		ML/SM	Mottled gray and brown.			ST 3	71					
55			Becomes saturated.			X SPT 4	100	4-3-4 (7)				
						X SPT 5	100	5-3-4 (7)				36
50				$\nabla$	15	X SPT 6	89	3-4-5 (9)				25
45		SP	POORLY GRADED SAND - medium dense, gray-brown, saturated, fine- to medium-grained with subrounded to rounded gravel. Driller indicated some heaving evident.		20	X SPT 7	67	3-7-18 (25)				
40						X SPT 8	44	15-6-6 (12)				
35			BASALT - hard to very hard (R4 to R5), fresh, dark gray, aphanitic, vossicular.  Compressive Strength: 4810 psi		30	RCN 9	90 (73)					
30	Auger refusal at 29 feet, switched to rock coring. Boring terminated at an approximate depth of 34 feet. Groundwater encountered at an approximate depth of 15 feet. Boring backfilled with bentonite and asphalt surface patched upon completion.											

CGT BOREHOLE - GRAPHIC LAB G1103625.GPJ GINT US.GDT 10/20/11

# LT1 BORING LOG

## CLACKAMAS COUNTY COURTHOUSE ADDITION - OREGON CITY, OREGON



HAMMER ASSEMBLY: AUTO TRIP      SPT SAMPLER: NO LINER - RECESSED ID      RECOVERY/RQD (%)

DRILL ROD USED: NWJ      BOREHOLE DIAM.: 5-INCHES

DRILLER: HARD CORE DRILLING DATE START: 6/19/2010 FINISH: 6/19/2010 DRILLING TECHNIQUE: MUD ROTARY / HQ3 CORING	<p>19250 S.W. Greenburg Road, Suite 113                  Portland, Oregon 97224                  Phone: 503-452-1240 Fax: 503-452-1528</p>	<b>SUMMARY BORING LOG</b> LT-1 COURTHOUSE SLOPE MITIGATION CLACKAMAS COUNTY, OREGON	DEC 2010 PROJ 2087 FIG. 2
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NOTE: Excerpted from Landslide Technology (LT) report for the Clackamas County Courthouse Northwest Slope Mitigation, dated December 13, 2010.

CGT Job No. G1103625  
**FIGURE 8**

# WILDCAT DYNAMIC CONE LOG

Carlson Geotechnical  
 PO Box 23814  
 Tigard, Oregon 97281

PROJECT NUMBER: G1103625  
 DATE STARTED: 10-01-2011  
 DATE COMPLETED: 10-01-2011

HOLE #: WDCP-1  
 CREW: MDI  
 PROJECT: Clackamas County Court House  
 ADDRESS: 807 Main Street  
 LOCATION: Oregon City, Oregon

SURFACE ELEVATION: 100.5 feet  
 WATER ON COMPLETION: Unknown  
 HAMMER WEIGHT: 35 lbs.  
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
	1	4.4	*				1	VERY LOOSE	VERY SOFT
	0	0.0					0	VERY LOOSE	VERY SOFT
1 ft	0	0.0					0	VERY LOOSE	VERY SOFT
	13	57.7	.....				16	MEDIUM DENSE	VERY STIFF
	11	48.8	.....				13	MEDIUM DENSE	STIFF
2 ft	8	35.5	.....				10	LOOSE	STIFF
	6	26.6	.....				7	LOOSE	MEDIUM STIFF
	7	31.1	.....				8	LOOSE	MEDIUM STIFF
3 ft	7	31.1	.....				8	LOOSE	MEDIUM STIFF
1 m	8	35.5	.....				10	LOOSE	STIFF
	3	11.6	..				3	VERY LOOSE	SOFT
4 ft	6	23.2	.....				6	LOOSE	MEDIUM STIFF
	2	7.7	..				2	VERY LOOSE	SOFT
	4	15.4	....				4	VERY LOOSE	SOFT
5 ft	5	19.3	.....				5	LOOSE	MEDIUM STIFF
	3	11.6	..				3	VERY LOOSE	SOFT
	7	27.0	.....				7	LOOSE	MEDIUM STIFF
6 ft	4	15.4	....				4	VERY LOOSE	SOFT
	5	19.3	.....				5	LOOSE	MEDIUM STIFF
2 m	3	11.6	..				3	VERY LOOSE	SOFT
7 ft	6	20.5	.....				5	LOOSE	MEDIUM STIFF
	3	10.3	..				2	VERY LOOSE	SOFT
	3	10.3	..				2	VERY LOOSE	SOFT
8 ft	3	10.3	..				2	VERY LOOSE	SOFT
	5	17.1	.....				4	VERY LOOSE	SOFT
	6	20.5	.....				5	LOOSE	MEDIUM STIFF
9 ft	4	13.7	....				3	VERY LOOSE	SOFT
	4	13.7	....				3	VERY LOOSE	SOFT
	5	17.1	.....				4	VERY LOOSE	SOFT
3 m 10 ft	3	10.3	..				2	VERY LOOSE	SOFT
	6	18.4	.....				5	LOOSE	MEDIUM STIFF
	6	18.4	.....				5	LOOSE	MEDIUM STIFF
	5	15.3	.....				4	VERY LOOSE	SOFT
11 ft	7	21.4	.....				6	LOOSE	MEDIUM STIFF
	8	24.5	.....				6	LOOSE	MEDIUM STIFF
	4	12.2	....				3	VERY LOOSE	SOFT
12 ft	6	18.4	.....				5	LOOSE	MEDIUM STIFF
	6	18.4	.....				5	LOOSE	MEDIUM STIFF
	6	18.4	.....				5	LOOSE	MEDIUM STIFF
4 m 13 ft	6	18.4	.....				5	LOOSE	MEDIUM STIFF

FIGURE 9



HOLE #: WDCP-1

**WILDCAT DYNAMIC CONE LOG**

Page 2 of 2

PROJECT: Clackamas County Court House

PROJECT NUMBER:

G1103625

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
	5	13.9	....				3	VERY LOOSE	SOFT
	1	2.8					0	VERY LOOSE	VERY SOFT
14 ft	3	8.3	..				2	VERY LOOSE	SOFT
	1	2.8					0	VERY LOOSE	VERY SOFT
	3	8.3	..				2	VERY LOOSE	SOFT
15 ft	3	8.3	..				2	VERY LOOSE	SOFT
	5	13.9	....				3	VERY LOOSE	SOFT
	6	16.6	....				4	VERY LOOSE	SOFT
16 ft	7	19.4	.....				5	LOOSE	MEDIUM STIFF
5 m	6	16.6	....				4	VERY LOOSE	SOFT
	4	10.2	..				2	VERY LOOSE	SOFT
17 ft									
18 ft									
19 ft									
6 m									
20 ft									
21 ft									
22 ft									
7 m									
23 ft									
24 ft									
25 ft									
26 ft									
8 m									
27 ft									
28 ft									
29 ft									
9 m									

FIGURE 9



# CLACKAMAS COUNTY COURTHOUSE OREGON CITY, OREGON

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## ASCE 41-13 SEISMIC EVALUATION REPORT

OCTOBER 29, 2015

KPFF PROJECT No. 215134

PREPARED BY:

KPFF CONSULTING ENGINEERS  
111 SW FIFTH AVENUE, SUITE 2500  
PORTLAND, OR 97204

SUBMITTED TO:

SERA ARCHITECTS  
338 NW FIFTH AVENUE  
PORTLAND, OR 97209

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EVALUATION PROCEDURE .....	2
SUMMARY OF DEFICIENCIES .....	4
SUMMARY .....	9

### APPENDIX A

#### ASCE 41-13 CHECKLISTS:

- LIFE SAFETY BASIC CONFIGURATION CHECKLIST
- LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPE C1: CONCRETE MOMENT FRAME
- NONSTRUCTURAL CHECKLIST

## EXECUTIVE SUMMARY

At the request of the SERA Architects, KPFF has performed an ASCE 41-13 Tier 1 seismic evaluation of the Clackamas County Courthouse located at 807 Main Street in Oregon City, Oregon.

The building was originally constructed in 1936. Drawings from the original construction were available to the design team. The building's construction consists of a concrete pan-joint system at the floor and roof slabs supported by concrete columns. The perimeter wall is cast-in-place concrete clad with a brick veneer. Both the columns and exterior walls are supported by conventional shallow concrete foundations.

A Tier 1, Life Safety Performance Level seismic evaluation was performed in accordance with the American Society of Civil Engineers (ASCE) 41-13, *"Seismic Evaluation and Retrofit of Existing Buildings."* ASCE 41-13 classifies buildings based on their construction type and provides seismic evaluation requirements applicable for each classification. This building is classified as a "Concrete Moment Frame" building. Additionally, based on seismic ground motions for Oregon City, the building location is classified as having a High Level of Seismicity.

These criteria dictate the completion of required ASCE 41-13 Tier 1 checklists which are included in Appendix A of this report. Our assessment also included a Tier 1 evaluation of nonstructural components that were able to be evaluated based on a visual review of accessible areas.

As expected, due to the age of the building and nature of its construction, our evaluation has determined that the building has numerous seismic deficiencies and does not meet the requirements for life safety as defined by ASCE 41-13. Consequently, we would expect that the building would experience significant damage during a major earthquake and pose a risk to the life safety of the occupants.

## PROJECT SCOPE

KPFF Consulting Engineers was retained to perform a seismic evaluation of the Clackamas County Courthouse in accordance with our proposal dated April 24, 2015. The evaluation is based upon the procedures and guidelines of ASCE/SEI 41-13, "Seismic Evaluation and Retrofit of Existing Buildings" published by the American Society of Civil Engineers and the Structural Engineering Institute. The intent is to determine if the structure meets the requirements for a "Life Safety" structural performance level and to identify any deficiencies. ASCE 41-13 defines the "Life Safety Structural Performance Level" as follows:

Life Safety is defined as the post-earthquake damage state in which a structure has damaged components but retains a margin against the onset of partial or total collapse.

There are three tiers of evaluation that can be performed using this standard. The first “Tier 1” is a screening phase meant to quickly identify seismic deficiencies. The next “Tier 2” is a deficiency-based evaluation and retrofit phase that can be used to review Tier 1 deficiencies more closely with further engineering analysis. “Tier 3” is a systematic evaluation and retrofit phase involving even higher forms of analysis. This effort is limited to a Tier 1 evaluation per our contract.

Several of the items identified as noncompliant per the Tier 1 evaluation could be further evaluated using Tier 2 procedures; however, given the nature of the building, it is very unlikely that the additional effort of a Tier 2 evaluation would result in any of the noncompliant items being revised to compliant. Therefore, we believe that the Tier 1 only evaluation is appropriate for this building.

Structural drawings from the original construction were provided for review. A limited visual assessment of the structure was performed on-site. No destructive testing or investigations were performed as part of this effort. Our review and the findings presented herein are limited to those conditions and components for which sufficient information could be confirmed on site by the visual observations of the KPFF structural engineer.

Observations, analyses, conclusions, and recommendations contained within this report reflect our best engineering judgment. Concealed problems with the construction of the building may exist that cannot be revealed through drawing review and site observations alone. Therefore, KPFF can in no way warranty or guarantee the condition of the existing construction of the building, or the future building performance.

The Clackamas County Courthouse, originally constructed in 1936, is located at 807 Main Street in Oregon City, Oregon. The building has approximate plan dimensions of 160’ by 100’ and consists of four stories total, with the lowest level being a daylight basement.

## EVALUATION PROCEDURE

### Site Reconnaissance

A site visit was conducted on September 23, 2015 by a representative of KPFF as part of an assessment team which also included architects from SERA Architects. The assessment team observed the exterior of the building and accessible areas inside of the building in order to review the general condition of the structure.

This visual review of the building was limited to the basement, roof, and unoccupied courtrooms. Architectural finishes covered the structure in most places except the mechanical room in the basement. An exterior visual review was conducted as well. Structure that was visible showed little to no signs of distress. Ponding on the roof was observed. The foundation was not accessible from the interior and therefore was not evaluated.

### Document Review

Structural drawings for the original construction of the building were provided for our review.

## Structural System Description

The floor and roof framing consist of pan-joists supporting a concrete slab. The joists are supported by concrete beams which are in turn supported by concrete columns. The exterior walls are concrete with a brick veneer. The exterior walls have multiple openings for windows and extend past the roof to form a parapet supporting a stone cornice. An elevator shaft surrounded by concrete walls exists near the center of the building. Multiple stairwells throughout the building are surrounded by concrete beams above the main floor, and by concrete walls below the main level. The concrete columns are shown to be supported by conventional concrete spread footings in the original plans. The exterior and interior concrete walls are shown to be supported by continuous spread footing, however, no foundation elements were directly observed during our site visit. Interior walls consist of unreinforced hollow clay tile and timber framed stud walls, which is common construction for the era.

Existing skylights were abandoned following the construction of a large mechanical penthouse on the roof slab. An addition was constructed to the north within the last decade and appears to have a seismic gap. However, the existence of a seismic gap between the two buildings was not confirmed during our site visit and cannot be confirmed with the information provided to KPFF. In the past, KPFF was hired to design a column removal plan in one of the main floor courtrooms. During our site visit, we noted that no seismic improvements had occurred at the building. The brick veneer and stone ornaments appears to be in good condition.

## Nonstructural Systems Description

Nonstructural items include partition walls, elevator, exterior canopies, suspended ceilings, and mechanical equipment. Excluding the partitions, these systems appeared to have been updated in many areas of the building since the building was constructed.

## Building Type

Under ASCE 41-13, this building is classified as a building type C1: Concrete Moment Frame.

## Performance Level

The performance level used for this evaluation is the “Life Safety” performance level as described in the “Project Scope” section of this report.

## Level of Seismicity

The level of seismicity of this site is considered “High” as defined by Section 2.5.

## Soil Type

A geotechnical report was prepared by GeoDesign, Inc. dated October 15, 2015 to evaluate the soil conditions below the building, as well as the nearby slope. GeoDesign, Inc. concluded the soil type to be soil site class D.

### Building Occupancy & Use

The building contains a mix of occupancies including courtrooms, office space, and storage. There is no known storage of hazardous materials in the building.

### Level of Inspections & Testing Conducted

Test borings have been conducted to evaluate the slope near the Willamette River, but have not been provided to KPFF at the time of the evaluation. No destructive testing or investigations were included in this effort.

Relevant parameters to the seismic evaluation are presented in the following table:

Parameter	Value	Comments
T	0.583s	Building period defined in Section 4.5.2.4.
S <sub>a</sub>	0.38 g	Response spectral acceleration parameter as defined in Section 4.5.2.3. Equal to S <sub>x1</sub> / T but shall not exceed S <sub>xs</sub> . S <sub>A</sub> includes a cap of 75% of "New" ground building motion as defined in ASCE 41.
C	1.0	Modification factor to relate expected maximum inelastic displacements to displacements calculated for linear elastic response. (Obtained from Table 4-8.)

### SUMMARY OF DEFICIENCIES

The Tier 1 ASCE 41-13 evaluation consists of completing a series of checklists that apply to the specific building type and determining which common deficiencies exist for that building. The completion of the checklists also requires a site visit and performing some basic structural calculations. Due to the fact that not all conditions were exposed for observation, some of the checklist items have been completed based on our experience with similar construction from the same time period. Specifically, the following checklists were completed and are attached at the end of this report:

- 16.1.2LS Life Safety Basic Configuration Checklist
- 16.16LS Life Safety Structural Checklist for Building Type C1: Concrete Moment Frames
- 16.17 Nonstructural Checklist

Historically, improperly detailed concrete moment frame buildings have not performed well during earthquakes. As expected, our evaluation has determined that the building has numerous seismic deficiencies and **does not meet the requirements for life safety** as defined by ASCE 41-13.

The following table summarizes the deficiencies that were identified for the building:

No.	Item	Tier 1 Ref.	Description of Deficiency
1	Building System: Adjacent Building	A.2.1.2	The addition to the north appears to be located immediately adjacent to the building. This creates a risk of the building moving differentially and “pounding” during an earthquake.
2	Geologic Site Hazards: Liquefaction	A.6.1.1	Liquefiable soil under the building’s foundation was reported by Carlson Geotechnical in a report dated October 20, 2011. These soils may lose all bearing capacity during an earthquake and cause large differential settlements in the foundation.
3	Geologic Site Hazards: Slope Failure	A.6.1.2	The building is located at the top of a steep slope. Pavement between the edge of the slope and the building is cracking and shifting away from the building, indicating a possibly mobile slope.
4	Seismic-Force-Resisting-System: Column Axial Stress Check	A.3.1.4.2	The concrete columns were not detailed to resist overturning seismic forces, in addition to gravity loads. Column failure during an earthquake may cause partial collapse of the building.
5	Seismic-Force-Resisting-System: Column Shear Stress Check	A.3.1.4.1	The columns were not originally designed or detailed to handle seismic forces. The columns are inadequate to resist the seismic forces at the rigid beam-column joints.
6	Seismic-Force-Resisting System: No Shear Failures	A.3.1.4.6	Columns are likely to experience shear failure before reaching the required moment capacity. This may lead to a sudden, non-ductile failure of the column and seismic-force-resisting system.
7	Seismic-Force-Resisting System: Strong Column-Weak Beam	A.3.1.4.7	Columns not designed and detailed for seismic forces have a lower strength than the connecting framing beams. A column failure in the seismic-force-resisting system will create a plastic hinge in the column, leading to partial collapse of the column and excessive building drift.



No.	Item	Tier 1 Ref.	Description of Deficiency
8	Seismic-Force-Resisting System: Beam Bars	A.3.1.4.8	The original building plans show bent up bars at the inflection point of the frame beams, with no indication of continuous bars. Shifting loads throughout the beam could cause failure in the under reinforced sections of the beam, causing collapse of the beam and floor.
9	Seismic-Force-Resisting System: Column-Bar Splices	A.3.1.4.9	The original plans detail column splices to be 30 bar diameters, which is less than the required 35 bar diameters. Short splices are susceptible to sudden non-ductile loss of strength in the beam-column joint.
10	Seismic-Force-Resisting System: Beam-Bar Splices	A.3.1.4.10	The original plans detail bar termination near the column face, creating an inadequate splice at the potential plastic hinge location of the frame beam. This detail is likely to fail before the required moment capacity is reached in the frame beam.
11	Seismic-Force-Resisting System: Column-Tie Spacing	A.3.1.4.11	The original plans detail a number of columns with tie spacing greater than that required, reducing the ductility of the column. Loose tie spacing may lead to a non-ductile failure of the column over several cycles during an earthquake, causing collapse.
12	Seismic-Force-Resisting System: Stirrup Spacing	A.3.1.4.12	Stirrups were not detailed along the full length of the beam. A lack of stirrups may lead to a non-ductile shear failure within the beam. The beam is not likely to maintain full moment capacity through several cycles during an earthquake.
13	Seismic-Force-Resisting System: Joint Transverse Reinforcing	A.3.1.4.13	Adequate joint reinforcing is not detailed in the original plans. A lack of reinforcing in the beam-column joint may lead to a non-ductile failure of the joint, as the required strength of the connected members cannot be reached.

No.	Item	Tier 1 Ref.	Description of Deficiency
14	Seismic-Force-Resisting System: Deflection Compatibility	A.3.1.6.2	During an earthquake, the seismic-force-resisting system will deform and cause building drift. Columns designed primarily for gravity loads may be inadequate as they assume unplanned bending moments caused by building drift, causing failure.
15	Partitions: Unreinforced Masonry	A.7.1.1	The building contains masonry partitions which are not adequately braced to prevent shattering. Earthquake forces are likely to damage these walls and cause them to break apart.
16	Partitions: Drift	A.7.1.2	The rigid masonry partitions in the building were not detailed to allow for movement between the concrete moment frames and partition. The rigid partitions assume unplanned loads and will likely fail and shatter.
17	Ceilings: Suspended Lath and Plaster	A.7.2.3	An existing lath and plaster ceiling was observed to remain above the suspended ceiling. Older lath and plaster ceilings were not detailed to undergo seismic forces, and as a result, are likely not adequately braced to the structure above.
18	Ceilings: Suspended Gypsum Board	A.7.2.3	The suspended gypsum board ceiling is not adequately braced to resist seismic forces, and may fall during an earthquake.
19	Light Fixtures: Independent Support	A.7.3.2	The light fixtures in the suspected acoustical tile ceiling are not self-supporting and are not adequately braced to resist seismic forces.
20	Cladding and Glazing: Overhead Glazing	A.7.4.8	Glazing does not appear to be laminated to protect against shattering and does not appear to be detailed to remain in the frame after cracked. Unlaminated glazing above or near exits is especially hazardous.

No.	Item	Tier 1 Ref.	Description of Deficiency
21	Masonry Chimneys: URM Chimneys	A.7.9.1	An unreinforced masonry chimney exists on the north side of the building. The unsupported height of the chimney above the roof is likely to collapse during an earthquake, causing damage below.
22	Masonry Chimneys: Anchorage	A.7.9.2	Anchorage from the chimney to the structure is unlikely giving the age of the chimney.
23	Stairs: Stair Enclosures	A.7.10.1	The height-to-thickness ratio of the URM walls is too high. This places the walls at risk of collapse due to the out-of-plane accelerations.
24	Stairs: Stair Details	A.7.10.2	The stairs were not detailed to accommodate the drift of the building during an earthquake. This could cause the stairs to collapse during an earthquake, impeding egress.
25	Contents and Furnishings: Tall Narrow Contents	A.7.11.2	Tall narrow items such as file cabinets and security screening devices are likely not properly anchored to structure and are likely to tip over during an earthquake.
26	Contents and Furnishings: Fall-Prone Contents	A.7.11.3	Items 20 pounds or more over four feet above the floor can fall during an earthquake and cause a falling hazard unless they are properly braced or supported.
27	Mechanical and Electrical Equipment: Fall-Prone Equipment	A.7.12.4	Equipment over 20 pounds and over four feet above the floor which are not properly braced can become a falling hazard during an earthquake. This equipment may also swing and damage nearby equipment, finishes, or structure.
28	Mechanical and Electrical Equipment: In-Line Equipment	A.7.12.5	The building's HVAC equipment located in the mechanical room and the penthouse was observed to lack proper anchorage to the floor. This equipment may become dislodged during an earthquake.

No.	Item	Tier 1 Ref.	Description of Deficiency
29	Mechanical and Electrical Equipment: Tall Narrow Equipment	A.7.12.6	Tall narrow equipment is likely to overturn during an earthquake if not properly anchored to structure. A freestanding water heater was observed to not be braced to structure in the mechanical room.

## SUMMARY

Our seismic evaluation of the Clackamas County courthouse has indicated that the building has numerous seismic deficiencies that are common for its type and era of construction. Deficiencies exist for both the structural systems (i.e. walls, columns, beams, etc.) and the nonstructural systems (i.e. ceilings, chimneys, mechanical equipment, etc.). Consequently, we would expect that the building would experience significant damage during a design level (or larger) earthquake and pose a risk to the life safety of the occupants.

# APPENDIX A

Project: Clackamas County Courthouse

Location: Oregon City, OR

Completed by: LE

Date: 09/22/15

### 16.1.2LS LIFE SAFETY BASIC CONFIGURATION CHECKLIST

Low Seismicity

C = Compliant

N/A = Not Applicable

Building System

NC = Not Compliant

U = Unknown

#### General

- C  NC  N/A  U LOAD PATH: The structure shall contain a complete, well defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation. (Commentary: Sec. A.2.1.1. Tier 2: Sec. 5.4.1.1)
- C  NC  N/A  U ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 4% of the height of the shorter building. This statement shall not apply for the following building types: W1, W1a, and W2. (Commentary: Sec. A.2.1.2. Tier 2: Sec. 5.4.1.2)
- C  NC  N/A  U MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure. (Commentary: Sec. A.2.1.3. Tier 2: Sec. 5.4.1.3)

#### Building Configuration

- C  NC  N/A  U WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above. (Commentary: Sec. A.2.2.2. Tier 2: Sec. 5.4.2.1)
- C  NC  N/A  U SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above. (Commentary: Sec. A.2.2.3. Tier 2: Sec. 5.4.2.2)
- C  NC  N/A  U VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation. (Commentary: Sec. A.2.2.4. Tier 2: Sec. 5.4.2.3)
- C  NC  N/A  U GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines. (Commentary: Sec. A.2.2.5. Tier 2: Sec. 5.4.2.4)
- C  NC  N/A  U MASS: There is no change in effective mass more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered. (Commentary: Sec. A.2.2.6. Tier 2: Sec. 5.4.2.5)
- C  NC  N/A  U TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension. (Commentary: Sec. A.2.2.7. Tier 2: Sec. 5.4.2.6)

**Moderate Seismicity: Complete the Following Items in Addition to the Items for Low Seismicity.**

#### Geologic Site Hazards

- C  NC  N/A  U LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance shall not exist in the foundation soils at depths within 50 ft under the building. (Commentary: Sec. A.6.1.1. Tier 2: 5.4.3.1)
- C  NC  N/A  U SLOPE FAILURE: The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating any predicted movements without failure. (Commentary: Sec. A.6.1.2. Tier 2: 5.4.3.1)
- C  NC  N/A  U SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated. (Commentary: Sec. A.6.1.3. Tier 2: 5.4.3.1)

**High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.**

#### Foundation Configuration

- C  NC  N/A  U OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than  $0.6S_w$ . (Commentary: Sec. A.6.2.1. Tier 2: Sec. 5.4.3.3)
- C  NC  N/A  U TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C. (Commentary: Sec. A.6.2.2. Tier 2: Sec. 5.4.3.4)

Project: Clackamas County Courthouse

Location: Oregon City, OR

Completed by: LE

Date: 09/22/15

## 16.9LS LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPE C1: CONCRETE MOMENT FRAMES

### Low Seismicity

#### Seismic-Force-Resisting System

- C  NC  N/A  U REDUNDANCY: The number of lines of moment frames in each principal direction is greater than or equal to 2. The number of bays of moment frames in each line is greater than or equal to 2. (Commentary: Sec. A.3.1.1.1. Tier 2: Sec. 5.5.1.1)
- C  NC  N/A  U COLUMN AXIAL STRESS CHECK: The axial stress caused by unfactored gravity loads in columns subjected to overturning forces because of seismic demands is less than  $0.20f'_c$ . Alternatively, the axial stress caused by overturning forces alone, calculated using the Quick Check procedure of Section 4.5.3.6, is less than  $0.30f'_c$ . (Commentary: Sec. A.3.1.4.2. Tier 2: Sec. 5.5.2.1.3)

#### Connections

- C  NC  N/A  U CONCRETE COLUMNS: All concrete columns are doweled into the foundation with a minimum of 4 bars. (Commentary: Sec. A.5.3.2. Tier 2: Sec. 5.7.3.1)

### Moderate Seismicity: Complete the Following Items in Addition to the Items for Low Seismicity.

#### Seismic-Force-Resisting System

- C  NC  N/A  U INTERFERING WALLS: All concrete and masonry infill walls placed in moment frames are isolated from structural elements. (Commentary: Sec. A.3.1.2.1. Tier 2: Sec. 5.5.2.1.1)
- C  NC  N/A  U COLUMN SHEAR STRESS CHECK: The shear stress in the concrete columns, calculated using the Quick Check procedure of Section 4.5.3.2, is less than the greater of  $100 \text{ lb/in.}^2$  or  $2\sqrt{f'_c}$ . (Commentary: Sec. A.3.1.4.1. Tier 2: Sec. 5.5.2.1.4)
- C  NC  N/A  U FLAT SLAB FRAMES: The seismic-force-resisting system is not a frame consisting of columns and a flat slab or plate without beams. (Commentary: Sec. A.3.1.4.3. Tier 2: Sec. 5.5.2.3.1)

### High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

#### Seismic-Force-Resisting System

- C  NC  N/A  U PRESTRESSED FRAME ELEMENTS: The seismic-force-resisting frames do not include any prestressed or posttensioned elements where the average prestress exceeds the lesser of  $700 \text{ lb/in.}^2$  or  $f'_c/6$  at potential hinge locations. The average prestress is calculated in accordance with the Quick Check procedure of Section 4.5.3.8. (Commentary: Sec. A.3.1.4.4. Tier 2: Sec. 5.5.2.3.2)
- C  NC  N/A  U CAPTIVE COLUMNS: There are no columns at a level with height/depth ratios less than 50% of the nominal height/depth ratio of the typical columns at that level. (Commentary: Sec. A.3.1.4.5. Tier 2: Sec. 5.5.2.3.3)
- C  NC  N/A  U NO SHEAR FAILURES: The shear capacity of frame members is able to develop the moment capacity at the ends of the members. (Commentary: Sec. A.3.1.4.6. Tier 2: Sec. 5.5.2.3.4)
- C  NC  N/A  U STRONG COLUMN—WEAK BEAM: The sum of the moment capacity of the columns is 20% greater than that of the beams at frame joints. (Commentary: Sec. A.3.1.4.7. Tier 2: Sec. 5.5.2.1.5)
- C  NC  N/A  U BEAM BARS: At least two longitudinal top and two longitudinal bottom bars extend continuously throughout the length of each frame beam. At least 25% of the longitudinal bars provided at the joints for either positive or negative moment are continuous throughout the length of the members. (Commentary: A.3.1.4.8. Tier 2: Sec. 5.5.2.3.5)
- C  NC  N/A  U COLUMN-BAR SPLICES: All column-bar lap splice lengths are greater than  $35d_b$  and are enclosed by ties spaced at or less than  $8d_b$ . Alternatively, column bars are spliced with mechanical couplers with a capacity of at least 1.25 times the nominal yield strength of the spliced bar. (Commentary: Sec. A.3.1.4.9. Tier 2: Sec. 5.5.2.3.6)
- C  NC  N/A  U BEAM-BAR SPLICES: The lap splices or mechanical couplers for longitudinal beam reinforcing are not located within  $l_p/4$  of the joints and are not located in the vicinity of potential plastic hinge locations. (Commentary: Sec. A.3.1.4.10. Tier 2: Sec. 5.5.2.3.6)
- C  NC  N/A  U COLUMN-TIE SPACING: Frame columns have ties spaced at or less than  $d/4$  throughout their length and at or less than  $8d_b$  at all potential plastic hinge locations. (Commentary: Sec. A.3.1.4.11. Tier 2: Sec. 5.5.2.3.7)

- C (NC) N/A U STIRRUP SPACING: All beams have stirrups spaced at or less than  $d/2$  throughout their length. At potential plastic hinge locations, stirrups are spaced at or less than the minimum of  $8d_b$  or  $d/4$ . (Commentary: Sec. A.3.1.4.12. Tier 2: Sec. 5.5.2.3.7)
- C (NC) N/A U JOINT TRANSVERSE REINFORCING: Beam–column joints have ties spaced at or less than  $8d_b$ . (Commentary: Sec. A.3.1.4.13. Tier 2: Sec. 5.5.2.3.8)
- C (NC) N/A U DEFLECTION COMPATIBILITY: Secondary components have the shear capacity to develop the flexural strength of the components. (Commentary: Sec. A.3.1.6.2. Tier 2: Sec. 5.5.2.5.2)
- C NC (N/A) U FLAT SLABS: Flat slabs or plates not part of the seismic-force-resisting system have continuous bottom steel through the column joints. (Commentary: Sec. A.3.1.6.3. Tier 2: Sec. 5.5.2.5.3)

**Diaphragms**

- (C) NC N/A U DIAPHRAGM CONTINUITY: The diaphragms are not composed of split-level floors and do not have expansion joints. (Commentary: Sec. A.4.1.1. Tier 2: Sec. 5.6.1.1)

**Connections**

- C NC (N/A) U UPLIFT AT PILE CAPS: Pile caps have top reinforcement, and piles are anchored to the pile caps. (Commentary: Sec. A.5.3.8. Tier 2: Sec. 5.7.3.5)



Project: Clackamas County Courthouse

Location: Oregon City, OR

Completed by: LE

Date: 09/22/15

## 16.17 NONSTRUCTURAL CHECKLIST

### Life Safety Systems

- C NC N/A U LS-LMH; PR-LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13. (Commentary: Sec. A.7.13.1. Tier 2: Sec. 13.7.4)
- C NC N/A U LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.4)
- C NC  N/A U LS-LMH; PR-LMH. EMERGENCY POWER: Equipment used to power or control life safety systems is anchored or braced. (Commentary: Sec. A.7.12.1. Tier 2: Sec. 13.7.7)
- C NC  N/A U LS-LMH; PR-LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints. (Commentary: Sec. A.7.14.1. Tier 2: Sec. 13.7.6)
- C NC N/A U LS-MH; PR-MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.4)
- C NC  N/A U LS-not required; PR-LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced. (Commentary: Sec. A.7.3.1. Tier 2: Sec. 13.7.9)

### Hazardous Materials

- C NC  N/A U LS-LMH; PR-LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers. (Commentary: Sec. A.7.12.2. Tier 2: 13.7.1)
- C NC  N/A U LS-LMH; PR-LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods. (Commentary: Sec. A.7.15.1. Tier 2: Sec. 13.8.4)
- C NC  N/A U LS-MH; PR-MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC  N/A U LS-MH; PR-MH. SHUT-OFF VALVES: Piping containing hazardous material, including natural gas, has shut-off valves or other devices to limit spills or leaks. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC  N/A U LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, has flexible couplings. (Commentary: Sec. A.7.15.4, Tier 2: Sec.13.7.3 and 13.7.5)
- C NC  N/A U LS-MH; PR-MH. PIPING OR DUCTS CROSSING SEISMIC JOINTS: Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec.13.7.3, 13.7.5, and 13.7.6)

### Partitions

- C  NC N/A U LS-LMH; PR-LMH. UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay tile partitions are braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity. (Commentary: Sec. A.7.1.1. Tier 2: Sec. 13.6.2)
- C NC N/A U LS-LMH; PR-LMH. HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)
- C  NC N/A U LS-MH; PR-MH. DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005. (Commentary A.7.1.2 Tier 2: Sec. 13.6.2)

- C NC (N/A) U LS-not required; PR-MH. LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)
- C NC (N/A) U LS-not required; PR-MH. STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints. (Commentary: Sec. A.7.1.3. Tier 2. Sec. 13.6.2)
- C NC (N/A) U LS-not required; PR-MH. TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft. (Commentary: Sec. A.7.1.4. Tier 2. Sec. 13.6.2)

### Ceilings

- C (NC) N/A U LS-MH; PR-LMH. SUSPENDED LATH AND PLASTER: Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 ft<sup>2</sup> of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)
- C (NC) N/A U LS-MH; PR-LMH. SUSPENDED GYPSUM BOARD: Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 ft<sup>2</sup> of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft<sup>2</sup>, and ceilings of smaller areas that are not surrounded by restraining partitions, are laterally restrained at a spacing no greater than 12 ft with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression. (Commentary: Sec. A.7.2.2. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft<sup>2</sup> have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in.; in High Seismicity, 3/4 in. (Commentary: Sec. A.7.2.4. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures. (Commentary: Sec. A.7.2.5. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-H. EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft<sup>2</sup> are supported by closure angles or channels not less than 2 in. wide. (Commentary: Sec. A.7.2.6. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-H. SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2500 ft<sup>2</sup> and has a ratio of long-to-short dimension no more than 4-to-1. (Commentary: Sec. A.7.2.7. Tier 2: 13.6.4)

### Light Fixtures

- C (NC) N/A U LS-MH; PR-MH. INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture. (Commentary: Sec. A.7.3.2. Tier 2: Sec. 13.6.4 and 13.7.9)
- C NC (N/A) U LS-not required; PR-H. PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft and, if rigidly supported, are free to move with the structure to which they are attached without damaging adjoining components. (Commentary: A.7.3.3. Tier 2: Sec. 13.7.9)
- C NC (N/A) U LS-not required; PR-H. LENS COVERS: Lens covers on light fixtures are attached with safety devices. (Commentary: Sec. A.7.3.4. Tier 2: Sec. 13.7.9)

### Cladding and Glazing

- C NC N/A (U) LS-MH; PR-MH. CLADDING ANCHORS: Cladding components weighing more than 10 lb/ft<sup>2</sup> are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft. (Commentary: Sec. A.7.4.1. Tier 2: Sec. 13.6.1)
- C NC N/A (U) LS-MH; PR-MH. CLADDING ISOLATION: For steel or concrete moment frame buildings, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.3. Tier 2: Section 13.6.1)

- C NC (N/A) U LS-MH; PR-MH. MULTI-STORY PANELS: For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.4. Tier 2: Sec. 13.6.1)
- C NC (N/A) U LS-MH; PR-MH. PANEL CONNECTIONS: Cladding panels are anchored out-of-plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections. (Commentary: Sec. A.7.4.5. Tier 2: Sec. 13.6.1.4)
- C NC (N/A) U LS-MH; PR-MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel. (Commentary: Sec. A.7.4.6. Tier 2: Sec. 13.6.1.4)
- C NC (N/A) U LS-MH; PR-MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel. (Commentary: Sec. A.7.4.7. Tier 2: Sec. 13.6.1.4)
- C (NC) N/A U LS-MH; PR-MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes over 16 ft<sup>2</sup> in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked. (Commentary: Sec. A.7.4.8. Tier 2: Sec. 13.6.1.5)

#### Masonry Veneer

- C NC N/A (U) LS-LMH; PR-LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft<sup>2</sup>, and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in.; for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (Commentary: Sec. A.7.5.1. Tier 2: Sec. 13.6.1.2)
- C NC N/A (U) LS-LMH; PR-LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor. (Commentary: Sec. A.7.5.2. Tier 2: Sec. 13.6.1.2)
- C NC N/A (U) LS-LMH; PR-LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing. (Commentary: Sec. A.7.5.3. Tier 2: Sec. 13.6.1.2)
- (C) NC N/A U LS-LMH; PR-LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup. (Commentary: Sec. A.7.7.2. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-MH; PR-MH. STUD TRACKS: For veneer with metal stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. on center. (Commentary: Sec. A.7.6.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-MH; PR-MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof. (Commentary: Sec. A.7.7.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-not required; PR-MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing. (Commentary: Sec. A.7.5.6. Tier 2: Section 13.6.1.2)
- C NC (N/A) U LS-not required; PR-MH. OPENINGS: For veneer with metal stud backup, steel studs frame window and door openings. (Commentary: Sec. A.7.6.2. Tier 2: Sec. 13.6.1.1 and 13.6.1.2)

#### Parapets, Cornices, Ornamentation, and Appendages

- C NC (N/A) U LS-LMH; PR-LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5. (Commentary: Sec. A.7.8.1. Tier 2: Sec. 13.6.5)
- C NC (N/A) U LS-LMH; PR-LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft. (Commentary: Sec. A.7.8.2. Tier 2: Sec. 13.6.6)
- (C) NC N/A U LS-MH; PR-LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement. (Commentary: Sec. A.7.8.3. Tier 2: Sec. 13.6.5)
- C NC (N/A) U LS-MH; PR-LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft. This checklist item does not apply to parapets or cornices covered by other checklist items. (Commentary: Sec. A.7.8.4. Tier 2: Sec. 13.6.6)

## Masonry Chimneys

- C (NC) N/A U LS-LMH; PR-LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney. (Commentary: Sec. A.7.9.1. Tier 2: 13.6.7)
- C (NC) N/A U LS-LMH; PR-LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof. (Commentary: Sec. A.7.9.2. Tier 2: 13.6.7)

## Stairs

- C (NC) N/A U LS-LMH; PR-LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out-of-plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1. (Commentary: Sec. A.7.10.1. Tier 2: Sec. 13.6.2 and 13.6.8)
- C (NC) N/A U LS-LMH; PR-LMH. STAIR DETAILS: In moment frame structures, the connection between the stairs and the structure does not rely on shallow anchors in concrete. Alternatively, the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.5.3.1 without including any lateral stiffness contribution from the stairs. (Commentary: Sec. A.7.10.2. Tier 2: 13.6.8)

## Contents and Furnishings

- C NC (N/A) U LS-MH; PR-MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/MH 16.1 as modified by ASCE 7 Chapter 15. (Commentary: Sec. A.7.11.1. Tier 2: Sec. 13.8.1)
- C (NC) N/A U LS-H; PR-MH. TALL NARROW CONTENTS: Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other. (Commentary: Sec. A.7.11.2. Tier 2: Sec. 13.8.2)
- C (NC) N/A U LS-H; PR-H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level are braced or otherwise restrained. (Commentary: Sec. A.7.11.3. Tier 2: Sec. 13.8.2)
- C NC (N/A) U LS-not required; PR-MH. ACCESS FLOORS: Access floors more than 9 in. high are braced. (Commentary: Sec. A.7.11.4. Tier 2: Sec. 13.8.3)
- C NC (N/A) U LS-not required; PR-MH. EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor. (Commentary: Sec. A.7.11.5. Tier 2: Sec. 13.7.7 and 13.8.3)
- C NC (N/A) U LS-not required; PR-H. SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components. (Commentary: A.7.11.6. Tier 2: Sec. 13.8.2)

## Mechanical and Electrical Equipment

- C (NC) N/A U LS-H; PR-H. FALL-PRONE EQUIPMENT: Equipment weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment, is braced. (Commentary: A.7.12.4. Tier 2: 13.7.1 and 13.7.7)
- C (NC) N/A U LS-H; PR-H. IN-LINE EQUIPMENT: Equipment installed in-line with a duct or piping system, with an operating weight more than 75 lb, is supported and laterally braced independent of the duct or piping system. (Commentary: Sec. A.7.12.5. Tier 2: Sec. 13.7.1)
- C (NC) N/A U LS-H; PR-MH. TALL NARROW EQUIPMENT: Equipment more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls. (Commentary: Sec. A.7.12.6. Tier 2: Sec. 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-MH. MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01. (Commentary: Sec. A.7.12.7. Tier 2: Sec. 13.6.9)

- C NC (N/A) U LS-not required; PR-H. SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components. (Commentary: Sec. A.7.12.8. Tier 2: Sec. 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-H. VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning. (Commentary: Sec. A.7.12.9. Tier 2: Sec. 13.7.1)
- C NC (N/A) U LS-not required; PR-H. HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb is anchored to the structure. (Commentary: Sec. A.7.12.10. Tier 2: 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-H. ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure. (Commentary: Sec. A.7.12.11. Tier 2: 13.7.7)
- C NC (N/A) U LS-not required; PR-H. CONDUIT COUPLINGS: Conduit greater than 2.5 in. trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections. (Commentary: Sec. A.7.12.12. Tier 2: 13.7.8)

### Piping

- C NC (N/A) U LS-not required; PR-H. FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. in diameter are restrained. (Commentary: Sec. A.7.13.5. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec. 13.7.3 and Sec. 13.7.5)

### Ducts

- C NC (N/A) U LS-not required; PR-H. DUCT BRACING: Rectangular ductwork larger than 6 ft<sup>2</sup> in cross-sectional area and round ducts larger than 28 in. in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft. The maximum spacing of longitudinal bracing does not exceed 60 ft. (Commentary: Sec. A.7.14.2. Tier 2: Sec. 13.7.6)
- C NC (N/A) U LS-not required; PR-H. DUCT SUPPORT: Ducts are not supported by piping or electrical conduit. (Commentary: Sec. A.7.14.3. Tier 2: Sec. 13.7.6)
- C NC (N/A) U LS-not required; PR-H. DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.14.5. Tier 2: Sec. 13.7.6)

### Elevators

- C NC N/A (U) LS-H; PR-H. RETAINER GUARDS: Sheaves and drums have cable retainer guards. (Commentary: Sec. A.7.16.1. Tier 2: 13.8.6)
- C NC N/A (U) LS-H; PR-H. RETAINER PLATE: A retainer plate is present at the top and bottom of both car and counterweight. (Commentary: Sec. A.7.16.2. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored. (Commentary: Sec. A.7.16.3. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations. (Commentary: Sec. A.7.16.4. Tier 2: 13.8.6)

- C NC (N/A) U LS-not required; PR-H. SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking. (Commentary: Sec. A.7.16.5. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.6. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.7. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. SPREADER BRACKET: Spreader brackets are not used to resist seismic forces. (Commentary: Sec. A.7.16.8. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. GO-SLOW ELEVATORS: The building has a go-slow elevator system. (Commentary: Sec. A.7.16.9. Tier 2: 13.8.6)