CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS
Policy Session Worksheet

Presentation Date: 1/12/2021 **Approx Start Time:** 1:30 pm **Approx Length:** 45 min

Presentation Title: New Circuit Courthouse Project Update

Department: County Administration

Presenters: Gary Barth, Courthouse Project Manager

Other Invitees: Courthouse Leadership Team Members Presiding Judge Kathie Steele, Sheriff Angie Brandenburg, District Attorney John Wentworth; County Finance Director Elizabeth Comfort, County Public & Government Affairs Director Sue Hildick; Consultants Marcel Ham (Rebel Group), Tom Kness (WT Partnerships), and Eric Petersen (Hawkins, Delafield & Wood).

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

No action requested. Information Only.

EXECUTIVE SUMMARY:

The County Courthouse Technical Advisory Team (TAT) is in the process of preparing a Public-Private Partnership (P3) procurement package for **Board review and approval later this spring** to design, build, partially finance, operate and maintain (DBfOM) a new county courthouse (the "Project") on the site identified in the adopted Red Soils Master Plan.

This package will be presented to the Board in advance of the deadline to provide the Oregon Judicial Department (OJD), the State Legislature and the Governor's office with the County's final Oregon Courthouse Capital Construction and Improvement Fund (OCCCIF) request for the FY 21/23 biennium budget.

This procurement package will contain the following:

1. A Project "affordability ceiling" based on projected revenue and assuming no new voter-approved taxes
2. A refined Project scope and cost estimate that falls within the affordability ceiling
3. A draft Request for Qualifications (RFQ) to be issued to private development teams interested in the Project
4. A draft Request for Proposal (RFP) to be issued to a short-list of development teams selected from RFQ respondents
5. A draft Project Agreement that will be entered into between the County and the preferred private development team selected from the RFP respondents
6. A draft Phase 2 Funding Agreement between the County and the State outlining the terms of the state funding contribution to the project

This procurement preparation effort was undertaken in order to provide the Board with the comprehensive analysis and information necessary to make an informed decision in directing staff in accomplishing the Strategic Priority to build a new county courthouse.

This session is intended to provide the Board with a project status update and answer any questions or hear any concerns the Board may have at this time and determine the schedule for future Board updates during this project phase.

FINANCIAL IMPLICATIONS (current year and ongoing):

The total Project costs and long range financial forecast are currently in development as part of the Procurement Preparation effort outlined in this staff report.

Is this item in your current budget? ☒ YES ☐ NO

What is the cost? This procurement preparation effort is budgeted at $1.3 million, jointly funded 50/50 between the State and the County, with the county share in the FY 20/21 adopted budget. The State already approved $31.5 million in OCCCIF bond proceeds and has earmarked an additional $63 million for a prospective state match ceiling of $94.5 million, subject to approval in the FY 21/23 biennium budget

STRATEGIC PLAN ALIGNMENT:

- Build a new county courthouse
    - Build public trust through good government
    - Grow a vibrant economy
    - Build a strong infrastructure

LEGAL/POLICY REQUIREMENTS: The Project RFQ, RFP, Project Agreement and Funding Agreement will all be produced and approved by county counsel, State DOJ and outside legal counsel

PUBLIC/GOVERNMENTAL PARTICIPATION: County Public & Government Affairs (PGA) is leading the public and governmental participation efforts as key members of the Project TAT.

OPTIONS: N/A

RECOMMENDATION: N/A

ATTACHMENTS:

- County Strategic Priority
- Courthouse TAT Organizational Chart
- Courthouse Replacement Project Progress Report
- Project Work Plan
- Project Frequently Asked Questions (FAQ)
- Red Soils Master Plan
- Value-for-Money Presentation

SUBMITTED BY:
Division Director/Head Approval _____
Department Director/Head Approval _____
County Administrator Approval _____

For information on this issue, please contact Gary Barth, Courthouse Project Manager, gbarth@clackamas.us

Strategic Priority:
Build Public Trust through Good Government

Public trust is the currency of good government. Clackamas County will design and deliver services that make a difference and measure our effectiveness in terms of results for our customers. We will listen, be accountable and deliver what we promise. When we allocate resources, they will be tied to results that matter. Updating the County Courthouse will ensure that key public safety services are safe and accessible to all residents.

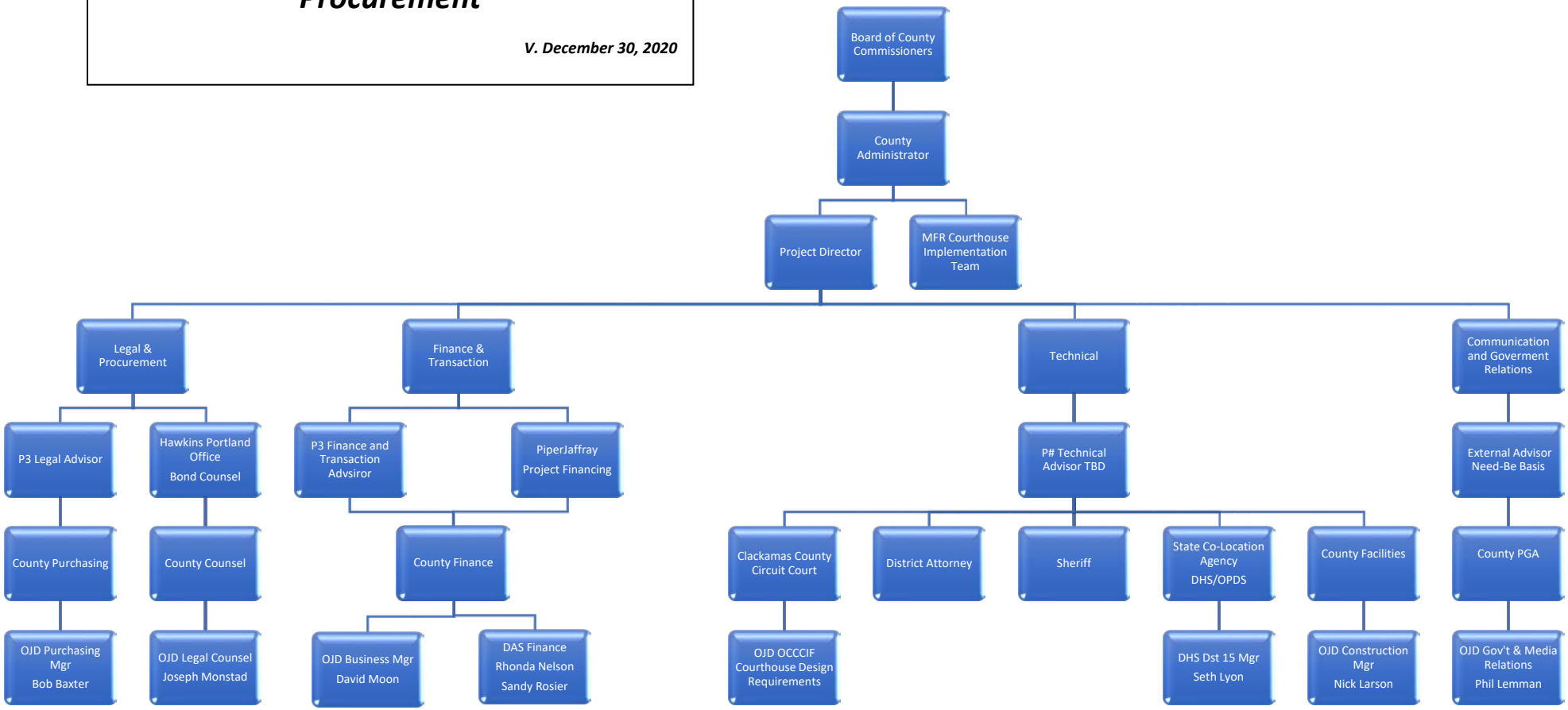
Results

- By 2023, build a new County Courthouse
- By 2021, the county's budget will be 100% tied to results with transparency to the public.

Clackamas County Courthouse

Project Organizational Chart for a P3 Procurement

V. December 30, 2020



CLACKAMAS COUNTY COURTHOUSE REPLACEMENT PROJECT

Courthouse design concept

December 31, 2020

Progress Report

Progress Report on the accomplishments to-date and the tasks remaining to fund, design and construct a new County Courthouse on the Red Soils Campus

Clackamas County Courthouse Replacement Project

PROGRESS REPORT

TIMELINE

The Courthouse Replacement Project was prioritized and undertaken after the 2013 Oregon Legislative Assembly created the Courthouse Capital Construction and Improvement Fund (OCCCIF), a program where the State would contribute up to 50% of the costs of a county courthouse improvement or replacement project. A new Courthouse was planned for the Red Soils Campus with the adoption of the Red Soils Master Plan in 1998.

RED SOILS CAMPUS MASTER PLAN		
Date	***Action***	***Purpose***
1998	BCC Approves Red Soils Master Plan	To guide policy decisions regarding consolidation of county functions and facilities on the Red Soils campus over 20 years 1998-2018
2004	PSB Is Built	First Phase of Red Soils master Plan Development. Funded with Full Faith & Credit (FF&C) Bonds
2006	BCC Study Session	To authorized staff to develop a proposal for a new Adult Detention Facility to be developed after the DSB.
2006	DSB & CUP built	Second Phase of Red Soils Master Plan Development. Funded with FF&C Bonds
2008	BCC	BCC was informed that new ADF proved cost prohibitive. Planning was halted during 2008 recession

NEW COUNTY COURTHOUSE REPLACEMENT PROJECT		
Date	***Action***	***Purpose***
2013	Oregon Legislative Assembly Creates the OCCCIF	To fund up to 50% of county courthouse improvement or replacement projects
12/10/14	BCC Study Session	Authorized staff to conduct research and present a policy proposal regarding construction of a new courthouse on the Red Soils Campus
4/7/15	BCC Study Session	Request approval of $133,500 in current FY 14/15 and a Policy Level Proposal for $371,500 for FY 15/16 and 16/17 for a total of $505,000 to hire outside consultant to assist staff in pursuing OCCCIF funding for a new courthouse
7/9/15	BCC Business Meeting	Approve contract totaling $505,000 with SERA Architects as outside consultant
12/1/15	BCC Study Session	Red Soils Master Plan and New Courthouse Project Update

Feb 2017	OCCCIF Apllication	OCCCIF application submitted to Oregon Judicial Department seeking match funding to plan, design and construct a new county courthouse. County share would come from FF&C Bonds
2/14/17	BCC Study Session	Request $1.25 million in county general funds to match $1.25 million in State general funds for planning efforts for the new county courthouse
2/16/17	BCC Business Meeting	BCC approved request of $1.25 million in State funding for courthouse planning to be matched by $1.25 million from county
Aug 2017	OJD Response to OCCCIF Application	OJD provides comments on Clackamas application, states that the application is a living document to be updated throughout the planning process as more information becomes available
10/17/17	BCC Policy Session	Courthouse Replacement Project Planning Update. Total project costs estimated at $184 million, with Courthouse $154 million. NOTE: staff report says State approved $1.2 million for planning, not $1.25 million as shown in the 2/16/17 staff report
11/2/17	**Project Public Event**	**Presentations by Elected Leaders, thank you to State Legislators, reveal of new courthouse conceptual design**
6/13/18	Leadership Team Meeting	Kick-Off meeting of Leadership Team of Elected Officials; Presiding Judge, District Attorney, Sheriff, BCC Chair and one additional County Commissioner. Purpose of the Leadership Team is to advise the BCC on critical issues to assist the BCC in providing staff direction on the courthouse project
6/26/18	BCC Study Session	Project Update: Revised cost estimate of $235 million with Courthouse costs excluding DA space at $189 million. Outlined project organizational structure, project timeline, and results of survey for a general obligation bond measure
9/5/18	Leadership Team Meeting	Project Update: Financing options, Communications & Outreach, Polling Updates, Legislative updates, call for Leadership Team commitment to project
9/18/18	BCC Study Session	Project update. Discussed county financing under various financing scenarios, assuming GO Bond on May 2019 ballot. Discussed polling efforts to guage public support for a GO Bond. Requested that BCC authorize drafting a Board Resolution confirming the County's commitment to the project
1/24/19	Leadership Team Meeting	Project Update: Financing discussion, adding Public Defenders as co-location agency in new courthouse per OJD request
1/29/19	BCC Study Session	Project Update; Legislative update, polling update, financing update, review of draft Resolution confirming County commitment to the project
2/14/19	BCC Business Meeting	Board adopted Resolution No. 2019-11 that states "Clackamas County is committed to funding and building a new county courthouse". Approval of Master and Phase I IGA's with State for courthouse funding.
2/25/19	Communication to City of Oregon City	County Administration sent a letter to Oregon City City Manager and Planning Director advising that the county is moving forward with constructing a new OSU Extension Building and County Courthouse as the next capital projects on the Red Soils campus as identified in the Red Soils Master Plan

3/14/19	Leadership Team Meeting	Project Update: NCSC final report, Communications Update, CLT Update
3/19/19	BCC Study Session	Project Update; National Center for State Courts concept design and space plan for new courthouse, Legislative update, communication update, cross-laminated timber update,
6/6/19	Leadership Team Meeting	Project Update: Timing of GO Bond – Nov 2019, Mat 2020, Nov 2020. ***Financing Options – Input needed for the BCC. Communications – Input needed for the BCC***
6/18/19	BCC Study Session	Information only discussion on "Community Benefit Agreements" also referred to as Project Labor Agreements. No action taken
6/27/19	BCC Business Meeting	Board approved amendment to the Phase I IGA for time extension of Phase Completion Date to July 1, 2020
10/2/19	Quarterly Budget Committee Meeting	Brief discussion on courthouse financing options. No decisions made
2/18/20	BCC Study Session	Presentation of the Value-for-Money Final Report indicating that a Public-Private Partnership (P3) delivery model provided the greatest value for money to constituents
7/7/20	BCC Study Session	Board approved proceeding with the P3 Procurement Preparation planning phase. Final Board approval required in Spring of 2021to proceed with P3 Procurement
10/29/20	BCC Business Meeting	Approval of Consultant Contracts with WT Partnerships (technical) and IMG Rebel (financial) for P3 Procurement Preparation effort
11/25/20	BCC Business Meeting	Approval of P3 Consultant Contract with Hawkins, Delafield & Wood (legal) for P3 Procurement Preparation effort

Project Planning Phase - Accomplishments To-Date

Since BCC approval in July 2015 to pursue OCCCIF funding for a replacement Clackamas County Courthouse the following tasks have been completed during this project planning phase:

- Submitted OCCCIF Application to Oregon Judicial Department in February 2017 which included:
  - SERA structural and space analysis of the existing courthouse demonstrating that replacement and not remodel was the only viable option
  - SERA space programming analysis and conceptual design for a new courthouse
  - Cost projections based on the SERA design provided by JMB Consulting (September 2016)
  - Financing Plan calling for issuance of Full Faith & Credit Bonds to cover county share of costs
- Reviewed the Red Soils Master Plan to confirm courthouse site location, Loop Road for on campus circulation, and new parking facilities to accommodate increased traffic to the campus
- Began relocation efforts for H3S Behavioral Health Facilities – Stewart and Hilltop – to be displaced by the new courthouse, as envisioned in the Red Soils Master Plan. [Note – a new Human Services Building was included in the Red Soils Master Plan on property north of the Development Services Building. This building was intended to be constructed before the Courthouse to house Behavioral Health and clearing the site for the future courthouse].
- Updated the cost estimates in March 2018 and March 2019
- Contracted with National Center for State Courts (NCSC) per OJD recommendation to conduct a secondary space programming and concept plan for the new courthouse.
- Updated the cost estimates in May 2019 based on NCSC analysis
- Evaluated Cross-Laminated Timber as a potential building component in the new courthouse. This initiative aligns with BCC policy direction and legislative priorities to support increased use of this sustainable building product which has the potential to revitalized the timber economy in Clackamas County. Received a $100K Wood Innovation Grant from the USFS to further research use of CLT and other Mass Timber in the new Courthouse. Contracted with the University of Oregon School of Architecture for architectural renderings developed by the Mass Timber Courthouse Design Studio.
- Research alternative Project Delivery Approaches to finance, design, build, operate and maintain the new courthouse to include possible Public-Private Partnership models (P3).
- Held an information only session on Community Benefit Agreements (aka Project Labor Agreements)
- Completed the Value-for-Money Analysis
- Completed the Mass Timber Courthouse Design and Lifecycle Cost Analysis by the University Of Oregon School Of Architecture with funding from the US Forest Service Wood Innovation Grant.
- Received Board approval to proceed with a P3 project delivery approach and initiated the P3 Procurement Preparation Phase for future Board review and approval
- Submitted funding request for OCCCIF funds for state budget FY 21/23.

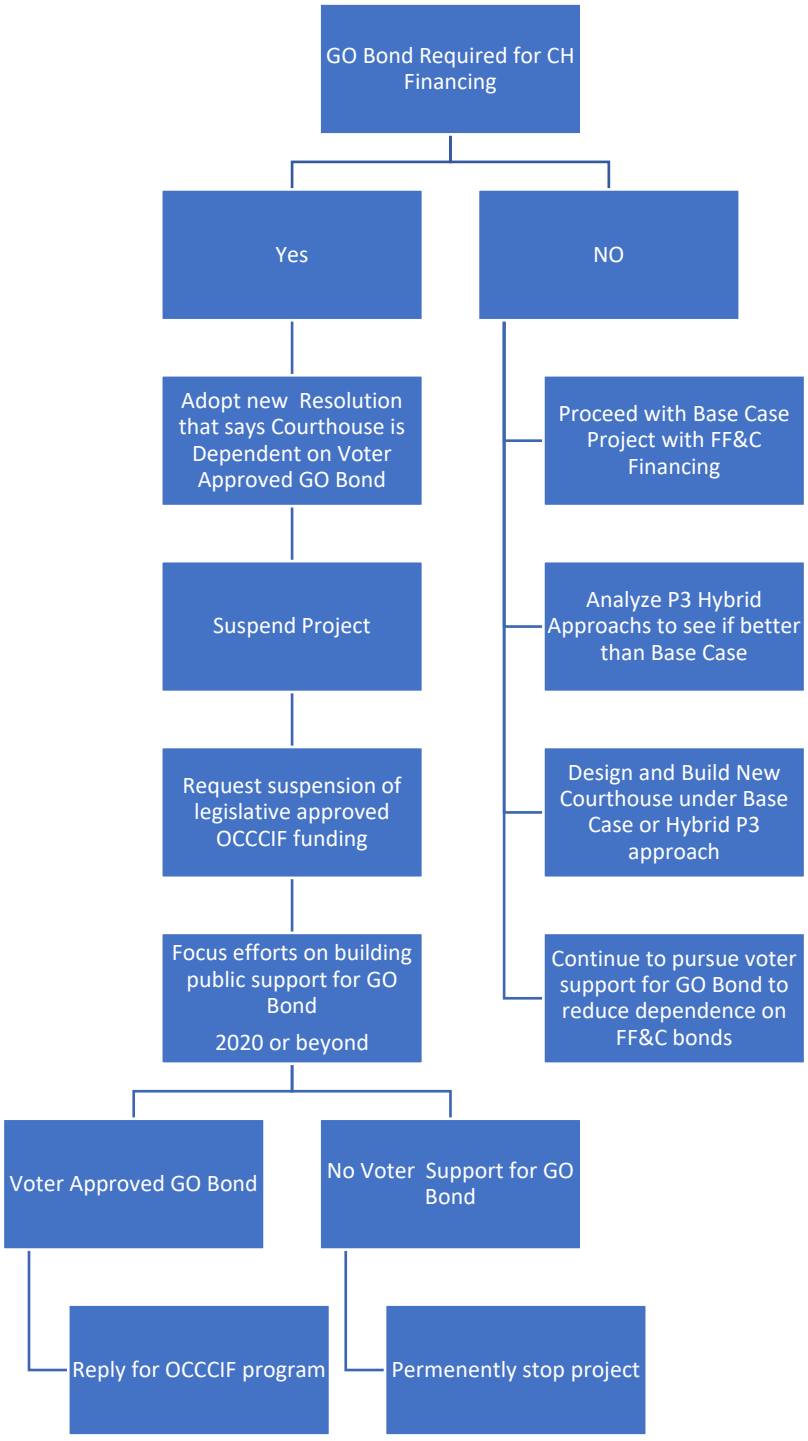
Original Base-Case submitted to the State in the OCCCIF Application

Details of the key elements of the Base-Case Courthouse:

- 255,000 square foot building with 16 courtrooms, consolidated District Attorney offices, and DHS and Public Defender offices as qualifying state co-location agencies to comply with 50% state match requirements
- Projected cost estimate of $220 million as of April 2019
    - $187 million for the courthouse split 50/50 between County and the State
    - $ 27 million for the DA, all paid by the County
    - $ 6 million for site work, Loop Road and Parking – TBD how much State might contribute based on proportional share of the Loop Road and Parking directly associated with the Courthouse
- County share will range from $125.5 to $132.5 million and State share will range from $87.5 to $94.5 million
- County share will be funded by Full Faith and Credit Bonds with a structured repayment schedule based on the county's ability to repay
- County will use the Construction Manager/General Contractor (CG/MC) Delivery Approach that was used to build PSB and DSB. The first contract will be issued for Architectural and Engineering Services for the building design, followed by a contract for the Construction Manager and General Contractor to construct the building.
- The design phase will last 18 months, the construction phase will be 30 months for a total project timeline of four years commencing once the Architectural firm is under contract.
- Project costs are estimated to be incurred at the following rate:
    - 2% in year 1 = $4 million
    - 6% in year 2 = $13 million
    - 28% year 3 = $62 million
    - 64% year 4 = $141million
- The State will ***reimburse the County*** up to $31.5 million at the end of the FY 19/21 biennium (just approved by the 2019 Legislative Assembly). The remainder of the $31.5 million not reimbursed in FY 19/21 plus up to additional $63 million at the end of the FY 21/23 biennium (planned for in the OJD budget for FY 21/23) will be reimbursed to the County at the end of FY 21/23 for a total reimbursement up to $94.5 million.

State Funding is on a reimbursement basis, after the county incurs the initial cost. The county financing plan will need to account for this timing difference.

Courthouse Financing Plan



The Board directed staff to proceed with the project without reliance on a voter-approved GO Bond, utilizing existing county revenue to provide the county funding necessary to obtain the State OCCCIF match funding.

Public-Private Partnerships (P3) and Value-for-Money (VFM) Analysis

With the Base Case, also referred to as the Public Sector Comparator (PSC) for VFM analysis, previously approved by the BCC to provide certainty of project completion and secure state match funding, the BCC authorized staff to hire outside consultants to perform a VFM analysis that will compare the approved PSC against P3 alternatives to determine optimum "life-cycle" costs and quality for the new courthouse project.

This approach was recently used by Howard County Maryland for their new county courthouse. They looked at four options prepared by their consultants that provided analysis of project risk, VFM analysis, financial analysis, and implications on credit ratings among others. The four options were:

1. Conventional: Design, Bid, Build after which the county would Operate and Maintain (DBB+OM) This was there Public Sector Comparator similar to our Base Case above.
2. Hybrid P3-1: Design, Build, Operate & Maintain (DBOM). County provides all financing, private partner is responsible for DBOM
3. Hybrid P3 – 2: Design, Build, Partially Finance, Operate & Maintain (DBfOM). In this option, the private party finances the design and build. At project completion, the County makes a lump sum payment for ½ the costs funded by issuance of GO Bonds (which do not require voter approval in Maryland). The remaining debt is repaid over a 30-year lease agreement with the private developer, along with "availability" payments for O&M. The private party is responsible for Operating & Maintaining the building during the lease term and if any portion of the building should ever be deemed "unavailable" due to building issues the lease payment is reduced accordingly. This shifts all operating risks to the private party.
4. P3: Design, Build, Finance, Operate & Maintain. This is often referred to as the Availability Model. In this option, the entire project is finance by the private entity and their debt is repaid through lease payments from the public partner, along with availability payments for the O&M.

Howard County then scored these four options on five evaluation factors:

1. Project Risk
2. Project Cost
3. Quality (building and O&M)
4. Long-Term Cost Certainty
5. Completion Time

Based on their scoring they chose Option 3, the Hybrid P3 DBfOM as the lowest risk, least costly option with the highest certainty of long-term costs. Having completed this analysis, they felt confident in moving forward with their chosen financing and delivery approach that also addressed the long term operating and maintenance needs of the new courthouse.

Clackamas County has similarity with Howard County. Both counties are replacing very old courthouses. Both are locating new courthouses on county-owned land, but both counties have to relocate existing buildings and services to accommodate the new courthouse. The buildings are comparable in total square footage although

Howard County is planning for only 5 courtrooms and much more space for other agencies. Howard County can issue GO Bonds without voter approval but must pay 100% of the costs, whereas Clackamas County would need voter approval for a GO Bond but is getting ½ the cost paid for by the state so in some ways the financing is comparable as well.

Both counties need to consider ongoing Operations and Maintenance requirements of their new courthouses and plan for the operating funds necessary to fund O&M. The Howard County option analysis considered these lifecycle costs in their financial analysis and VFM analysis.

Clackamas County's VFM analysis reached a similar conclusion to the Howard County with the P3 Hybrid approach achieving the highest value for money among the alternatives considered and the Board directed staff to proceed with a P3 approach for the new courthouse.

Design and Size = Cost

With the PSC approved by the BCC, providing certainty for project completion, efforts are currently underway to see if the project costs can be reduced through scope and design refinement. This is being done in coordination with an Affordability Analysis to determine what the county can afford in match funding for design and construction as well as ongoing operations and maintenance. The BCC will be asked to approve a total project budget and long-term payment obligations, approved by the State for funding match that meets the Oregon Judicial Department requirements for the courthouse.

State as a Partner

The State of Oregon is a significant financial contributor to the new Clackamas County Courthouse. Intergovernmental Agreements define the Roles and Responsibilities of the County and State Agencies involved in this project, particularly staff from the Oregon Judicial Department (OJD) and Department of Administrative Services (DAS).

Any decisions made by the County relating to this project will need to be made in consultation, support and approval of the State. Project teams are in place and formal, recurring communication takes place between the County project staff and key staff from the State to ensure that efforts are coordinated and appropriate for this project.

CCCP3 Phase 1 Workplan V2

	Task Name	Duration	Start	Finish	Predecessors	Status
1	Procurement Preparation Activities	161d	10/22/20	06/11/21		In
2	State Funding	154d	11/02/20	06/11/21		
3	Confirmation of inclusion of Courthouse in OJD ARB	5d	11/02/20	11/06/20		
4	Development of "Facts Sheet" by Comms	5d	11/16/20	11/20/20		
5	Internal Sign off of "Facts Sheet", share and coordinate with OJD	0	11/30/20	11/30/20		
6	Governor announces “Governor’s Recommended Budget”	0	12/01/20	12/01/20		
7	Senate Legislative Days: begin to brief Clackamas Caucus on request	5d	12/07/20	12/11/20		
8	House Legislative Days: continue to brief Clackamas Caucus	5d	12/14/20	12/18/20		
9	Meet with presiding officers, members of Pub Sub, Capital Construction Sub	21d	01/01/21	01/29/21		
10	Develop testimony for Ways & Means ("W&M") panel - Judge Steele	5d	02/01/21	02/05/21		
11	W&M Public Safety Subcommittee hearing	5d	03/01/21	03/05/21		
12	Identify citizens to speak in support at W&M roadshow	5d	03/15/21	03/19/21		
13	W&M roadshow (estimated date)	2d	04/01/21	04/02/21		
14	Rework testimony in anticipation of W&M Capital Construction Sub	5d	04/12/21	04/16/21		
15	W&M Capital Construction hearing	5d	05/03/21	05/07/21	39FS +36d	
16	Expect bonding capacity legislation to move	9d	06/01/21	06/11/21		
17	Project Initiation	17d	10/22/20	11/13/20		In
18	Initial Due Diligence Request*	0	10/22/20	10/22/20		In
19	Data Collection and Review Period	12d	10/22/20	11/06/20		In
20	Initial Phase 1 Workplan	5d	11/02/20	11/06/20		In
21	Detailed Phase 1 Workplan	5d	11/09/20	11/13/20		Not
22	Affordability Ceiling	88d	11/02/20	03/12/21		Not
23	Establish Baseline	18d	11/02/20	11/25/20		
24	Define Base Case Estimate	5d	11/02/20	11/06/20		
25	Refine capital and O&M with WT	13d	11/09/20	11/25/20	24	
26	Determine "Comfortably" Available Funds	33d	11/02/20	12/18/20		
27	Analyze debt service capacity	33d	11/02/20	12/18/20		
28	Analyze available O&M moneys from replaced facilities	33d	11/02/20	12/18/20		
29	Determine cash flow available for Courthouse	15d	11/30/20	12/18/20		
30	Determine "Gap"	15d	11/30/20	12/18/20		
31	Define difference between funds and costs	15d	11/30/20	12/18/20		
32	Refine Scope and Sources	73d	11/23/20	03/12/21		
33	Confirm minimum (2024?) scope with State	18d	11/23/20	12/18/20		
34	Identify cost saving options with WT and County	46d	12/07/20	02/12/21		
35	Identify potential new revenues	36d	12/21/20	02/12/21		
36	Discuss scope changes and revenues with BCC / State	5d	12/28/20	01/05/21		Not
37	Discuss scope changes and revenues with BCC / State	5d	01/18/21	01/22/21		
38	Discuss scope changes and revenues with BCC / State	5d	02/08/21	02/12/21		
39	Finalize affordability estimates / incorporate into docs	24d	02/08/21	03/11/21		Not
40	Present final affordability numbers to BCC	0	03/12/21	03/12/21		Not
41	Procurement Documents Drafting	104d	11/02/20	04/02/21		Not
42	RFQ (Preliminary / to be coordinated with Hawkins)					Not
43	RFQ Drafting					
44	RFP (Preliminary / to be coordinated with Hawkins)					Not
45	RFP / ITP Drafting					
46	Project Agreement (Preliminary / to be coordinated with Hawkins)	85d	12/01/20	04/02/21		Not
47	PA Term Sheet Development	21d	12/01/20	01/04/21		Not
48	PA Drafting	64d	01/05/21	04/02/21		Not
49	Payment Mechanism (WT / Rebel / Hawkins)	60d	01/04/21	03/26/21		
50	Technical Documents and Sections	84d	11/02/20	03/05/21		Not
51	Project Goals - Initial Draft	5d	11/09/20	11/13/20		Not
52	Project Site Location and Description - Initial Draft	5d	11/09/20	11/13/20		Not

	Task Name	Duration	Start	Finish	Predecessors	Status
53	Project Scope - Initial Draft	5d	11/09/20	11/13/20		Not
54	Technical Requirements Structure and Outline	10d	11/02/20	11/13/20		Not
55	Program Development and Updates	75d	11/13/20	03/05/21		Not
56	Sustainability (All Stakeholder Groups)	69d	11/13/20	02/25/21		Not
57	Deliverable: Sustainability and Wellness Survey	0	11/13/20	11/13/20		Not
58	Stakeholder Review Period	5d	11/16/20	11/20/20	57FS +1d	Not
59	Meeting: Sustainability Charrette	0	12/11/20	12/11/20		Not
60	Deliverable: Findings, Metrics and Benchmarks	0	12/11/20	12/11/20	59	Not
61	Stakeholder Review Period	5d	12/11/20	12/17/20	60	Not
62	Meeting: Courtrooms and Chambers Requirements	5d	12/18/20	12/28/20	61	Not
63	Meeting: Admin and Management Requirements	5d	01/08/21	01/14/21	61FS +11d	Not
64	Deliverable: Courtroom & Chambers Requirements	0	01/14/21	01/14/21	62FS +11d	Not
65	Meeting: Sheriff's Office Requirements	5d	01/11/21	01/15/21		Not
66	Deliverable: Admin and Management Requirements	0	01/21/21	01/21/21	63FS +5d	Not
67	Deliverable: Sheriff's Office Requirements	0	01/22/21	01/22/21	65FS +5d	
68	Deliverable: Draft Sustainability TR's	0	02/04/21	02/04/21	67FS +5d, 66FS	
69	Stakeholder Review Period	10d	02/05/21	02/18/21	68	
70	Deliverable: Final Sustainability TR's	0	02/25/21	02/25/21	69FS +5d	
71	Stakeholder Group: Courtrooms and Chambers	54d	11/19/20	02/10/21		Not
72	Meeting: Kickoff Meeting	0	11/19/20	11/19/20		Not
73	Deliverable: Priorities, Objectives, Original Program Survey	0	11/19/20	11/19/20	72	Not
74	Meeting: Program Validation	0	12/03/20	12/03/20		Not
75	Stakeholder Review: Program	6d	12/03/20	12/10/20		Not
76	Meeting: Program Confirmation	0	12/10/20	12/10/20		Not
77	Deliverable: Draft Adjacency Diagrams	6d	12/10/20	12/17/20	74FS +5d	Not
78	Meeting: Room Requirements	0	12/17/20	12/17/20		Not
79	Deliverable: Final Program & Adjacency Diagrams	14d	12/17/20	01/11/21	76FS +5d	Not
80	Deliverable: Room Data Sheets & Functional Requirements	0	01/07/21	01/07/21	78FS +11d	Not
81	Stakeholder Review: RDSs & Functional Requirements Draft	10d	01/07/21	01/20/21	80	Not
82	Meeting: Final Review	5d	01/21/21	01/27/21	81	Not
83	Deliverable: Record Documents	0	02/03/21	02/03/21	82FS +5d	Not
84	Stakeholder Group: Admin & Mgmt	53d	11/20/20	02/10/21		Not
85	Meeting: Kickoff Meeting	0	11/20/20	11/20/20		Not
86	Deliverable: Priorities, Objectives, Original Program Survey	0	11/20/20	11/20/20	85	Not
87	Meeting: Program Validation	0	12/01/20	12/01/20		Not
88	Stakeholder Review: Program	8d	12/01/20	12/10/20		Not
89	Meeting: Program Confirmation	0	12/10/20	12/10/20		Not
90	Deliverable: Draft Adjacency Diagrams	0	12/17/20	12/17/20		Not
91	Deliverable: Final Program & Adjacency Diagrams	0	12/17/20	12/17/20	89FS +5d	Not
92	Meeting: Room Requirements	0	01/07/21	01/07/21		Not
93	Deliverable: Room Data Sheets & Functional Requirements	0	01/14/21	01/14/21	92FS +5d	Not
94	Stakeholder Review: RDSs & Functional Requirements	10d	01/14/21	01/27/21	93	Not
95	Meeting: Final Review	5d	01/28/21	02/03/21	94	Not
96	Deliverable: Record Documents	0	02/10/21	02/10/21	95FS +5d	Not
97	Stakeholder Group: Sheriff's Office	53d	11/20/20	02/10/21		Not
98	Meeting: Kickoff Meeting	0	11/20/20	11/20/20		Not
99	Deliverable: Priorities, Objectives, Original Program	0	11/20/20	11/20/20	98	Not
100	Meeting: Program Validation	0	12/02/20	12/02/20		Not
101	Stakeholder Review: Program	8d	12/02/20	12/11/20		Not
102	Meeting: Program Confirmation	0	12/11/20	12/11/20		Not
103	Deliverable: Draft Adjacency Diagrams	5d	12/18/20	12/28/20		Not
104	Deliverable: Final Program & Adjacency Diagrams	5d	12/18/20	12/28/20	102FS +5d	Not
105	Meeting: Room Requirements	0	01/14/21	01/14/21		Not
106	Deliverable: Room Data Sheets & Functional Requirements	0	01/21/21	01/21/21	105FS +5d	Not

	Task Name	Duration	Start	Finish	Predecessors	Status
107	Stakeholder Review: RDSs & Functional Requirements	10d	01/21/21	02/03/21	106	Not
108	Meeting: Final Review	0	02/03/21	02/03/21	107	Not
109	Deliverable: Record Documents	0	02/10/21	02/10/21	108FS +5d	Not
110	Stakeholder Group: DA's Office	53d	11/20/20	02/10/21		Not
111	Meeting: Kickoff Meeting	0	11/20/20	11/20/20		Not
112	Deliverable: Priorities, Objectives, Original Program	0	11/20/20	11/20/20	111	Not
113	Meeting: Program Validation	0	12/03/20	12/03/20		Not
114	Stakeholder Review: Program	6d	12/03/20	12/10/20		Not
115	Meeting: Program Confirmation	5d	12/10/20	12/16/20		Not
116	Deliverable: Draft Adjacency Diagrams	0	12/18/20	12/18/20		Not
117	Deliverable: Final Program & Adjacency Diagrams	0	12/23/20	12/23/20	115FS +5d	Not
118	Meeting: Room Requirements	0	01/07/21	01/07/21		Not
119	Deliverable: Room Data Sheets & Functional Requirements	0	01/14/21	01/14/21	118FS +5d	Not
120	Stakeholder Review: RDSs & Functional Requirements	10d	01/14/21	01/27/21	119	Not
121	Meeting: Final Review	5d	01/28/21	02/03/21	120	Not
122	Deliverable: Record Documents	0	02/10/21	02/10/21	121FS +5d	Not
123	Stakeholder Group: State Offices (DHS/CIDC/OPDS/JACL)	49d	11/20/20	02/04/21		Not
124	Meeting: Kickoff Meeting	0	11/20/20	11/20/20		Not
125	Deliverable: Priorities, Objectives, Original Program	0	11/20/20	11/20/20	124	Not
126	Meeting: Program Validation	0	12/03/20	12/03/20		Not
127	Stakeholder Review: Program	5d	12/03/20	12/09/20		Not
128	Meeting: Program Confirmation (DHS)	0	12/15/20	12/15/20		Not
129	Meeting: Program Confirmation (CIDC/OPDS/JACL)	0	12/15/20	12/15/20		
130	Deliverable: Draft Adjacency Diagrams	0	12/10/20	12/10/20	126FS +5d	Not
131	Deliverable: Final Program & Adjacency Diagrams	0	12/22/20	12/22/20	128FS +5d	Not
132	Meeting: Room Requirements (DHS)	0	01/08/21	01/08/21		Not
133	Meeting: Room Requirements (CIDC/OPDS/JACL)	0	01/08/21	01/08/21		
134	Deliverable: Room Data Sheets & Functional Requirements	0	01/15/21	01/15/21	132FS +5d	Not
135	Stakeholder Review: RDSs & Functional Requirements	10d	01/15/21	01/28/21	134	Not
136	Meeting: Final Review	0	01/28/21	01/28/21	135	Not
137	Deliverable: Record Documents	0	02/04/21	02/04/21	136FS +5d	Not
138	D&C Requirements - Architecture and Sustainability	61d	12/07/20	03/05/21		Not
139	Meeting: D&C Standards Part 1	5d	12/07/20	12/11/20		Not
140	Deliverable: D&C Standards Part 1	0	12/18/20	12/18/20	139FS +5d	Not
141	Stakeholder Review: D&C Standards Part 1	10d	01/04/21	01/15/21	140FS +6d	Not
142	Meeting: D&C Standards Part 2	5d	01/11/21	01/15/21	139FS +16d	Not
143	Deliverable: D&C Standards Part 2	0	01/22/21	01/22/21	142FS +5d	Not
144	Stakeholder Review: D&C Standards Part 2	10d	01/25/21	02/05/21	143	Not
145	Meeting: D&C Standards Part 3	5d	02/01/21	02/05/21	142FS +10d	Not
146	Deliverable: D&C Standards Part 3	0	02/12/21	02/12/21	145FS +5d	Not
147	Stakeholder Review: D&C Standards Part 3	10d	02/15/21	02/26/21	146	Not
148	Deliverable: Record Documents	0	03/05/21	03/05/21	140FS +51d, 143FS	Not
149	Risk Workshops	60d	10/29/20	01/28/21		Not
150	Risk Workshop Prep	7d	10/29/20	11/06/20		Not
151	Risk Workshops Coordination	5d	11/09/20	11/13/20	150	Not
152	Initial Risk Workshops	5d	11/16/20	11/20/20	151	Not
153	Risk Identification	16d	12/07/20	12/30/20	152FS +8d	Not
154	Risk Prioritization & Allocation	5d	01/04/21	01/08/21	153	Not
155	Risk Valuation	14d	01/11/21	01/28/21	154	Not
156	Review and Summary	0	01/28/21	01/28/21	155	
157	BCC Review and Approval of Procurement Package	7d	04/15/21	04/23/21		Not
158	Submittal of RFP Package to BCC	0	04/15/21	04/15/21		Not
159	BCC Review of RFP Package	7d	04/15/21	04/23/21		Not
160	BCC Decision on RFP Package	0	04/23/21	04/23/21		Not

FREQUENTLY ASKED QUESTIONS

for the Clackamas County Courthouse Replacement Project

1. Why do we need a New Courthouse now?

Providing safe facilities for the administration of justice is a county government responsibility in Oregon. Clackamas County ("County") has been examining options to replace the existing Courthouse, originally built in 1937, for almost 60 years. The current Courthouse is too small for its intended purpose and has significant security and operational issues including not having separate circulation for the public, the judicial staff, and defendants. In addition, the building is nearing the end of its useful life and will require substantial investment to renovate and update to modern standards. In addition, there are significant seismic concerns with the existing building. Finally, the State currently has a program that will provide up to half the capital costs for new courthouse buildings, and we have been accepted into the program, which means that the cost to replace the existing courthouse with a suitable alternative may never be lower.

2. Where will the New Courthouse be constructed?

The new Clackamas County Courthouse ("New Courthouse") will be located within the Clackamas County's Red Soils Campus, near the Clackamas County Adult Detention Facility and Juvenile Court building. This location was identified in the Red Soils Master Plan in 1998. Refer to Figure 1 for the approximate location.

3. What is a Public-Private Partnership?

A Public-Private Partnership ("P3") is a well-established approach to financing and procuring large, complex public infrastructure projects. Under a P3, the public agency establishes the scope, purpose, specifications, and requirements of a project, while design, build and long-term operations, maintenance, and rehabilitation are carried out by the private P3 partner ("Project Company"). Typically, only after a project is completed will the public agency start paying the Project Company "availability payments" that are performance-based payments for delivering a building that is meeting contractually specified performance criteria.

4. Why are you doing a Public-Private Partnership?

Public-Private Partnerships have proven to be effective and reliable delivery methods for courthouses across the United States. Recent examples include the Howard County (MD) Courthouse, Travis County (TX) Courthouse, Miami-Dade (FL) Courthouse, and the Long Beach (CA) Courthouse. The P3 method enables the County to effectively leverage private sector innovation and know-how, and the benefits of competition to deliver the project on time, on budget, and with cost certainty for the next 30 years, knowing that the County will have a top-notch, well-maintained courthouse throughout that time period. In addition, the private sector will take on many of the risks or "surprises" associated with building, operating and maintaining the courthouse, enabling the County to focus on other core programs and services.

5. Who will own the New Courthouse?

The New Courthouse will be owned by the County.

6. What are the Project Company's responsibilities?

The Project Company will be responsible for design, building, partially financing, operating and maintaining the New Courthouse for a 30-year term, as further described below.

The Project Company will perform all design and build ("D&B") activities for the New Courthouse, generally including:

1. the building for the New Courthouse;
2. exterior grounds and amenities, which may include benches, exterior walkways, etc.;
3. surface parking lots and secure parking garage(s);

4. access and circulation roadways; and
5. utility connections.

The Project Company's operations and maintenance ("O&M") responsibilities for a 30-year term following the completion of the D&B activities, will generally include:

1. preventive (or scheduled) maintenance;
2. reactive (or unscheduled) maintenance;
3. custodial services;
4. renewal and/or replacement on a predetermined schedule of interior building items, including ceilings, flooring, walls, heating/cooling systems, electrical systems, plumbing, security systems and/or equipment, etc.;
5. renewal and/or replacement on a predetermined schedule of exterior building items, including roofing, building cladding, window repair, cleaning and replacement, structural systems, etc.;
6. maintenance and/or rehabilitation of exterior grounds, including surface parking lots, parking garage(s), and exterior amenities such as benches and landscaping; and
7. returning the New Courthouse to the County at the end of the 30-year operations and maintenance period in like-new condition.

The County currently plans to have the Project Company privately finance the entire New Courthouse until the Project Company achieves "Occupancy Readiness". After Occupancy Readiness is achieved, the County intends to finance half of the long-term capital cost through a milestone payment to the Project Company utilizing the State OCCCIF bond proceeds with the Project Company financing the other half. Repayment of the project debt will be the obligation of the Project Company, not the County, but the Project Company will rely on county availability payments to meet the private debt obligations.

At this time, the County and its advisors are in the process of refining the specific activities and division of responsibilities between the County and the Project Company to be included in the D&B and O&M performance specifications to be developed for the New Courthouse, which set forth the Project Company's obligations for these activities (the "Technical Requirements").

7. How will the Project Company be paid?

The Project Company will be required to finance the entire design and build phase of the project and will only start getting repaid after completing a building that meets all the technical specifications. At Substantial Completion, the Project Company will receive a milestone payment for about half of the capital costs that will be funded through a State grant. The remaining private financing will be repaid over the term of the agreement through availability payments that are subject to performance deductions for not meeting contractually specified performance criteria. The availability payments will be based on the Project Company's competitively proposed costs of designing, building, financing and maintain the New Courthouse.

8. Who are the County's advisors?

The County has retained three firms to assist in the development and management of the procurement activities necessary to engage a preferred Project Company:

- **WT Partnership (WT) – Technical Advisor:** along with architectural firm WRNS Studio and sustainability advisor Atelier Ten, WT will be providing technical guidance, program corroboration and refinement, cost estimating and value engineering services throughout the procurement process, and developing the Technical Requirements;
- **Rebel – Financial Advisor:** in addition to financial and transaction guidance to the County, Rebel will be developing financial models and an affordability ceiling for the project, preparing the risk assessment and allocation, defining the payment and deductions mechanisms, and working to make sure that the County gets an "on market" transaction; and
- **Hawkins Delafield & Wood LLP (Hawkins) – Legal Advisors:** Hawkins will be developing the procurement documents as well as drafting the agreement between the County and the Project Company.

These firms are collectively referred to as the "Advisors", and along with County and State staff, form the Courthouse Project Technical Advisory Team ("TAT").

All three firms have vast advisory experience on many successfully completed P3 projects of similar scope and complexity to the New Clackamas County Courthouse.

9. How will the services of the Project Company be procured?

Subject to approval from the Board of County Commissioners ("BCC") and the Oregon Judicial Department ("OJD"), the County will employ a two-step procurement process for the selection of a Project Company.

Step 1 – RFQ Phase: The County will issue a Request for Qualifications ("RFQ") which will be available to all companies wishing to participate. These companies, joint ventures or consortia will submit a Statement of Qualifications ("SOQ") to be reviewed and evaluated by the County, after which point, the County expects to shortlist three (3) private entities who have demonstrated their qualifications in accordance with the requirements of the RFQ. These three shortlisted entities (the "Proposers") will be invited to participate in Step 2. The duration of this phase is generally expected to be three months.

Step 2 – RFP Phase: The County will issue a Request for Proposals ("RFP"), which will include the instructions to Proposers ("ITP"), a draft of the Project Agreement to be entered into between the Project Company and the County, and a draft of the Technical Requirements (collectively, the "Project Documents"). During this phase, the Proposers will have an opportunity to review the Project Documents and negotiate some of their aspects including, for example, risk allocation or project schedule. During this second step, the Proposers will also be asked to develop conceptual drawings for the New Courthouse that may include floor plans, exterior massing diagrams and sketches, representation of building sections, and proposed exterior and interior materials. The RFP process will provide for competition across the full spectrum of project elements – design, build, financing, operation and maintenance. At the end of this phase, the Proposers will submit their "Proposals", which will include firm fixed price bids for all the services the Proposers will provide for design, building, financing, and 30 years of operations and maintenance. These proposals will be assessed for completeness and compliance, and then evaluated against the County's evaluation criteria, after which point, the County will select a preferred Proposer. The duration of this phase is typically nine (9) to twelve (12) months. Commercial and financial close typically occurs three (3) months after selection.

10. Will the "Advisors" design some or all of the New Courthouse?

For many P3 projects, the Advisors develop a reference design, which the Proposers are at liberty of adopting. Alternatively, the Proposers may also elect to develop an entirely different design, as long as such design is in compliance with the Technical Requirements. In this particular case, the Advisors will not be producing a reference design, but will be corroborating the program requirements developed by the National Center for State Courts ("NCSC"), developing updated cost estimates based on the validated NCSC program, and developing the design and building standards, guidelines and specifications to which the Project Company will have to adhere. The Proposers will be able to leverage their expertise and innovation to develop and competitively propose a design that meets the stated purpose and need for the New Courthouse. This approach (not providing a reference design) is common with P3 projects and has been utilized successfully on many such projects, including the Howard County Courthouse P3 and the Miami Dade Courthouse P3.

11. Who will develop the design of the New Courthouse?

The design for the New Courthouse will be developed in two distinct stages. The first stage will include the development of a conceptual design by the shortlisted Proposers—as described in the response to question #9—in the highly competitive environment of the RFP Phase.

The second stage of the design activities will occur after selection of a preferred Proposer—the Project Company—who will further develop the conceptual design submitted with its Proposal into construction

documents. During this stage, the County and its Advisors will be reviewing every phase of the New Courthouse's design, from the foundations and structural frame, to exterior and interior finishes and materials to ensure that they meet the contractual requirements.

12. How will the construction of the New Courthouse impact activities at the existing courthouse?

Given that the New Courthouse will be constructed in a different location, no impacts to the ongoing activities and operations of the existing Courthouse are anticipated during the construction period. An exception might occur after final completion of the New Courthouse, when the relocation of staff may cause some disruption. The County and its Advisors will be looking into ways to minimize such disruptions.

13. When are we moving into the New Courthouse?

The County and the Advisors are currently working on a timeframe for the opening of the New Courthouse. At a high level, a Project Company is expected to be selected within approximately a year from now, with the design and build phase lasting about three years. As we continue to develop the procurement documents, we will be able to update key stakeholders and the general public with a more accurate timeframe.

14. We have security concerns at the existing courthouse. Will these concerns be addressed?

Yes. Security is a key issue for the New Courthouse, the County and its Advisors will be coordinating, not only with current users of the existing courthouse, including the Judicial staff and the Sheriff's office, but also with the Information Technology Divisions at the County and the Oregon Judicial Department. The security section in the Technical Requirements will touch upon many security aspects for the New Courthouse, and is expected to include:

1. distinct and separate circulation zones within the facility for the judicial staff, the public, and in-custody dependents;
2. acoustics performance measures (e.g., to avoid confidential conversations being overheard from the other side of a wall);
3. electronic security systems;
4. ballistic-glass implementation and anti-shatter glass provisions at ground level;
5. building designs featuring progressive collapse resistance provisions (i.e., design and build specifications developed to avoid the collapse of an entire building when a primary structural element fails in order to protect occupants in other building areas);
6. permanent bollards at strategic locations around the building;
7. types of door hardware and latches;
8. security of information systems and computer networks; and
9. personal health and safety of all building users.

15. How will the County ensure the Project Company maintains the New Courthouse to an acceptable standard?

As part of the development of the Project Documents, we will develop *availability standards* and *performance standards* that Project Company will have to observe and adhere to during the O&M phase. The availability standards will ensure all areas inside and outside the New Courthouse are available to users and fit for their intended purpose. An example of an availability failure would be a courtroom not being available due to the fire protection system not properly working, which would be a health and safety hazard. The performance standards will ensure that all areas are maintained to a required level. An example of a performance failure would be scuffs or stains on walls, which do not make a room unavailable, but must be cleaned and/or painted over.

In the event an availability or performance failure occurs, the County will be able to deduct a calculated amount from the payment the County would otherwise make to the Project Company. The amount deducted accounts for the time it takes the Project Company to rectify the situation, taking into consideration the gravity of the failure, the importance of the particular area, and the time when the failure occurred. For example, the value of an availability or performance failure in a courtroom at midnight, when there are no users present in the building, will be less than the value of the same failure in the same courtroom at 9.00 a.m. on a weekday, when its unavailability will impact key areas of the day-to-day activities of the New Courthouse.

These availability and performance standards and associated payment deductions are meant to have a financial impact on the Project Company's bottom line so that they are encouraged to implement a regimented maintenance schedule for the New Courthouse and avoid any deferred maintenance.

In addition, the Project Documents will include detailed "hand-back requirements" that will establish the standards which the Project Company must meet when returning the New Courthouse to the County after completing the 30-year operation and maintenance term. These requirements will ensure that a high level of ordinary and capital maintenance is performed right through the end of such 30-year term.

NEXT STEPS

The County and its Advisors currently anticipate presenting a final P3 Procurement Package to the BCC for review and approval in May 2021. The P3 Procurement Package is expected to include the project affordability ceiling, a project financing plan, a draft RFQ, draft RFP and a draft Project Agreement to be entered into between the Project Company and the County. With BCC approval, the RFQ would be issued and the procurement of a Project Company would commence.

Based on the current project timeline, construction would commence in 2022 and the project would be complete in late 2024/early 2025.

Figure 1: New Courthouse location

RED SOILS
MASTER PLAN

April 2019 Update/OSU Extension Building

CLACKAMAS COUNTY

SERA

Acknowledgments

SERA Architects, Inc.
Master Planners and Urban Designers
Becky Epstein
Gauri Rajbaidya
Chris Meigel
Margo Rettig
Cassandra Tyler
Matt Moreno

Harper Houf Peterson Righellis, Inc.
Civil Engineering
Ron Peterson

Kittelson & Associates
Transportation and Traffic
Phill Worth
Chris Brehmer

Atlas
Landscape Architecture
Nick Wilson

County Commissioners, Clackamas County
Jim Bernard, Chairperson
Sonya Fischer, Commissioner
Ken Humberston, Commissioner
Paul Savas, Commissioner
Martha Schrader, Commissioner

Clackamas County
Gary Schmidt, County Administrator
Christa Wolfe, Finance Director
Jeff Jorgensen, Facilities Manager
George Marlton, Procurement Manager

Project Management
Gary Barth

Table of contents

1. Executive Summary

Executive Summary

1.1 Overview

The Red Soils Campus is a mixed-use, approximately 68-acre site in the City of Oregon City that consolidates most of Clackamas County's government services and facilities into a cohesive, campus-like setting. The campus will integrate public civic areas, private commercial development, sustainable design and building practices, and open spaces. The proposed plan is designed to guide development over the next 20 years.

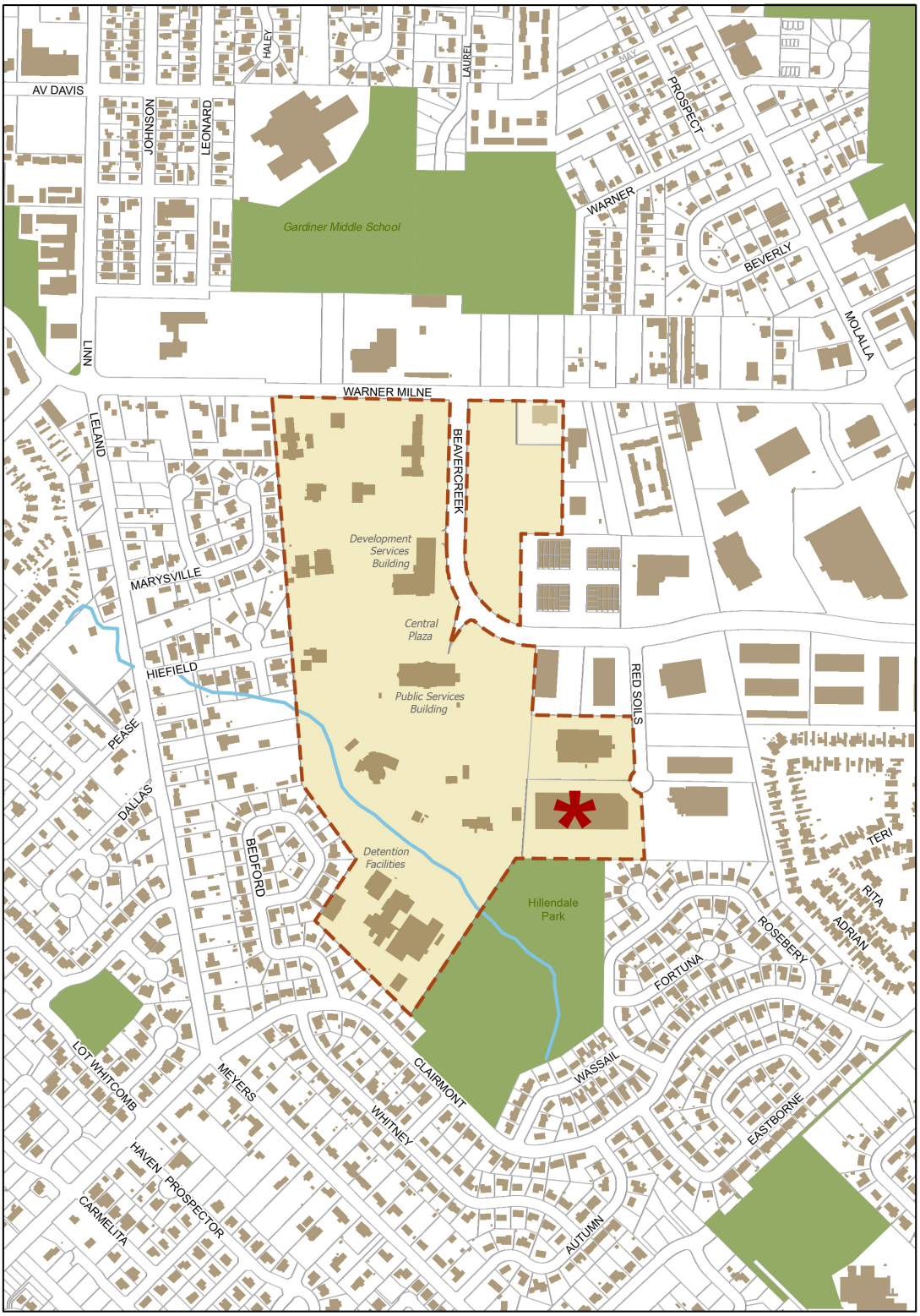
The Master Plan for the Red Soils campus creates a mutually advantageous situation for the City of Oregon City and Clackamas County. The City is assured that the land will be developed over time in a holistic and comprehensive manner, and that the proposed land uses are compatible with those of the surrounding residential neighborhoods. In addition, the Master Plan provides the City with an understanding of the impact of development on public services and traffic. In return for thinking creatively and establishing a clear vision for the site, Clackamas County is assured of a more efficient, economical, and expedited review process with the knowledge that proposed buildings or landscape designs will be approved by the City.

The current planning process began with development of the 1998 Facilities Plan, which identified County departments operating in dilapidated facilities or in separate locations spread around the County. This initial planning effort was driven by the County's desire to consolidate its services into a single location, develop better facilities for county employees, and better serve the citizens of Clackamas County. That plan was endorsed by the Clackamas County Board of Commissioners and met both the regulatory and design intent of the City of Oregon City. Six subsequent planning efforts have followed since 1998. They developed the initial site design and refined and amended the plan and resulted in the Clackamas County Red Soils Site Master Plan which was adopted by the Board of County Commissioners in 2000. It was supplemented in 2001 and an alternative to that plan was prepared and adopted in 2004. In 2006, the County Commissioners and the City of Oregon City adopted a further revised Red Soils Site Master Plan. Updates were made in 2007 and 2009.

The Plan is designed to be flexible. Any of the proposed buildings shown and described here in the Master Plan can be developed at any point in the 20 year planning period.

The Red Soils Master Plan proposes approximately 1,120,852 square feet of development. The majority of the proposed land uses are dedicated to institutional, civic, and support activities associated with Clackamas County's government services. This includes the Public Services Building (PSB) in 2006, the Development Services Building (DSB) completed in 2008, the Central Facilities Utility Plant (CUP) completed in 2008, the Civic Plaza, additions and renovations to the existing Detention Facility completed in 2011, and the following proposed facilities: an Adult Detention Facility (ADF), a Courthouse Building (CB) that includes Courts and District Attorney functions, two County Office Buildings (COB1 and COB2), an Evidence Processing and Storage Facility (Silver Oak), a multi-level parking garage, a Communications Center (C-COM) and a new Juvenile Detention Facility (JDF), Shaver Building, and other potential private development. Approximately 150,000 square feet out of the total are assigned to a combination of private commercial and office spaces that will front onto Beavercreek Road.

This April 2019 update reflects the land use submission and conditional approval through Oregon City's Planning Department for the relocation of the OSU Extension Program into a new facility (Building 11). Next steps for the facility are to complete design documentation and construction.



Context Map

Taxlots
Red Soils Campus Site
Parks
Existing Building Footprints
Silver Oak
Wetlands
600 Feet

1.2 Guiding Principles

The planning objectives guiding the planning process were established by the project's Steering Committee in 1998 as part of the Facilities Master Plan.

The following principles served as the foundation for this Master Plan:

Create an enduring image for the campus.

The campus and its new buildings shall communicate a sense of quality, permanence, and dignity.

Design a great place for county employees to work.

The built environment of the Red Soils Campus from its architecture to its central plaza and ample connections to surrounding neighborhoods will encourage staff and visitors to interact and promote the exchange of ideas.

Develop a plan that makes both short-term and long-term fiscal sense.

The design, construction, and operation of the buildings on the Red Soils Campus shall focus on reducing the life-cycle costs with the construction of the Central Utility Plant.

Build a place that employs environmentally-sustainable practices.

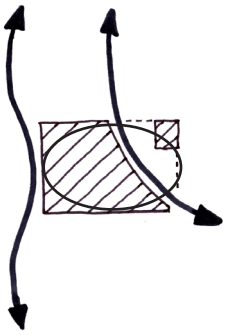
The campus will employ various measures to improve its long-term environmental impacts including reducing energy use through the proper orientation of buildings and insulation, creating efficient mechanical systems, managing stormwater run-off on-site, and implementing daylighting improvements. All newly constructed buildings will meet Leadership in Energy and Environmental Design (LEED®) Silver Certification.

1.3 Key Features

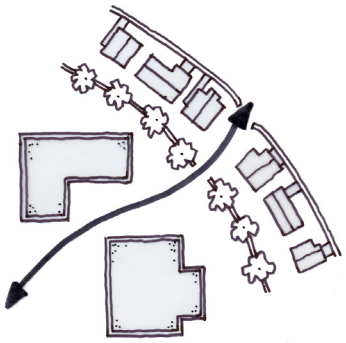
The Master Plan follows thirteen years of work between the City of Oregon City and Clackamas County. During this time, Clackamas County and their consulting team developed a number of master plan alternatives and designed and constructed Clackamas County's Public Services Building and the Development Services Building. The Development Services Building, Central Utility Plant, and the Central Plaza were all developed under the umbrella of the adopted March 2006 Master Plan.

Acquisition and incorporation of Silver Oak triggered the Fall 2011 land use review.

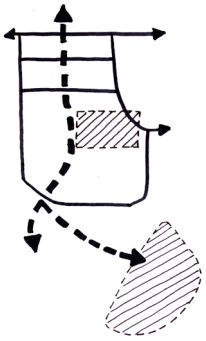
Key features of the Red Soils Master Plan include:



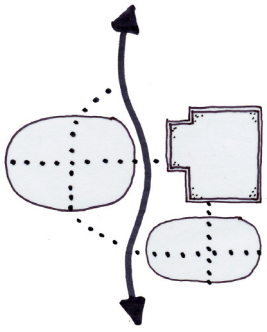
Create a central plaza that is the heart of the Red Soils Campus and serves as a gathering place for employees and visitors.



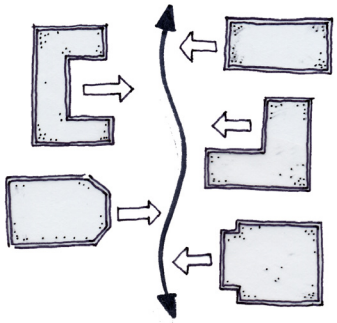
Integrate pedestrian and bicycle links from the campus with the single-family residential neighborhoods to the west (via Hiefield Court), Hillendale Park to the southeast, and Warner Milne Road to the north.



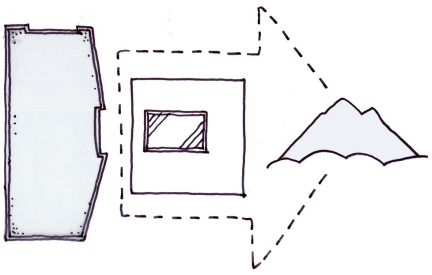
Articulate an internal north-south "pedestrian and bike spine" between Warner Milne Road and Hillendale Park. The proposed connection will link all the buildings within the site and bring people to the Central Plaza.



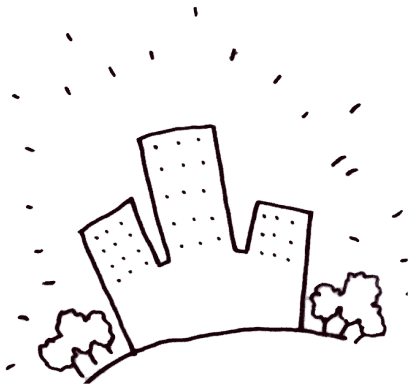
Incorporate surface parking areas adjacent to the buildings in a manner that does not visually detract from the pedestrian realm and does not increase pollution associated with stormwater run-off.



Orient the front doors of all the buildings to the pedestrian spine and/or the plaza.



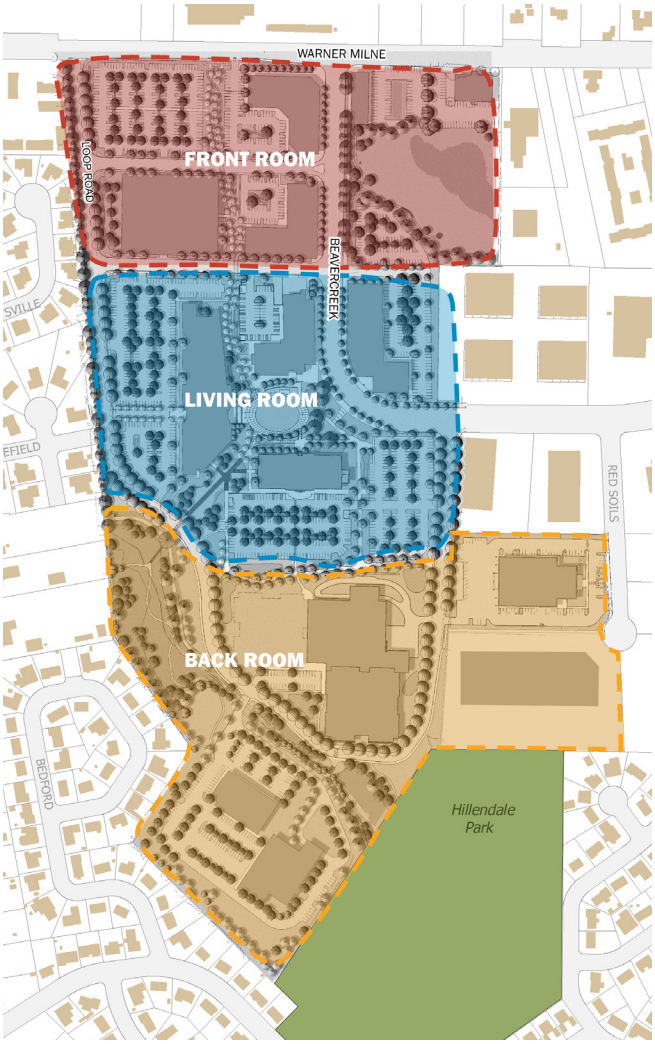
Site buildings in a manner that creates a central public plaza and maintains views of Mt. Hood.



Require all new buildings on campus to meet USGBC LEED® Silver Certification criteria.

Site Rooms: Given the scale of the site, and in order to create a more understandable and manageable approach, the Master Plan divides the site up into three zones based on how the proposed campus buildings are oriented and to shape civic spaces, as well as their function. These zones, or "rooms," are defined in the plan with regards to their character, programming, and the hierarchy of private to public spaces. The rooms include a "Living Room," a "Front Room," and a "Back Room."

The rooms are discussed in more detail in Section 4 of this document detailing the overall Master Plan. While the three rooms have distinct edge conditions that give each space its own identity, the three will function as an integrated whole, given the connections proposed between each room. A serpentine bicycle and pedestrian path is proposed as a primary link between the rooms, extending north-south from Warner Milne Road to Hillendale Park and east-west from Hiefield Court to Red Soils Court. A secondary trail will include a link from Hiefield Court along Mud Creek to Hillendale Park. In addition to proposed bike and pedestrian trails, all roads are planned with sidewalks and, where it makes sense, stand alone bike facilities or opportunities for bicyclists to share the lane with autos. Temporary sidewalks will be built in conjunction with parking areas constructed during the early phases of implementation.



Room Division of Campus

1.4 Phasing

The development of the Red Soils Campus envisions a 20-year build-out period with completion by 2030. The following potential development sequence remains speculative given the financial realities of what can be built and when. As observed over recent years, growth of the campus may not always proceed as anticipated. Therefore, the Master Plan should be considered as a snapshot of what can occur rather than a blueprint. Current Architectural and Engineering site plans can be found in the Appendix.

Phase One (2008): The Public Services Building (PSB), the Development Service Building (DSB), the Central Plaza, the Central Utility Plant (CUP), and an initial pedestrian and bike spine comprise the first phase of completed construction.

The Public Services Building (PSB), a USGBC LEED® Silver Certified building located on the south side of the Central Plaza, was built in 2004. This building incorporates a number of simple sustainable building principles that include: orienting the building to optimize solar control, reducing surface parking through traffic demand management and public transit programs, and integrating stormwater measures to reduce the impact of runoff on local watersheds.

The PSB, with 110,000 gross square feet, is home to the Clackamas County Commissioners, County administration offices, County Counsel, Employee Services, the Finance Department, Public and Government Affairs, the County Clerk's office, Department of Human Services, and the Treasurer's office. The lobby of the building has a campus information booth and a public exhibit space.

The Development Services Building (DSB) opened in the fall of 2008 and frames the north side of the Central Plaza. This four-story, 178,000 gross square foot facility (including below-grade parking on the north-west side of the building) houses Assessment and Taxation, Transportation and Development, the County Surveyor, Water Environment Services, Business and Community Services, and Tourism. The building has two public entrances; one facing the Central Plaza and the existing Public Services Building, and the other facing the parking deck. The DSB received a LEED® Silver Certification, in 2010.

Additional parking for this area and the DSB is currently accommodated with surface parking lots designed to meet City Code requirements and located adjacent to the building across Library Court. Parking spaces in the adjacent below grade parking structure are reserved for assigned county vehicles. It is understood that some of the surface parking spaces associated with the DSB will be removed in the future as a result of the construction of the Courthouse.

Phase Two (Future): The County plans to construct a new Adult Detention Facility (ADF) capable of accommodating up to 800 beds, which are currently allowed on the site as a conditional use. The ADF is to be located north of Mud Creek, east of Kaen Road, and south of the east-west pedestrian and bike spine.

Full Build-Out: For the following developments to occur, the first building to be built in the sequence will likely be the County Office Building (Building #9 as noted on the Illustrative Master Plan). The proposed parking garage could then be constructed following the relocation of the two information service building functions to either the Public Services Building or the Central Utility Plant. Depending on the overall campus parking needs, this Parking Garage will be a 3 to 4-story structure with a potential for 832 spaces.

Once the Parking Garage is constructed, the Courthouse could be built, providing a west face to the Central Plaza. Once these steps are completed, the Courthouse will provide a public face to the Central Plaza and for people entering the campus from Beavercreek Road.

With the completion of the Courthouse, or even in conjunction with its construction, Clackamas County may opt to offer to an outside developer the land to the east side of the relocated Beavercreek Road for retail and/or office uses (these are noted as Buildings 11 and 12 in the Illustrative Master Plan). Another County Office Building could be developed in the Front Room on the corner of Warner Milne Road and Beavercreek Road and would complete the north end of the campus.

The Living Room and the Back Room could be developed over the following twenty years by reusing a portion of the existing County Jail. Juvenile Services could be moved into the portion of the building built in 1990 while the unused portions of the existing Jail could be demolished to provide an area to expand Central Communications toward the southeast or to build a new facility. The County is exploring alternative uses for the Jail.

Access to the area south of Mud Creek will continue to be provided via the existing old Kaen Road right-of-way and the Mud Creek Wetland crossing, provided that the ADF is not built out in a later phase. This connection provides the shortest distance over the wetland and therefore poses the least impacts on the resource. The balance of the area will be used for staff parking for the proposed new ADF, Central Communications, and Juvenile Services with a visitors' area for Juvenile Services on the southeast side of the site next to Hillendale Park. Construction of the new ADF and its associated parking will require the removal of the structures for Dog Services.

At full build-out of the Adult Detention Facility, the Loop Road will need to be constructed running along the western property line from Warner Milne Road to and around the north side of the Mud Creek Wetland and up to the eastern property line to Beavercreek Road. The portion of Kaen Road constructed with the Public Services Building in Phase 1 has been connected to the area currently used for parking and landscape treatment, clearing a site area that can then be used to construct an addition to the Adult Detention Facility of up to 672 cells.

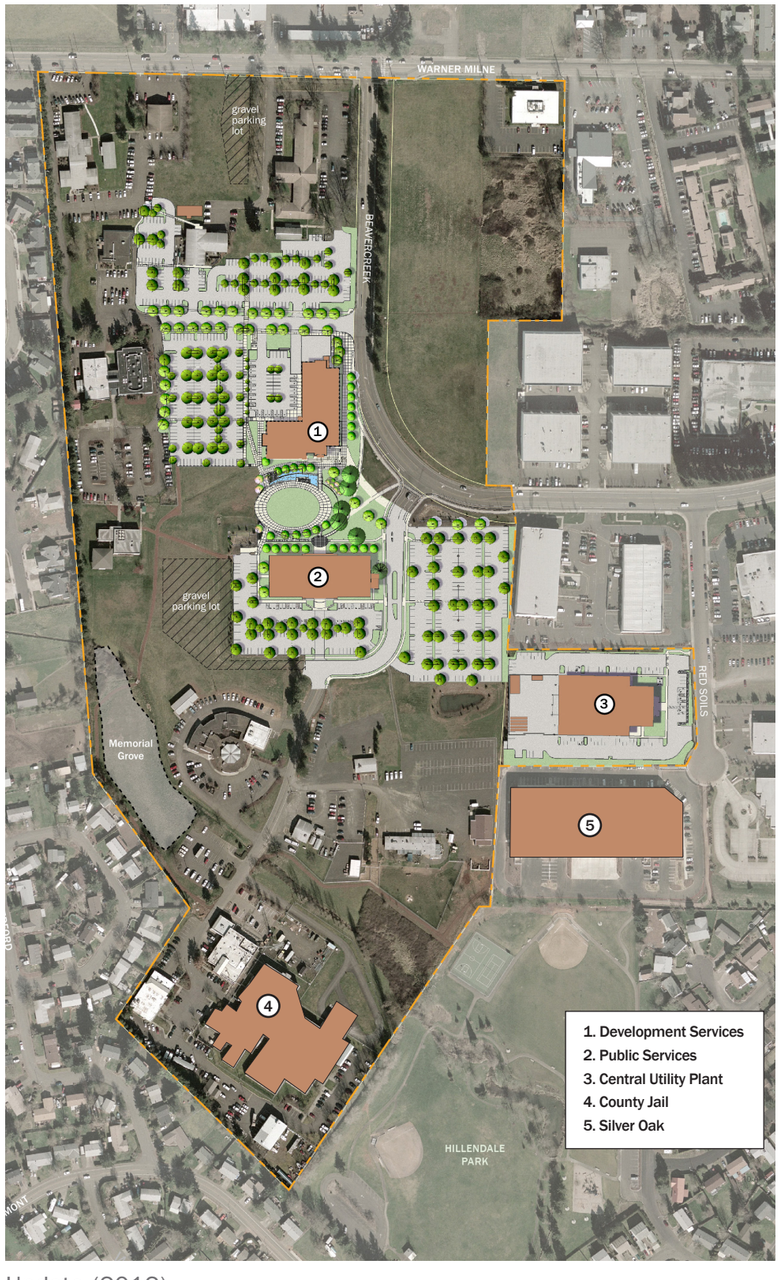
Developed in this sequence, the campus at full build-out will contain 1,120,852* square feet of buildings and approximately 16.2 acres of site area dedicated to usable landscaping and open space.

*Note: area should be 1,254,529

In order to ensure that the goals and objectives of the Master Plan are met, a plus or minus 10% maximum is placed on all quantifiable elements. The Master Plan establishes the proposed uses for the site and restricts the number and magnitude of allowable changes of these uses. Changes to the established criteria above, and beyond the plus or minus 10% threshold, will trigger a Type III Procedure Land Use Review and Amendment as explained in Chapter 17.65.080.B of the City of Oregon City Zoning Code.

Beyond 2030 : Further expansion beyond 2030 within the overall Red Soils site (and build-out total) is possible east of the Loop Road and adjacent to the proposed Adult Correction Facility. This open area, away from the neighboring single-family residential neighborhoods, will enable the Adult Detention Facility and its potential addition to be served by the site's hierarchy of vehicular connections further increasing overall safety and efficiency.

For example, as the majority of truck deliveries to the campus will occur from Red Soils Court and the driveway fronting the Central Utility Plant, direct access to the ADF across the Loop Road will be simple and straight forward. Visitors, including legal personnel and employees, will be able to approach the building from the parking areas to the building's north and south entries.



Update (2012)

Current (2018 Update)

Full Build-Out (2030)

Red Soils Campus: Program by Phase

updated July, 2018

Public Facilities	2008 (Phase 1) Gross SF	2012 Update Gross SF	2018 Update Gross SF	2030 Full Build-Out
Existing Facilities				
Community Health	17,742	17,742		
Beavercreek Clinic Annex	1,797	1,797		
Stewart Community Center	15,080	15,080		
Oregon City Hilltop	17,394	17,394		
Community Health WIC Program	5,757	5,757		
County Jail	74,965	74,965		
South Station	6,800	6,800		
Property Room	10,500	10,500		
Jail Maintenance Facilities	1,187	1,187		
County Communications (CCOM)	11,536	11,536		
County Building A *(Former OSU Extension)*	4,310	4,310		
County Building B *(Former OSU Extension Annex)*	2,082	2,082		
Technology Services	5,993	5,993		
Technology Services Annex *(former Assessor)*	12,016	12,016		
Juvenile Intake & Assessment	17,621	17,621		
Juvenile Annex Mod *(former Dog Services Admin)*	9,016	9,016		
Juvenile Annex *(former Facilities Building)*	14,315	14,315		
Storage Building *(former Dog Services Shelter)*	6,690	6,690		
County Work Crew Facility	2,742	2,742		
Shaver Building	9,415	9,415		9,415
Public Service Building	110,000	110,000		110,000
Development Service Building	178,000	178,000		178,000
Central Utility Plant	52,159	52,159		52,159
Silver Oak Building		85,697 **		136,838 ***
2018 Update				
OSU Extension Service Building *(former Retail & Office Building (Beavercreek/Warner Milne)*			21,631	21,631
Current Total Area	587,117	672,814	694,445	
Current Floor Area Ratio (FAR)	0.196	0.23	0.23	
Full Build Out (2030)				
Adult Detention Facility				200,542 *
Central Communications				24,000
Juvenile Facilities				72,500
Courthouse				215,756
County Office Building 1				93,688
Health Housing and Human Services				70,000
Retail and Office (Beavercreek)				70,000
Full Build-Out Total Area				1,254,529 ^
Full Build-Out Floor Area Ratio (FAR)				0.42 ^

Notes:

1. All numbers are gross square footages for the entire building area.
2. Total Area of the Campus is square feet: 2,989,868

* At Full Build-Out a projected 205,289 gross square foot addition could be made to the Adult Detention Facility (ADF) bringing the facility to a total of 405,831 gross square feet and the overall campus to 1,629,525 gross square feet (FAR=0.54). This projection may change based upon final design and constructions bids received for the facility.

**For the 2012 Update the proposed total area for the Silver Oak Building is 85,697 gross square feet, with 32% Office and 68% Storage Warehouse. The enlarged area from the building footprint of 68,419 gross square feet represents a proposed fully accessible two story space within part of the building to maximize the storage warehouse potential.

***For the Full Build-Out the proposed total area for the Silver Oak Building is 136,838 gross square feet, with 18% Offices and 82% Storage Warehouse. The enlarged area from the building footprint of 68,419 gross square feet represents a proposed fully accessible two story space within the building to maximize the storage warehouse potential.

^ The net campus area at Build Out increased by 380 sf due to a clerical error in the last update. The square footage of the former Retail and Office Building SM (Beavercreek/Milne) was planned to be 9000 sf but was only reported as 8620 sf in the prior version of this table. All other tables reflected the 9000 sf number. This building has been renamed OSU Extension Building.

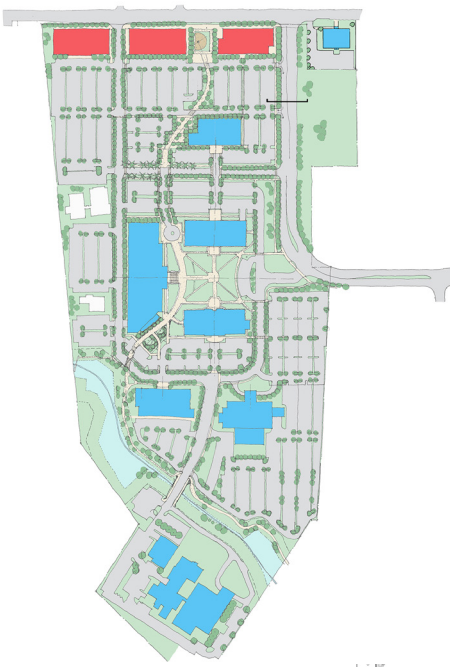
Full Build-Out (2030)

2 Background

2.1 Overview of Previous Planning Efforts

Background

Urban Alternative, February 2004



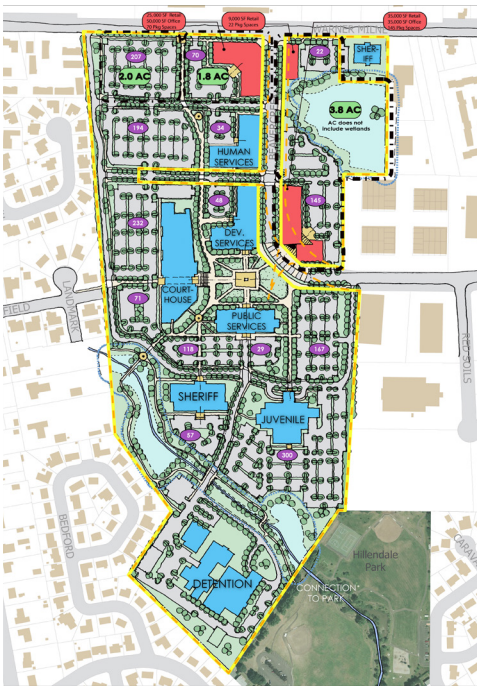
Suburban Alternative, February 2004

2.1 Overview of Previous Planning Efforts

This section reviews the prior planning efforts that led to the current Red Soils Master Plan. Principles emerged in each planning effort that defined themes and key design moves summarized in this Master Plan Update. The January 2012 Update is preceded by the seven planning efforts listed to the right.

The initial 1998 planning effort identified needs; the 2000 planning effort chose the site and developed the initial site design; the 2001 and 2004 planning efforts established the project's goals and objectives; the 2006 planning effort refined the plan and was adopted; the 2007 planning effort amended the adopted plan based on the new acquisition of the Central Utility Plant property located adjacent to the campus to the east of the area assigned for the Central Utility Plant (CUP); and the 2009 presented an update to the Mud Creek Wetlands and revisions to the existing Detention Facility in the Back Room of campus.

- Dec. 1998 — Clackamas County Facilities Master Plan
- Feb. 2000 — Clackamas County Red Soils Site Master Plan
- Nov. 2001 — Clackamas County Supplement to the Red Soils Site Master Plan
- Sept. 2004 — Clackamas County Red Soils Site Master Plan Alternative
- Mar. 2006 — Clackamas County Adopted Red Soils Master Plan
- Apr. 2007 — Clackamas County Red Soils Master Plan Amendment
- Oct. 2009 — Mud Creek Wetlands Update and Detention Facility Revisions



Adopted Master Plan, March 2006

Master Plan Update, October 2009

The Clackamas County Commissioners initiated the Facilities Master Plan in an effort to improve customer service and to meet the growing facility and space requirements of the County. The Facilities Master Plan evaluated existing County facility conditions, analyzed department space needs, and suggested alternative sites for a centralized campus of County service facilities as the planning process concluded that the County needed to develop a new campus that consolidated all their services. Consequently, a preferred concept was identified through public feedback.

With the site selected through the Facilities Master Planning process, the Clackamas County Red Soils Master Plan formally commenced in February 1999 with three goals:

- Design a campus master plan for the Red Soils site.
- Determine the adequacy of the site to accommodate the County's program needs.
- Determine the site's expansion capacity beyond the 2008 planning horizon.

In response to these goals, the first draft of the Red Soils Site Master Plan was developed over a 20 month period from February 1999 through October 2000. A key feature of this plan was the relocation of Beavercreek Road, which allowed the development of a campus with building clusters that helped eliminate some of the conflicts between pedestrians and vehicles. This plan also introduced the idea of moving parking to the perimeter of the site and allowing parking to occur along Beavercreek Road.

The November 2001 supplement to the Red Soils Master Plan refined the October 2000 Master Plan. A need to reduce project costs prompted a revision of the site plan and building program. This revision introduced a more ambitious private sector development strategy to share development costs engaging a Utility Service Provider to take responsibility for the energy utilization, space conditioning, and lighting of the buildings on the campus.

The Utility Services Provider concept was part of the design-build procurement utilized by Clackamas County for the design and construction of the Public Services Building (PSB). A Provider was selected to design, construct, and manage the energy consumption for the PSB. This sustainable approach was further anticipated in the design and construction of the Central Utility Plant.

Detailed programmatic requirements from Clackamas County and further analysis of the site led to the revision of the 2001 Master Plan. Commonly referred to as Alternative Four, this plan was adopted in concept by the City of Oregon City in 2004 and serves as the foundation for the Red Soils Master Plan adopted in 2006.

The following list, presented to the City of Oregon City on September 7, 2004, summarizes the major themes and features incorporated into the design of Alternative Four, which served as the starting point for the Adopted 2006 Master Plan:

Beavercreek Road

- Relocate Beavercreek Road to slow down traffic and allow parallel parking along the road for a more urban setting.
- Sculpt the curve along Beavercreek to enhance the sense of entry to the core of the campus.
- Protect mature trees and other vegetation, where feasible, to emphasize a sense of a green landscaped setting.

Campus Town Center Feeling

- Develop the plaza to serve as the pedestrian and activity center of the campus.
- Orient buildings to the plaza and Beavercreek Road and place parking behind buildings so as not to detract from the pedestrian environment.
- Cluster public buildings and services to the west of Beavercreek Road to promote easy inter-facility access and allow the development of private retail/ office buildings.

Pedestrian Spine

- Design the Pedestrian Spine as a landscaped, multi-use pathway with a series of nodes along the corridor to preserve open space and provide access to buildings within the site.
- Design the Pedestrian Spine to improve access for the maintenance and installation of utilities.
- Orient future development in the main campus to the Pedestrian Spine as a means of encouraging internal pedestrian circulation and minimizing pedestrian-vehicle conflicts.

Access

- Develop vehicular access points to the campus.
- Connect pedestrians and bicyclists to the site from adjacent neighborhoods, parks and roadways through a network of on-street bicycle lanes, sidewalks, and pathways.
- Provide connectivity through the site by linking Warner Milne Road, Beavercreek Road, Hiefield Court, Hillendale Park, Library Court, Loop Road and Front Street.
- Locate visitor parking behind or to the side of the buildings so as not to interrupt the public realm.
- Design select pedestrian crosswalks, especially across Beavercreek Road.
- Coordinate with TriMet locating bus stops along Warner Milne and Beavercreek Road to provide transit access to the site.

Phasing

- Develop a comprehensive phasing scheme that enables the sale of strategic parcels to private developers.

Since the Master Plan was adopted by the City of Oregon City in March 2006, the Michael's Building (now Central Utility Plant) and site were added to the campus via a Master Plan Amendment process in 2007. This two–story, 41,000 SF building is now used and referred to as the Central Utility Plant (CUP). It provides all new facilities with energy-efficient heating and cooling via a loop system, and also houses the Clackamas County Facilities Department, Veterans' Services, and Elections. In addition to the Central Utility Plant, the County has completed construction of the Development Service Building and the public plaza, which opened to the public in the Fall of 2008.

The Red Soils Master Plan Update in 2008 amended the proposed site of the Adult Detention Facility (ADF), and the 2009 update addressed wetlands and revisions to the jail.

The January 2012 Update reflects the acquisition of Silver Oak of 68,419 SF and provides for revised guidelines on security and screen fencing appropriate to the re-use of this building as an evidence processing and storage facility.

3 Existing Conditions

Existing Conditions

3.1. Introduction

The 1998 Facilities Master Plan commenced the co-location of County services onto the Red Soils Campus and incorporated the existing buildings on the Red Soils site into the Master Plan and Master Plan phasing process. The Adult Detention Facility, Sheriff Facilities, Juvenile Services, Community Health Buildings, Behavioral Health Buildings, Technology Services Annex (former Assessment & Tax building), OSU Extension Facility, and Technology Service buildings are existing buildings which are part of the Master Plan until Phase 3 build-out or until operational efficiencies are better served in alternate future planning efforts.

These existing facilities hold Mixed Use Employment (MUE) Permitted, Limited or Conditional Uses that will eventually be incorporated into new buildings or renovated in the future phases of the Master Plan. The existing facilities meet applicable code and Oregon City Zoning requirements for when they were constructed. Some of the existing facilities have specialized architectural needs, the Adult Detention Facility, for instance, built in 1959 has security, screening, fencing and access requirements that, for public safety, must be maintained for this use. Clackamas County has made efforts to reduce the visual impact of these existing features. Similarly, most of the existing facilities have mechanical equipment, generators, transformers or other visually challenged items which had been placed in the landscape, but screened in a similar approach with chain link fencing. Public and staff safety is a chief concern for the County and thoughtful pathway and streetscape design has been incorporated to provide an appealing visual backdrop in lieu of a visual connection to the facility itself. These specialized enclosures or screenings were in place before the 1998 Facilities Master Plan was adopted, and provide a first level of preventative security for these buildings.

The Red Soils site is located within the city limits of the City of Oregon City and is bounded by Warner Milne Road to the north, Hillendale Park and neighboring residential development to the south, commercial and office/industrial development to the east, and residential development to the west. The site is zoned MUE which allows the development for a variety of institutional, commercial, and retail uses. Appendix C further describes the uses, building heights and setback requirements amended as part of the March 2006 Master Plan to allow for greater height and reduced setbacks from public streets.

Aerial Photo (2009)

350 Feet

3.2 View Corridors and Topography

The site is relatively flat with slopes ranging from 0% to 6%. There are two high points: one located in the northwest corner of the site and one east of the Public Services Building. These high points provide views of Mt. Hood and the Cascade Range to the east. The view corridor from the west side of the property, looking east down the center line of the plaza to Beavercreek Road, is the most prominent site axis on campus. This view corridor aligns the front door of the future Courthouse and the center of the campus.

Site Analysis

Existing Trees

Mud Creek Wetland, view from Juvenile Services and entrance to Adult Detention Facility

3.3 Trees

There are a number of tree groupings throughout the campus:

- Memorial Grove
- Recently installed street trees along Library Court
- West of the Central Plaza at the point where Beavercreek Road changes direction
- South of the Public Services Building and west of Kaen Road

For security and public safety concerns the Facilities Department of Clackamas County monitors tree growth adjacent to buildings and will endeavor to maintain existing trees and shrubs. If needed, for safety or security reasons, the County will coordinate with the City of Oregon City to change species or placement of trees outside of the Master Planning process.

3.4 Water Quality Resource Areas

The low points on the site correspond with two existing wetlands. The southern wetland is associated with Mud Creek. The other wetland is located in the northeast corner of the property and drains to Newell Creek. Both wetlands have been delineated by a professional wetland scientist and professional survey updates are current. The Mud Creek Wetland delineation (WD 03-0099) was approved by the Division of State Lands (DSL) and the Newell Creek Wetland delineation (WD 04-0433) was as well. These Title 3 wetlands are identified as Water Quality Resource Areas and are therefore under the protection of the City of Oregon City Development Code, Chapter 17.49.

The Water Quality Resource Area consists of the protected water feature and its vegetated corridor consisting of a vegetated buffer 50 feet wide from the edge of each of the delineated wetlands. Development within the resource area is limited to stormwater outfalls and walkways as allowed under the provisional use section of the code.

3.5 Drainage

Drainage is directed by an east - west “ridge”on the site just to the south of the Public Services Building with stormwater falling to the north of this ridge flowing toward Newell Creek and stormwater falling to the south flowing toward Mud Creek. The City of Oregon City mandates on-site stormwater retention and water quality treatment bioswales for new developments.

Bioswale

3.6 Vehicle Access and Circulation

Access to the site is from Warner Milne Road and Beavercreek Road. Warner Milne is classified as a major arterial in the City of Oregon City's Transportation Systems Plan. This designation is intended to accommodate traffic to the site with a limited number of intersections and driveways. Beavercreek Road is classified as a minor arterial. This designation is also intended to promote through traffic but is less restrictive about access to adjacent land parcels. Beavercreek Road is currently a three-lane cross-section with two through lanes and a center turn lane. Field observations have found that traffic speeds are generally higher than the posted speed for this facility. Contributing factors to this condition include the width of the roadway, the road grade as it curves, and the lack of adjacent buildings.

Once inside the campus Library Court and Kaen Road, private roads for public use, do not function as part of a larger street network. Kaen Road dead ends at the County's current Jail, and Library Court acts as a driveway to Behavior Health Centers, Technology Services, and the Development Services Building. Warner Milne at Molalla Avenue, Beavercreek Road, and Leland Road have traffic signals. The signal at the Warner Milne/Beavercreek Road intersection is the only controlled access point on the site. Traffic analysis has determined that most of the signalized intersections currently operate at acceptable Levels of Service during P.M. peak hours.

Path near memorial Grove and Mud Creek Wetland

3.7 Bicycle and Pedestrian Access

Bicycle and pedestrian access to the site is provided via public facilities on the previously-described streets. A pedestrian pathway that meanders through the campus, and receives high use by neighbors and staff for exercise and connectivity to adjacent uses. The Silver Oak Building has an easement on the east side of site for pedestrian and bicycle access to Hillendale Park. Bicycle lanes are provided on Beavercreek Road, Kaen Road and Library Court. All buildings receiving public visitors have exterior bicycle parking and the Development Services Building provides additional secure staff bicycle parking for the campus. Connectivity Guidelines in the Master Plan section further describes the proposed pattern of sidewalks and bicycle lanes on campus. See Appendix E for bicycle parking counts.

3.8 Parking

The campus provides a total of 1,651 parking spaces, including spaces in temporary use gravel parking lots. A summary of existing parking spaces is described in the following tables. See Appendix F for proposed future parking.

Bicycle Parking at PSB

3.9 Existing Fencing and Screening

As mentioned in the Introduction, Pulbic Safety Operations facilities such as the Adult Detention, Juvenile Services, Sheriff, County and Technology Services have existing fencing and screening. for public security The Adult Detention Facility (ADF) has 8-foot, 12-foot and 16-foot high chain link fencing with barbed or razor wire at the top for public safety. Other Public Safety Facilities have slatted chain link, and/or 12-foot high chain link with barbed or razor wire at the top to protect fleet vehicles, Court evidence and maintain the Chain of Custody required by State Laws and a fiscally responsible material. These existing fences and any future fence needs of this type are located in the Back Room (see Rooms section of the Master Plan section). Pedestrian and bicycle paths that are adjacent to these fences are proposed with landscape screening elements to reduce the visual impact of fences and screens.

Existing perimeter fence, ADF. Mud Creek Wetland foreground
Fence: Chain link with barbed wire, 8-foot high.

Existing screening of equipment at Technology Services
Fence: Slatted chain link, 4-foot high.
f

Existing perimeter fence at ADF
Fence: Chain link with barbed wire, 8-foot high.

Existing screening of equipment at Technology Services annex (former Assessment and Tax Facility
Fence: Painted wood slats, 8-foot tall.

Existing screening at Sheriff's Facility
Fence: Slatted chain link, 8-foot high.

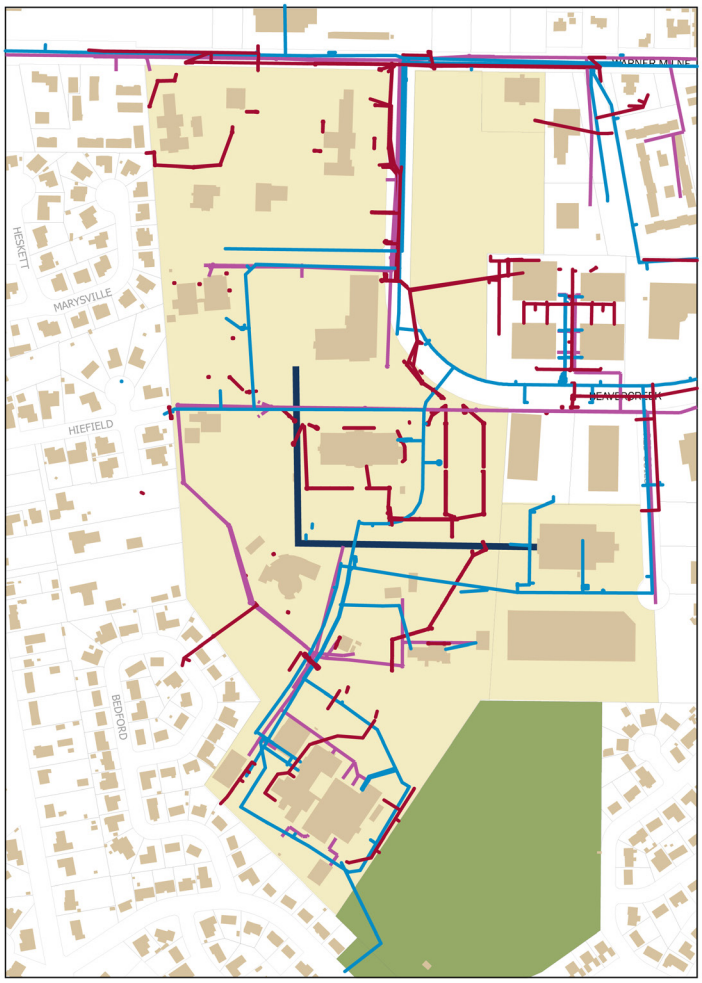
Other existing fencing and screening pre-dating the 1998 Facilities Master Plan on campus include slatted chain link and wood slats. These were permitted through the City of Oregon City Planning and Building Departments, and provide a first level of public safety preventative security for these buildings.

3.10 Utilities

Public water, sanitary sewer, and stormwater conveyance systems are presently available to the site, along with franchise utilities including power, phone, cable, natural gas, and county telecommunications. The backbone of these franchise utilities is located in a joint trench from Beavercreek Road, south on Kaen Road towards the existing Adult Detention Facility. County owned chilled/steam lines as well as telecommunications lines are located in a utility trench (the utilidor) running from the CUP to the Public Services Building and Development Services Building.

Existing public water is located along Beavercreek Road, Warner Milne Road, Library Court, Kaen Road and in two east-west lines crossing the site: one at Hiefield Court and one that runs through the proposed Adult Detention Facility (ADF). The Kaen Road public water line and the existing Jail public line both provide a looped public water system around the existing Jail located on the south end of the Campus. These two systems are a combination of 8-inch and 12-inch diameter water lines.

The Jail and other campus buildings South of the PSB were previously served by a private campus 6-inch line. This line was abandoned and the public loop systems in the area were improved in 2010. All buildings near the Jail are now metered individually and connected to the public water system. The PSB is served with water from the 12-inch public main line located in Kaen Road. The DSB is served with water from the existing public 12-inch main running east-west from Hiefield Court to Beavercreek Road. The campus buildings north of Library Court were previously served by a private campus 6-inch line. This line was also abandoned in 2010 and all the buildings are now metered individually and connected to the public water system.



Utilities

An 8-inch public sanitary sewer main runs northwest from the existing Jail to Beavercreek Road, the PSB and DSB are connected to this public sewer line. This existing sanitary sewer system expands to 15-inch diameter prior to leaving the Red Soils Campus. A downstream analysis conducted by Harper Houf Peterson Righellis in January 2008 did not indicate any capacity issues resulting from the proposed ADF facility.

Public sanitary sewer is also located along Library Court which conveys flows to a public line in Beavercreek Road which flows north to a public main in Warner Milne. These City-owned lines continue east combining near Molalla Avenue. The system continues east to Highway 213 connecting to a Tri-County sewer interceptor main which conveys all sewage to the Tri-County sewage treatment plant located near the Clackamas River.

Private stormwater systems exist for the Mud Creek and Newell Creek drainage basins. These include the recently constructed treatment and detention facilities for the Public Services Building and Kaen Road which convey runoff to the Mud Creek basin. The DSB building, Central Plaza and parking lots are served with private stormwater detention and water quality facilities consisting of a combination of underground detention and stormwater treatment facilities as well as above ground treatment swales and flow-through treatment planters. The DSB also collects and stores stormwater for irrigation of the parking deck landscaping, the landscaping around the DSB, and the Central Plaza. Excess runoff from the DSB is directed off-site to the northeast respecting the original Newell Creek basin.

The Red Soils Campus contains a Water Quality Resource Overlay associated with Mud Creek and Newell Creek wetlands. The wetlands have been delineated and the Oregon Department of State Lands concur with their delineations. Development within the Water Resource Overlay District is subject to the requirements of Chapter 17.49 of the Oregon City Code.

3.11 Silver Oak

In 2010, Clackamas County acquired Silver Oak, leading to this Master Plan Update. Located at 1810 Red Soils Court, the building is 68,419 square feet and was in private use prior to acquisition by the County.

4 Master Plan

Master Plan

4.1 Vision

The 2030 vision for the Red Soils Campus reflects Clackamas County's desire to consolidate the majority of its functions and to create a civic identity for the County that encourages the exchange of ideas while also showcasing a commitment to creating a state-of-the-art, sustainable government center.

4.2 Plan

The Master Plan is responsive to the needs of the employees of Clackamas County and to those of its neighbors. The proposed development has been crafted in response to a number of spatial, organizational, and growth concerns while seeking to remain easy to implement. In light of this, the Adopted Master Plan of 2006 included changes to the code such as modifying height limits in order to make the code more favorable to the type of desired development indicated in the Master Plan.

The vision for Red Soils Campus shapes its design: the proposed program, campus-wide circulation, infrastructure, and natural systems, and the connection between specific areas of the campus are designed to promote interaction and activity. This section details the unifying elements of the plan such as the pedestrian and bicycle connections and sustainability measures before describing in more detail the design framework and program.

The Master Plan has been carefully crafted to meet existing regulations. The proposed buildings comply with the Design Guidelines for Clackamas County and the City of Oregon City. For further details about how individual elements of the plan meet existing county zoning and design criteria see Appendix C and Appendix E.

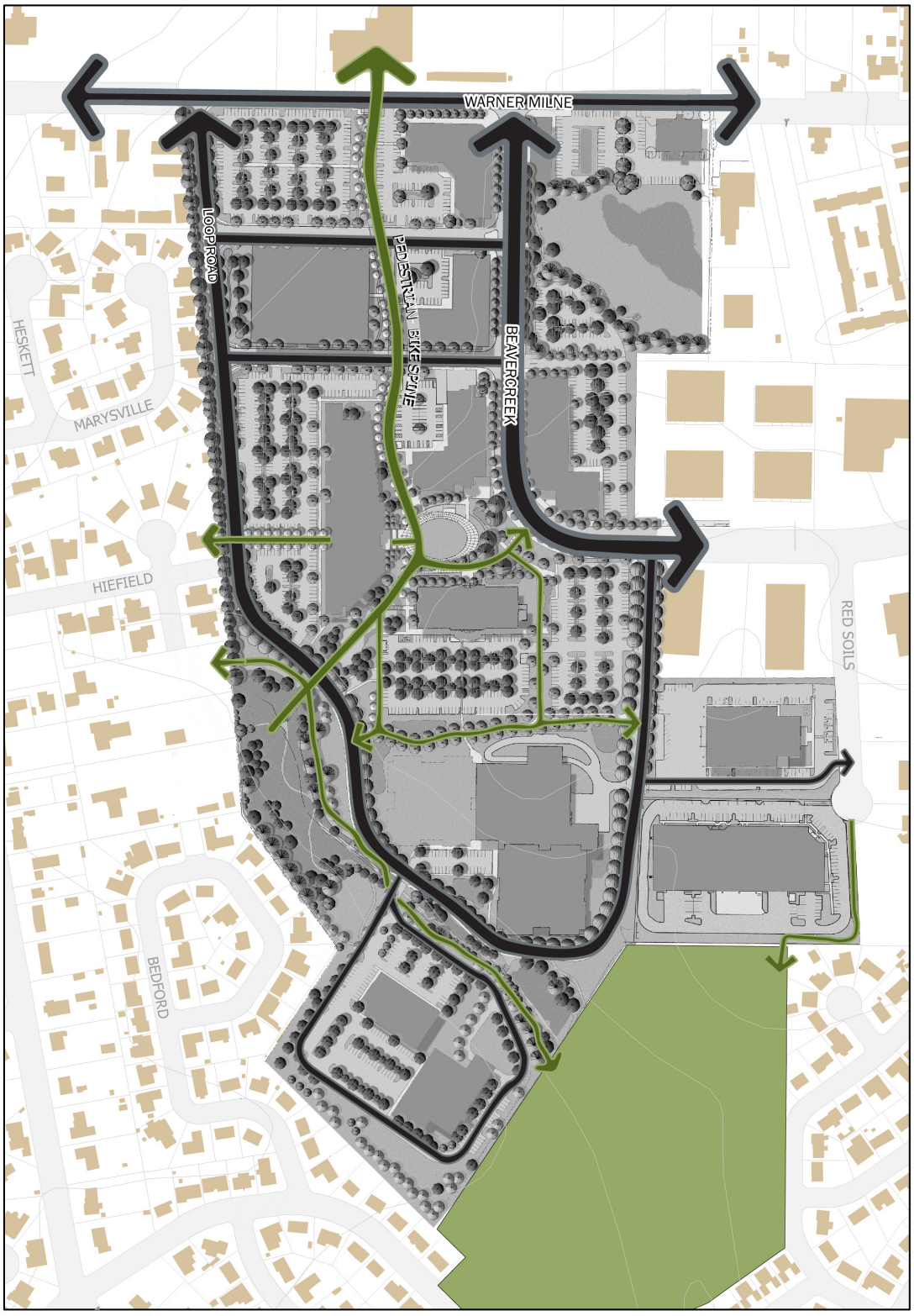
Connectivity: The Master Plan proposes a multi-modal system consisting of a street hierarchy based upon function, transit service, sidewalks, bike paths and trails. This network is designed to reduce dependence on the automobile and link the site's three rooms.

The proposed transportation network takes advantage of the existing infrastructure network, as well as adds new links to provide a complete multi-modal network. All planned pedestrian, bicycle, transit, and vehicular connections from the community will lead to and from the Living Room and its Central Plaza, the heart of the Red Soils Campus.

Beavercreek Road serves as the gateway to the campus from the east and the north. Coming from the east, visitors to the campus are greeted by a view of the Central Plaza framed by the Public Services Building and the Development Services Building and a frontal view of the Courthouse. Upon entering Beavercreek Road from the north, visitors will travel past County Office Buildings that frame the entrance from Warner Milne Road to the heart of the campus. This segment of Beavercreek Road will be developed in a manner characteristic of an urban commercial zone with wide sidewalks, street trees, attractive architectural façades, a family of attractive street furnishings, transit stops, and on-street parking. These street treatments are intended to mark an entry to the campus and provide an inviting pedestrian environment so people are invited to walk through the campus in a comfortable and attractive setting.

The proposed Loop Road will be the most important new roadway, passing north-south between the residential neighborhood on the western edge of the campus and the industrial uses and Hillendale Park on the eastern and southern edges of the campus.

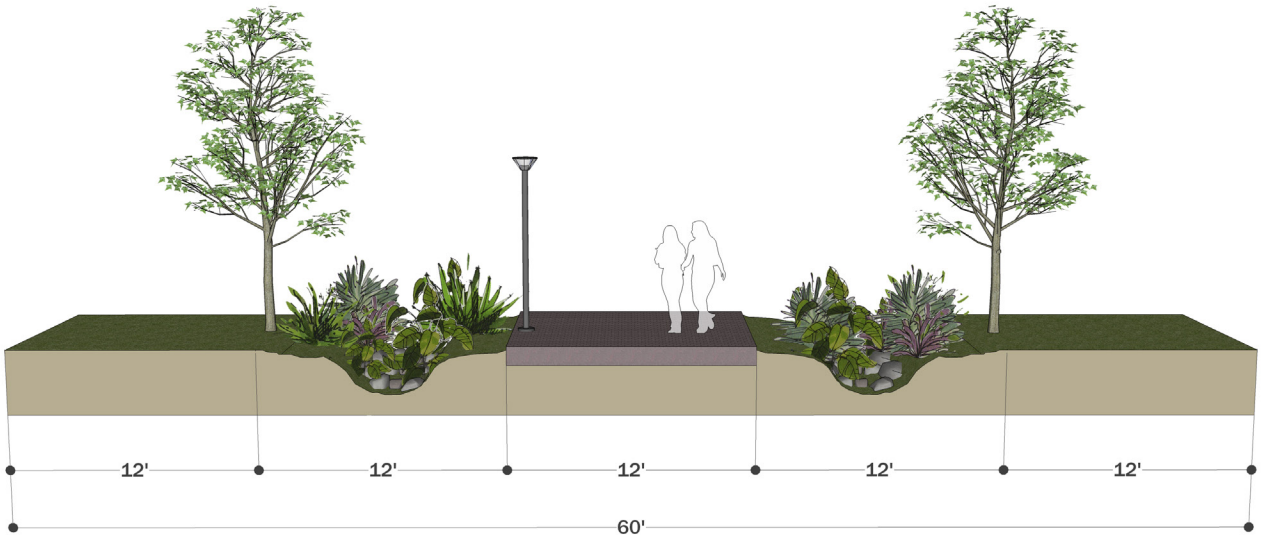
The Loop Road will provide perimeter access to parking areas serving the county buildings in the center of the site thereby minimizing conflicts between pedestrians, bicyclists, and vehicles. Access to the Loop Road from Beavercreek Road will be controlled via a signalized intersection. Overflow parking areas will also be accessed via the Loop Road. Bicycle lanes will be provided along the Loop Road to encourage mixed traffic and to keep speeds relatively low.



Connectivity

Roadway 1
Roadway 2
Roadway 3
Bicycle and Pedestrian Greenway / Pathways

300 Feet



Cross Section of the Pedestrian-Bike Spine (at maximum width)

In addition to the network of streets, the campus will include a hierarchy of pedestrian and bicycle connections. With the exception of the west side of the Loop Road parallel to the adjacent residential neighborhood, all campus streets will include sidewalks. The majority of the sidewalks, designed with a curb side planting strip serving as a protective edge, will take pedestrians to the front door of all buildings, emphasizing the formal public entry to these civic buildings.

Many of the pedestrian and bike paths will be informal in nature. The primary pedestrian and bicycle "spine" will run north-south through the campus in a serpentine alignment, connecting facilities on Warner Milne Road to the center of the campus at the Central Plaza and then further south on to Hillendale Park. At the point where the path meets the Loop Road, it will head east, towards the Central Utility Plant before heading north between the DSB and the existing surface lot to Beavercreek Road. Additional east-west connections are proposed from Hiefield Court through the Courthouse portal to the Central Plaza, as well as an east-west connection south of Loop Road to Hillendale Park.

The serpentine path proposed through the center of the campus will serve not only as the primary pedestrian and bike connection from Warner Milne Road but also as an organizing and connecting device to the larger campus. This shared connection is to be a wide pathway with shade trees, stormwater management bioswales, and lush vegetation suitable to the Pacific Northwest's micro-climate along its edges. The constructed stormwater detention swale crossed by the path will help detain runoff from adjacent hard surfaces and buildings.

Other features will include pedestrian lighting to enhance security, signage to facilitate wayfinding, and shade trees to reduce heat island effects from paved surfaces. Additionally, a section of the spine southeast of the Courthouse will include a boardwalk system running across a vegetated wetland. The intent of this corridor feature is to provide a pleasant place for people to walk and bicycle between buildings on the campus while further limiting interactions with motor vehicles.

Wetlands: The Newel Creek and Mud Creek wetlands contribute to the overall character of the campus. The Newel Creek wetland is located on the east side of Beavercreek Road, north of the proposed commercial site. The Mud Creek wetland runs from west to east in the southern portion of the site. Periodically required delineation updates shall be prepared as administrative submissions.

The Newel Creek wetland will be enhanced with appropriate plantings and surrounded by a landscaped wetland park and an adjacent interpretive viewing area. The Mud

Sustainable Wetland Design Examples

Creek wetland will create additional natural resources for the campus and screening for neighboring residential uses. An interpretive kiosk and a pedestrian bridge will welcome visitors and direct them to the passive recreational trail network leading to Hillendale Park. Shade trees and native plants will flank the trails.

Landscape plantings in the area adjoining the Mud Creek wetlands are referred to as Memorial Grove with trees, planted in memory of deceased county personnel, and other plant materials compatible with the existing temporary gravel parking lot use. When the parking use is re-accommodated, this area will receive additional landscape plantings and treatments to complete the Memorial Grove as a special place on campus. While the majority of the trees and shrubs proposed comply with the City of Oregon City's landscape palette, the City does not regulate plant materials in wetlands. Nevertheless, all wetland plant materials will be selected to restore functional values of the wetlands. Restoration work may include introducing meanders, reducing channelization, creating weirs, or other improvements to wetland hydrology.

The Newel Creek and Mud Creek wetlands will be supplemented by stormwater facilities located to detain and improve the quality of run-off from impervious surfaces including roads, parking lots, and rooftops. The primary facility will be east of the ramp to the DSB to capture run-off from the plaza and to visually terminate the plaza's water feature. A secondary facility is planned around the future ADF to accommodate stormwater run-off from that building.

Mud Creek riparian buffer was re-vegetated in accordance with City of Oregon City's Natural Resource Overlay District (NROD) buffer mitigation standards. Plant species were selected that may naturally occur in the landscape setting, that provide food and cover for wildlife species, and provide seasonal landscape interest in leaf color, flowering, fruit and texture, for users of the trail. The plantings located in the Mud Creek riparian corridor are located adjacent to two parking lots and will also provide future shade to the creek, thereby enhancing water quality by reducing stream temperature.

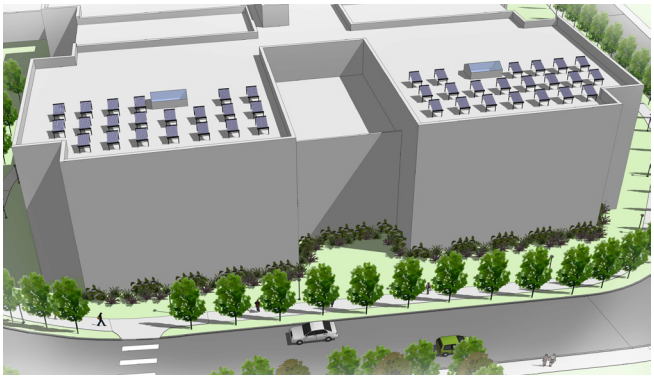
Wetlands delineations are required to be updated on a periodic basis, typically every five years. Those updates will be prepared as independent reports submitted to City staff, separate from Master Plan updates. This will allow the updates to proceed on their own schedule, and allow Master Plan Updates to focus on substantive changes in program or development focus by the County.

Sustainability Measures: The Clackamas County Board of Commissioners required a sustainable design for the Red Soils Campus. This commitment to the environment includes the desire to reduce the life cycle, operating, and maintenance costs associated with county facilities, while better serving the citizens of Clackamas County and its employees.

The March 2006 Master Plan approved by the Clackamas County Board of Commissioners and adopted by the City of Oregon City articulated a strong commitment to sustainability. The Master Plan mandates that all new buildings achieve a minimum of USGBC Silver rating based on the Leadership in Energy and Environmental Design (LEED®) program, the preeminent strategy used in the United States to promote and measure sustainable design.

Beyond the LEED® requirements, another key sustainable feature incorporated in the Master Plan is the development of the Central Utility Plant (CUP) which connected to the PSB, the DSB, and the future ADF and Courthouse via a utility trench carrying both heated and chilled water to each building, eliminating the need for separate boilers, chillers, and cooling towers at each building. The CUP has the added capability of reducing peak electrical demand and saving money while reducing overall Greenhouse Gas emissions.

The Central Utility Plant capitalizes on the diverse campus utility loads and the economy of scale in addition to running high-efficiency equipment. As a result, cooling is anticipated to reduce energy consumption by over 60%, heating efficiency by over 20%, and waste heat recovered for use by other building loads. A further benefit of this approach is that it enables any necessary or periodic equipment upgrades to be extremely cost effective and to address all the buildings served simultaneously.



Potential Solar Panel Configuration

Solar PV: E Portland Community Center Aquatics Addition

Alternative Solar Panel Configuration

Chicago City Hall Green Roof

Solar panels

Urban Bioswale

Roadside Bioswale

Parking Lot Bioswale

Red Soils Campus Bioswale

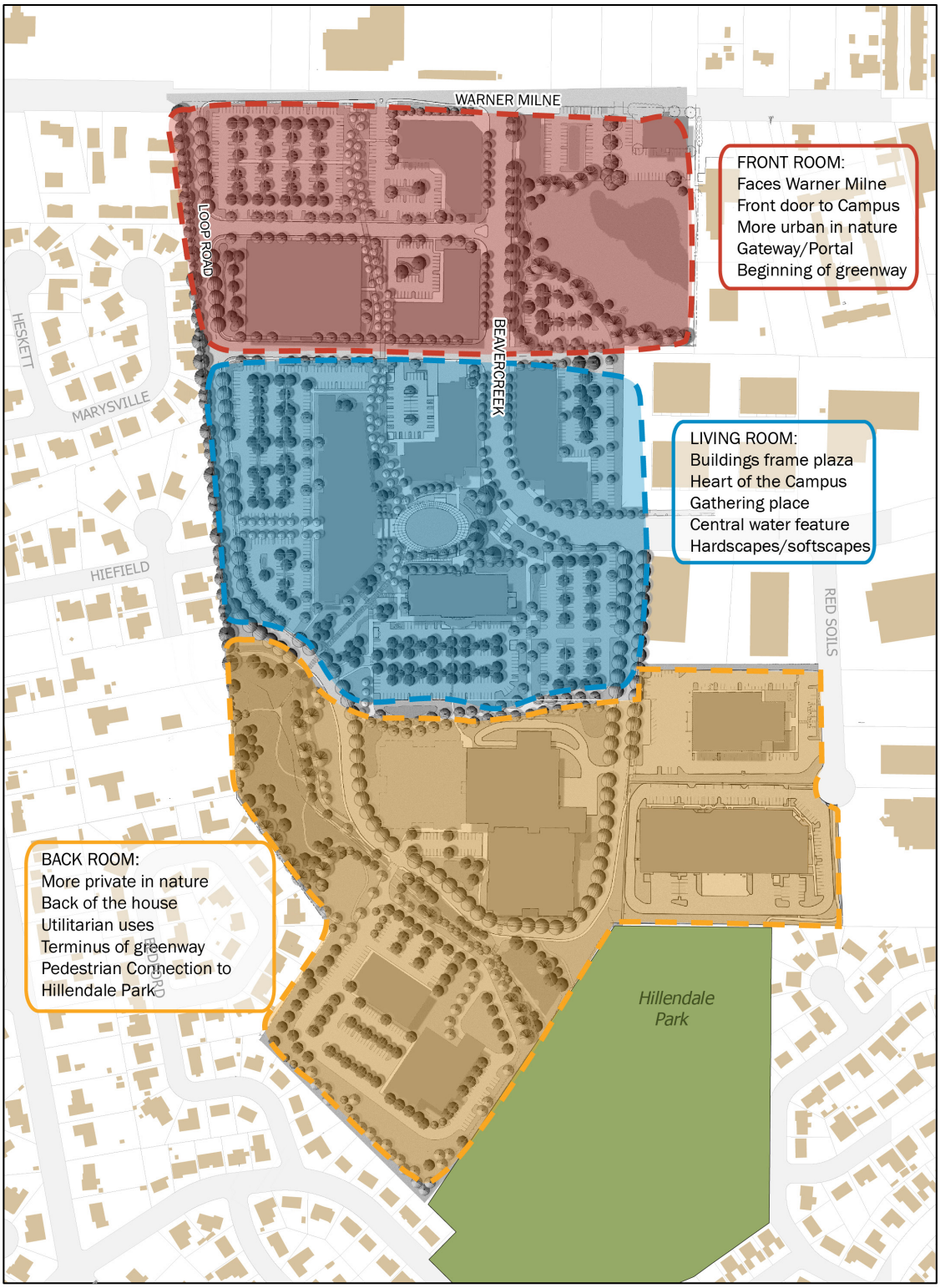
The Adult Detention Facility will integrate the new Oregon Administrative Rules (OAR 330–135–0010 to 330–135–0055) requiring contracting agencies to spend an amount equal to at least 1.5% of a public improvement contract for the construction or improvement of a public building for including appropriate solar energy technology in the building. Solar technologies applicable to the ADF include solar electric (photovoltaics), solar water heating, and/or passive solar building orientation and design treatments. The approach taken to satisfy this requirement will be left up to the design-build contractor, and determined as the project progresses.

Stormwater will be managed and treated on-site. Stormwater from the buildings will be treated initially by being channeled through bioswales and/or planters and then be directed to a 15,000 gallon cistern in the Development Services Building. The landscaping related to the DSB and the Central Plaza will be irrigated from a combination of roof-collected rainwater and/or foundation-drained water stored in the DSB cistern. Run-off from impervious plaza areas will also be channeled via an underground pipe to an attractive and functional secondary wetland area east of the pedestrian ramp to the DSB.

Stormwater management for the Adult Detention Facility is planned to include underground detention, retention cisterns, and bioswales. The underground storage systems will be used for summertime irrigation of landscaping areas around the new ADF.

Other measures to achieve long-term sustainability include orienting buildings, or wings of buildings, east-west to reduce solar exposure (heat-gain) and minimize the cooling load, creating a mix of land uses to reduce vehicle miles traveled – especially by single occupancy vehicles, and by encouraging greater pedestrian activity by providing invitingly attractive and efficient walks and pathways.

Silver Oak already has an underground detention and storage system designed to capture all building and site runoff on-site.



Rooms Concept

300 Feet

FRONT ROOM

4.3 Rooms

The design concept of "rooms" emerged from the vision and guiding principles. The campus was segmented into three distinct zones based on the orientation and function of campus buildings and civic spaces. These include the "Front Room," the "Living Room," and the "Back Room." Each of these rooms has its own identity and character, distinguished by land uses, landscaping, pedestrian/ bicycle/vehicular connections, and the incorporation of sustainable technologies.

The Front Room is bounded by Warner Milne Road to the north, the future Loop Road to the west, Library Court to the south, and the commercial buildings to the east side of Beavercreek Road. This is the most public of the three rooms as defined by its land uses and its proximity to Beavercreek and Warner Milne Roads. The campus entrance will be framed by the County Office Building, the Health, Housing & Human Services Buidling, and the OSU Extension Service Building, which anchors the northeast corner of the Warner Milne and Beavercreek Road intersection. These buildings are intended to serve the needs of Clackamas County and the surrounding neighborhood, as well as accommodate related professionals associated with the Red Soils Campus.

Moving south toward the heart of the campus from the Beavercreek Road and Warner Milne Road intersection, visitors and employees will pass another County Office Building (COB2) on the west side of the road north of Library Court. The eastern edge of the Front Room will be defined by a privately developed commercial building at the point where the realigned Beavercreek Road begins to head east. This building is expected to include retail space and private offices for the County or firms that work with the County.

Beavercreek Road will be urban in nature through its alignment and with street trees evenly spaced in tree grates along the edge of the street, along with street lighting, and signage. The trees related to the County Office Buildings will offer shade and character to the street and those related to the commercial buildings will provide high visibility and ease of contact for pedestrians.

The realigned Beavercreek Road will consist of two travel lanes, a center turn lane, bicycle lanes, parallel parking on each side, and inviting sidewalks. Its character is to be very different than the central bike and pedestrian spine. The north-south central bike and pedestrian spine located between Beavercreek Road and the Loop Road is designed to be a more introspective and quiet space as reflected by its serpentine alignment, selection of plants, day-lit stormwater management swale and, most importantly, by its lack of cars.

The Loop Road entrance from Warner Milne and its alignment along the western edge of the campus will be less formal. The landscaping will emphasize screening and the separation of unrelated uses. Where the road is adjacent to the existing residential area, there will be no sidewalk on its west side providing additional privacy to the site's neighbors.

The other roadways of the Front Room parallel Warner Milne Road. Library Court and Front Road will each consist of two travel lanes, parallel parking, and comfortable curb side sidewalks without planting strips. In addition, these roads will not include bicycle lanes as it is presumed that traffic volumes and speeds will be low enough for bicyclists to comfortably share the roadway.

East Elevation, DSB

LIVING ROOM

The Living Room is bounded by Library Court to the north, the Loop Road to the west, and Beavercreek Road to the east. This is to be the most formal and public of the three rooms containing the Central Plaza, the heart of the campus, and the three County buildings most frequently visited by the general public.

The Central Plaza will be framed on the south by the Public Service Building (PSB), on the north by the Development Service Building (DSB), and by the Courthouse on the west. The long axis of the Central Plaza and the front door to the Courthouse align with Beavercreek Road and the distant view to Mount Hood. A mixed-use Office / Retail building is proposed on the east side of Beavercreek Road partially "closing" the northeast corner of this urban space as well as helping to frame the distant view.

The Central Plaza symbolizes the fundamental principles of the Red Soils Campus: democracy, service, and justice. Designed as a formal approachable space, the plaza has been constructed of high quality materials with a correspondingly high level of workmanship reflecting the pride of the citizens of Clackamas County. The incorporation of public art and the Plaza's central water feature reinforce this dedication.

The plaza can accommodate formal community gatherings as well as informal community uses. The plaza is a formal oval with a grassed center, surrounded by a perimeter pathway and is distinguished from the surrounding walkways and central greenway through its materials and its water feature.

The water feature is in front of the Development Services Building in order to optimize southern exposure and is intended to suggest the nearby Willamette Falls with white water simulated by pumping water from an upper pool over a curved aggregate wall. Once water arrives into the lower pool, it flows west to east, terminating at the ramp that leads to the DSB. The large stairs serve as a seating area and a small ADA accessible islet is surrounded by water on three sides. Basalt columns also make reference to the Willamette Falls, extending in a pattern from the water to the surrounding seating area and paved oval paths beyond. The water feature is illuminated from surrounding pedestrian lighting sources as well as light fixtures under the water directed upwards to highlight the basalt columns.

The area east of the DSB ramp is intended to be developed as a lush stormwater detention facility that provides a riparian-like habitat. This facility follows the existing topography and serves as a natural terminus to the water feature and the paved oval. A similar functional and aesthetic wetland is proposed as part of the construction of the future Courthouse. The future wetlands, on a much larger scale, are to be located between the Courthouse and the Public Services Building, and will be bridged over by a boardwalk that connects to the serpentine pedestrian and bike spine as well as links the Courthouse to the PSB.

These special central open space features are distinguished from other campus gathering spaces by their formality and ability to accommodate multiple activities in the form of a more regional park. Designed open spaces elsewhere on the campus will clearly “belong” to immediately adjacent uses such as seating areas near buildings or at places offering contemplative viewpoints, wetlands that are part of a system, or pocket parks that are part of the pedestrian corridor. Other open spaces, which include passive recreation areas such as the Memorial Grove in the Mud Creek Wetlands and a system of pocket parks and sitting areas lining pedestrian corridors, are secondary open spaces. Site furnishings, lighting, and paving have been selected carefully for the Central Plaza, as well as the larger campus and are referred to in Appendix D.

BACK ROOM

The Back Room is located south of the parking area behind the existing Public Services Building and is served by the Loop Road and Kaen Road. While the other rooms of the campus are designed to attract users or to be symbolic, the Back Room is designed to be functional. This room contains the county facilities that are not as frequently visited by the public and is the location of the existing Jail with its 2011 revisions, the Central Utility Plant, the recently acquired Silver Oak, a proposed 800-bed Adult Detention Facility, and the future Communications Center.

The Adult Detention Facility will be located just north of the Loop Road and the Mud Creek Wetlands and the remaining undeveloped portion of this defined site enables future expansion.

By 2030, vehicles will be able to access the Back Room via the Loop Road. As the Courthouse comes on line, the refined Loop Road will be needed to move cars around the new Adult Detention Facility and the existing Jail if necessary. Pedestrian and bicycle access to the Back Room, as well as to and from Hillendale Park, will be available via the Loop Road and the pedestrian/bicycle spine through the campus.

Since there is less contact with the general public in this portion of the campus, the amenities are straightforward and casual. The Public Safety Operations Facilities located in this Room require enhanced security features, restricted access, and facility screening options. This is partially realized by the curb-tight sidewalks without planting strips along the outside edge of the proposed Loop Road and the absence of parallel parking.

Silver Oak is to be used as a Mixed-Use Employment (MUE) facility.

Program

County Office
Courthouse
Office/Commerical
Detention Facility
Campus Facility/Parking
County Administration

300 Feet

4.4 Program

The initial building program was established through a series of meetings with key stakeholders with growth measured over a ten-year period. As staff and area projections became more refined, a project management group was established consisting of representatives of essential project components. This team developed the current projections on which this Master Plan is based. The management group adopted the recommendation that land uses should be separated into three distinct rooms based upon their function and location on campus. It was also established that a mix of land uses would encourage walkability and greater pedestrian activity on the campus. The following descriptions detail each primary building yet unbuilt:

County Office Buildings: Two County Office Buildings are proposed for the campus Front Room. A first Office Building (COB1) is proposed north of the Development Services Building. Similar to the DSB, this Office Building will have two front doors; one facing Beavercreek Road and one opening to the central pedestrian and bike spine. This Office Building will be four stories and 100,711 gross square feet. The government departments to be accommodated here have yet to be determined. A second Office Building (COB2) is proposed at the corner of Beavercreek Road and Warner Milne Road. This will also be a four-story building but with 75,608 gross square feet. The County departments to be accommodated in this building have yet to be determined.

Courthouse: The Clackamas County Courthouse, the focal point of the campus, is proposed in the campus Living Room. It will contain 215,756 gross square feet accommodating 16 courtrooms, court offices, a law library, judges' chambers, District Attorney Offices, and Family Court services. Its north and south winds will be separated and joined by an open-roofed atrium and passage space coinciding with an utility easement. Additional Judicial functions will be housed in the five-story wing located north of the Central Atrium. A smaller four-story wing to the south will contain the District Attorneys' offices. The public entries for the Courthouse, Public Services Building, and Development Services Building will be arranged within easy sight of each other, enabling employees and visitors to navigate the area easily.

Adult Detention Facility: The current configuration of the existing Jail accommodates approximately 434 beds. The County anticipates constructing a new Adult Detention Facility of 200,542 gross square feet in the campus Back Room with a potential for up to 800 adult detention beds, which are a permitted conditional use on the site. Although the new building may have a larger footprint than the existing Jail, new facilities typically require a lower ratio of guards to inmates; this translates into fewer vehicle trips to the facility. In addition, the ADF will regulate the number of visitors that may visit the site at any one time.

Juvenile Facility: Juvenile Services is to be located in the 1990's portion of the existing Adult Detention Facility located south of the Mud Creek Wetlands in the campus Back Room. The existing Jail will be used for storage until some time in the future, at which time the pre-1990's portion of the building complex will be demolished. This will allow area for either the expansion of Central Communications or a new building and the development of the parking areas required to be in conformance with the Master Plan's parking objectives.

Private Development: The Master Plan recognizes private development as an element of the overall strategy for the Red Soils Campus. The County recognizes that a number of businesses and services in the private sector routinely locate near County offices given that their primary focus is doing business with the County. The Master Plan contemplates approximately 150,000 square feet to be available for a mix of commercial and retail uses.

Parking Garage: The parking garage in the Front Room is prepared to be a 3 to 4 story structure with potential for up to 832 spaces.

4.5 Systems

The Red Soil Master Plan is intended to bring together the spatial and programmatic needs of Clackamas County within the natural and built environment. To achieve this goal, conservation and stewardship principles are integrated into the plan.

The following diagrams and text explain the individual systems that comprise the larger Red Soils Campus including: Open Space, Connectivity (Bicycle, Pedestrian, Vehicular), and Infrastructure. Viewed as a whole, these elements help to create a vibrant place for those who work at and visit the Red Soils Campus.

Landscape Guidelines: Landscape elements including plant materials, street furnishings, pedestrian and vehicular lighting, and paving materials will be used to highlight buildings and public spaces. A primary view corridor will be established from the Courthouse down the center of Beavercreek Road to Mt. Hood along the east-west center of the campus. To reduce site irrigation needs, drought-resistant plantings will be specified and the use of toxic pesticide and fertilizers should be reduced. Furthermore, in order to reduce ambient site temperatures and reduce the amount of asphalt in surface parking areas, a high ratio of soft landscape to hardscape will be maintained

Pathways will be delineated throughout as passive or active with similar treatment given to open spaces and courtyards to better define and animate movement through the campus.

The primary pedestrian connection through the campus is the serpentine pedestrian/bike spine that extends from Warner Milne Road to the Central Plaza and then heads south to Hillendale Park along Mud Creek. East-west connections with the residential neighborhoods to the west and linkages to the Central Utility Plant and back to the Central Plaza will provide pleasant pathways separated from vehicular traffic.

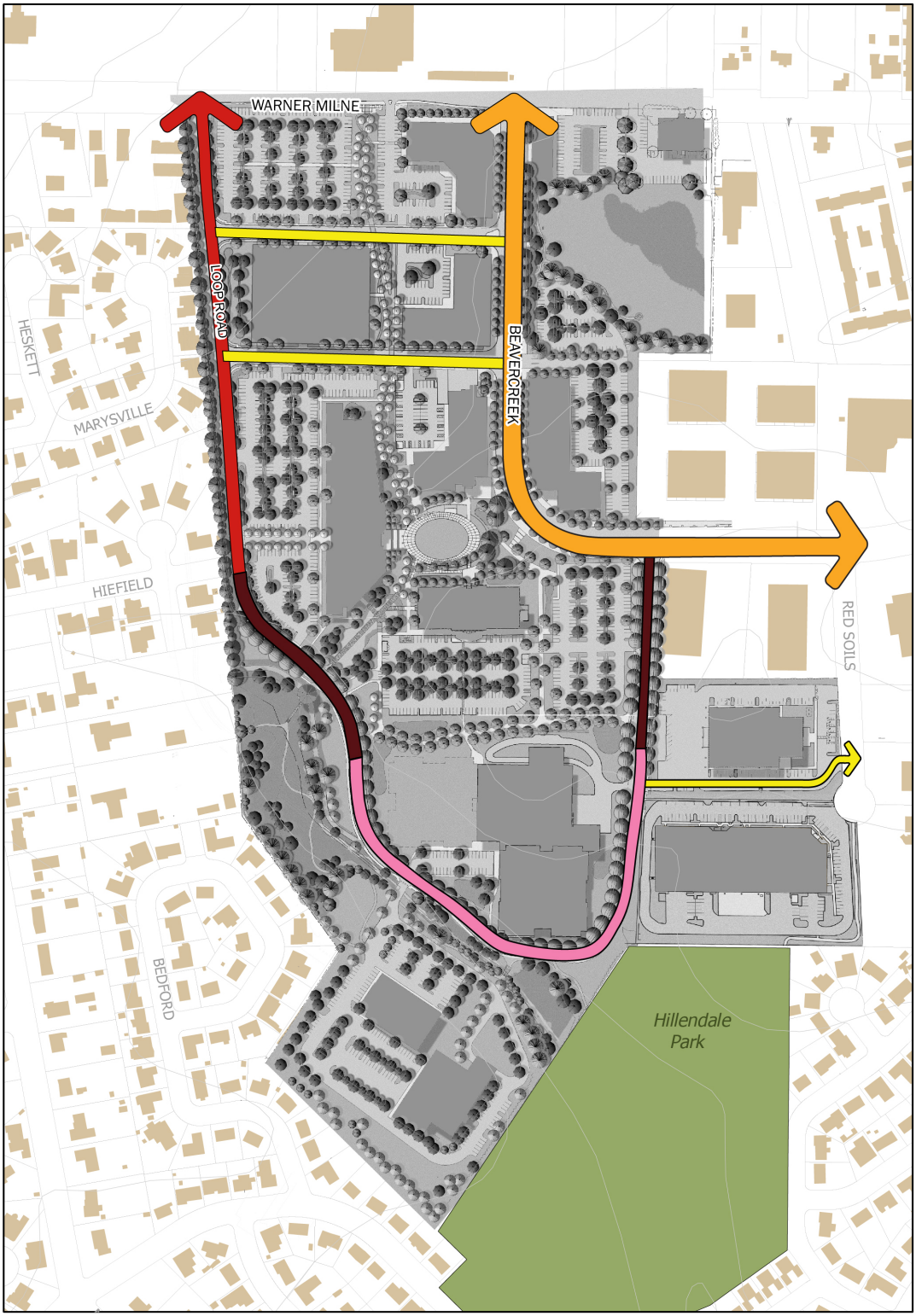
Sidewalks are removed from streets where there are existing bark dust paths. Similar to a local residential streets, bikes are expected to share the drive lanes with cars in these areas.

Way-finding signage and lighting for paths, sidewalks, and the Central Plaza will be designed to facilitate safe navigation throughout the campus.

Open Space

- Wetland
- Stormwater Treatment
- Kiosk
- Pocket Park
- Civic Gathering
- Pedestrian Pathways

300 Feet


WARNER MILNE
LOOP ROAD
BEAVERCREEK
HESKETT
MARYSVILLE
HIEFIELD
RED SOILS
BEDFORD
Hillendale Park
Street Plan
Street Type A
Street Type B
Street Type C
Street Type D
Street Type E
300
Feet

Connectivity Guidelines

Streets: A Transportation Management Plan was prepared to guide the design of streets, roadways, and parking for the campus. Issues addressed include the slowing of traffic and enhancing bicycle and pedestrian paths, as well as placing an emphasis on the use of public transportation. Traffic is expected to be slowed through the Red Soils Campus by tightening up the curve along Beavercreek Road with a shorter radius curve promoting slower speeds. When this work is completed, the following four intersections should be signalized: Warner Milne Road and Beavercreek Road, Beavercreek Road and Library Court, Beavercreek Road and the proposed Loop Road, and the Loop Road and Warner Milne Road.

Alternative transportation and foot-traffic needs will be enabled through a network of bike and pedestrian links through the campus. Further emphasis on facilitating public transportation would also be beneficial.

With development of the Red Soils Campus and the siting of the proposed retail/office buildings fronting onto Beavercreek Road, this realigned roadway will take on a more local and urban character, allowing on-street parking to be provided. These design treatments and land uses will help to temper traffic speeds in the vicinity, and subsequently lower them.

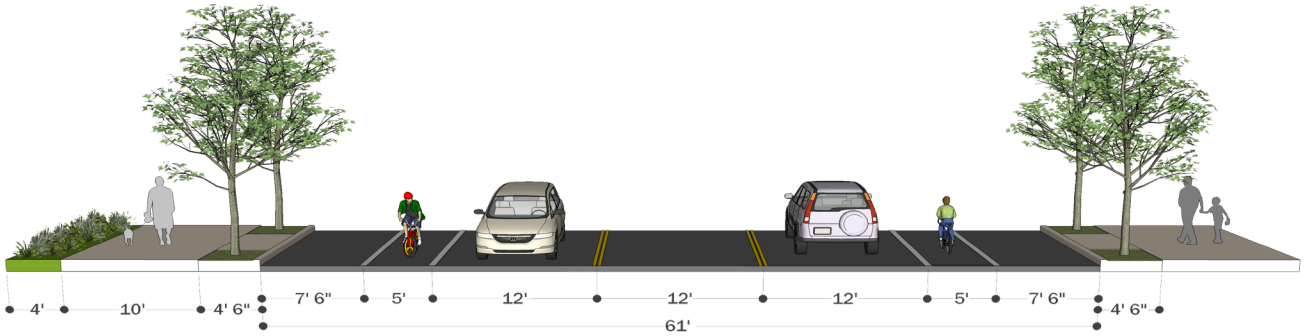
Trip Generation: Many County departments have been on the Red Soils Campus since 1970's, with the oldest being the Jail which was built in 1959. The most significant public facility moving to the site will be the Courthouse which is expected to be the last new building to be completed. At that point, full build-out of the Master Plan, the Campus is anticipated to generate approximately 1,043 additional vehicle trips during the A.M. peak hour and 1,129 vehicle trips during the P.M. peak hour over and beyond trip count records from 2005. In addition, the proposed private sector office / retail buildings are expected to generate about 200 vehicle trips during the A.M. peak hour and 325 vehicle trips during the P.M. peak hour.

The County is working with the City to develop mutually acceptable methods of assessing transportation impacts of Campus construction.

The Silver Oak building that is proposed for addition to the Red Soils Master Plan was originally developed and permitted as a light industrial land use. The proposed tenant improvements to the building will provide 55,257 square feet of archival storage space and 14,068 square feet of office space within the existing structure. No new site access is proposed.

Comparing the trip generation of the former light industrial use and the proposed County use, the trip generation of Silver Oak is expected to be reduced by approximately 130 daily trips and 28 weekday P.M. peak hour trips. Accordingly, the trips generated by Silver Oak on the roadway network are expected to be reduced upon incorporation into the Master Plan and subsequent re-use. The Sheriff's office evidence room is currently located within the Red Soils Campus and will move to Silver Oak. The current evidence room area will be re-used for storage, meaning there should be no change in campus trips as a result of building re-use on the campus through incorporation of Silver Oak (beyond the one-time on-campus transfer of storage materials during the evidence room relocation).

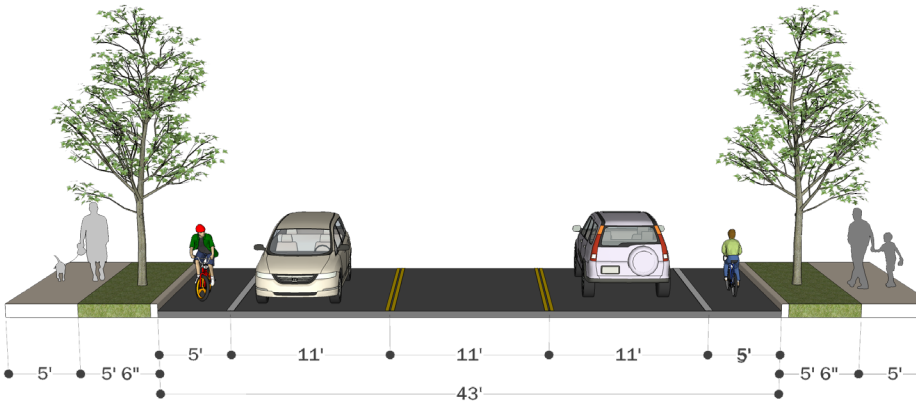
Based on an anticipated incremental reduction in daily and peak hour building trip generation, no additional traffic operational or safety analysis is needed for the proposed Master Plan modification to comply with the City of Oregon City Municipal Code and no Transportation System Development Charge payment should be required.



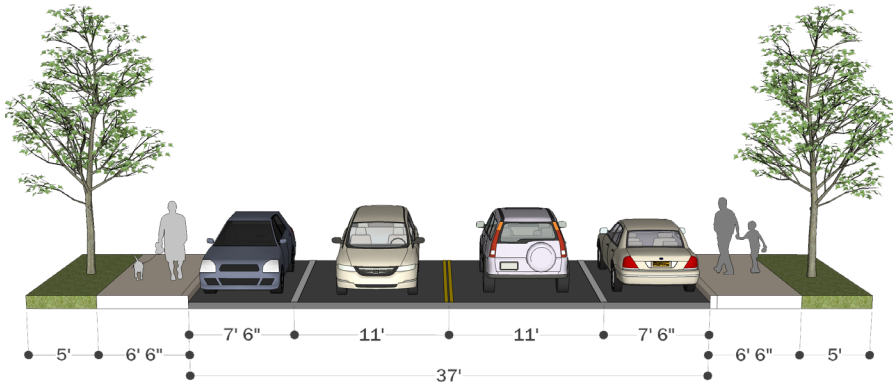
Street Type A - Beavercreek Road

Type A: Beavercreek Road is designed as a boulevard with two travel lanes in each direction, a center turn lane, bike lanes and parallel parking on each side of the street, and a 15' formal pedestrian zone with 10' clear walking zones. Within the curb-edge planting strip, trees with grates are to be spaced evenly and located approximately 30 feet on center. Street trees are characterized by larger canopies that shade the public realm reducing summer heat-island effects and encouraging pedestrian and bicycle activity. The emphasis on the pedestrian zone is further reinforced by the realignment of Beavercreek Road in Phase Three, involving a slight narrowing of the overall right-of-way and building a tighter radius curve in front of the Central Plaza, prompting vehicles to slow down thereby fostering a safer walking environment.

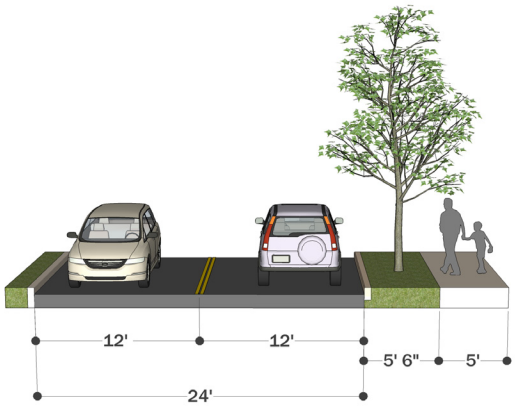
Type B: The Loop Road is divided into three segments representing its different street type conditions, access to parking areas, and adjacent land uses. The Loop Road segment north of the future ADF and south of the Courthouse will have one travel lane in each direction, a center turn lane, bike lanes, and a curb-edge planting zone running parallel to the street adjacent to a continuous 5' wide sidewalk.



Street Type B - Loop Road



Street Type C - Road

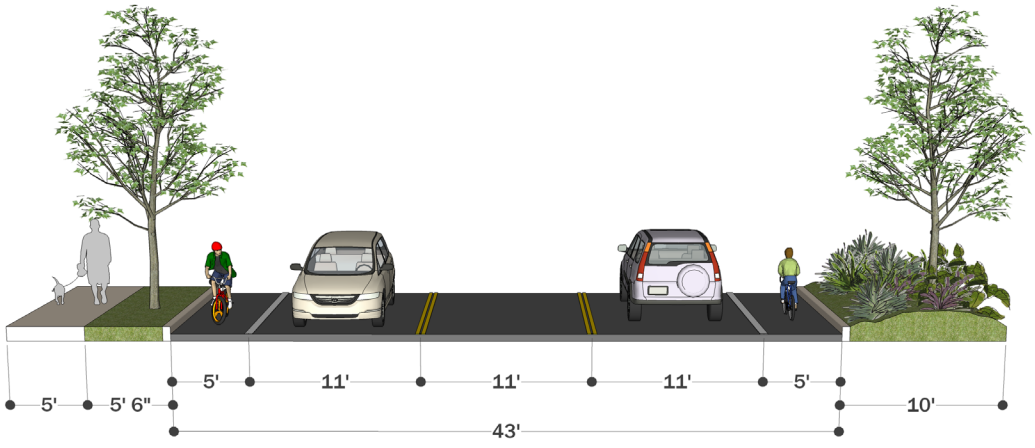


Street Type D: Loop Road

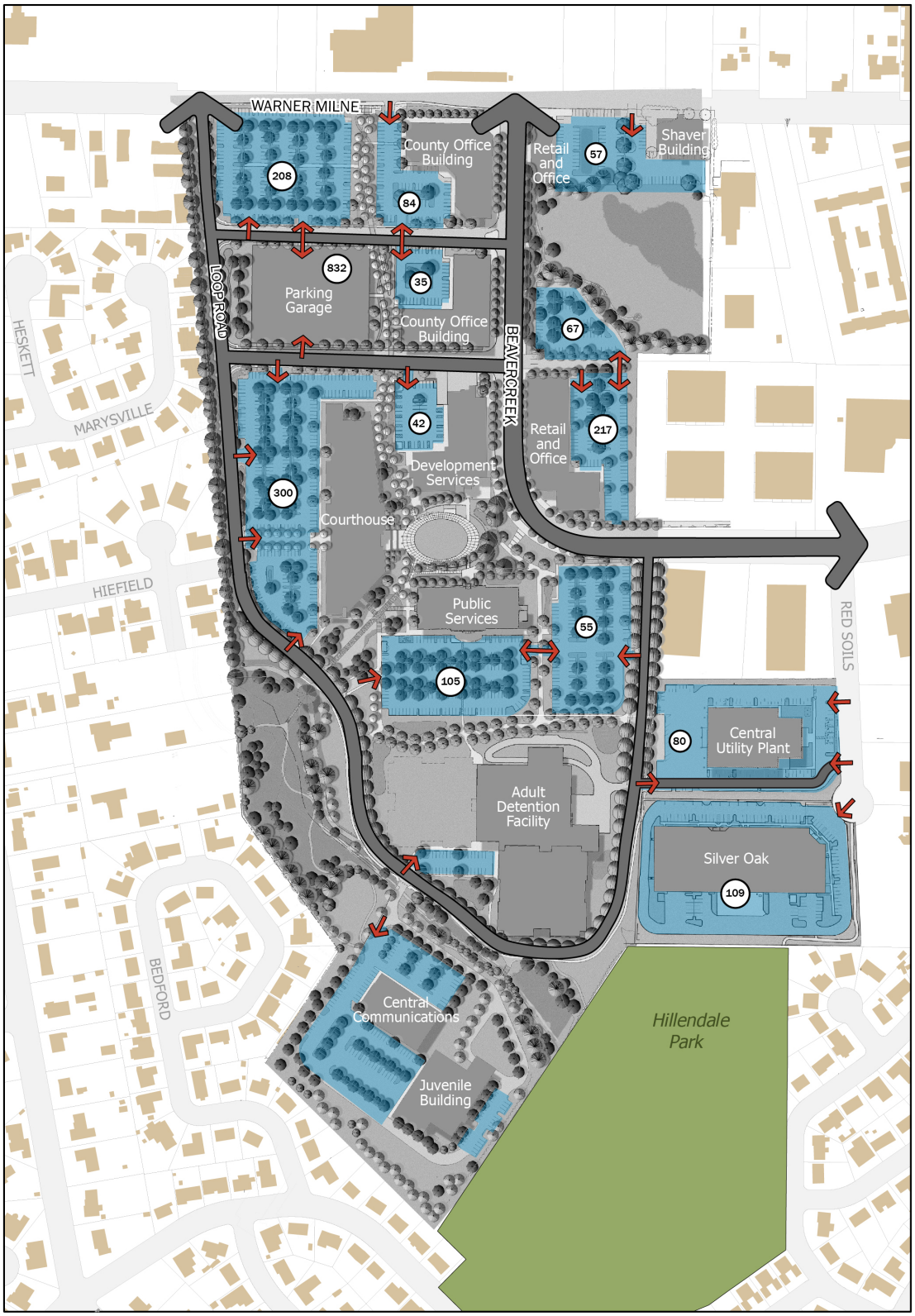
Type C: This Road segment is functional in nature and consists of one travel lane in each direction, on-street parking on both sides of the roadway, a curb-edge sidewalk, and outer planting strips.

Type D: This Loop Road segment consists of one 12' travel lane in each direction, no parallel parking, a curb-edge planting strip, and a 5-foot sidewalk on the east side of the street. The surrounding vegetation, especially in the Memorial Grove area, precludes need for a dedicated planting strip on the south side of the roadway.

Type E: This Loop Road segment consists of one travel lane in each direction, a center turn lane that allows access to the east-west streets, a bike lane on each side, curb-edge planting strips, and sidewalks on both sides of the street. Landscaping along the western edge of the site will be 10 feet wide to help provide an adequate visual screen buffer for the residential neighborhoods located along the western edge of the campus.



Street Type E - Loop Road
(Note: Section shown looking south.)



Parking

Parking Lot
Parking Entry
105 Parking Capacity

300 Feet

Parking Guidelines: Parking lots will be located behind or adjacent to buildings and in surface lots during the initial phases of development. In the full build-out, a parking structure will be constructed as shown on the Parking Plan in the area north of Library Court and west of the future County Office Building.

Per Section 17.52 of the Oregon City municipal code, a minimum of 1,935 parking spaces and a maximum of 2,905 parking spaces are required for the institutional and commercial land uses anticipated in the Master Plan. In response to the City's parking requirements, the plan shows 2,342 total spaces, of which 100 are dedicated to on-street parking along Beavercreek Road and 832 are in a 4-story parking garage. The 2,342 spaces shown on the plan includes 160 spaces for the detention facility.

Pedestrian Guidelines: Pedestrian traffic will be encouraged by creating a hierarchy of pathways and open spaces throughout the campus. The front doors of all public buildings will be oriented to the internal pedestrian and bike spine or the street. A comprehensive pedestrian system will be designed that includes connections to the campus from every direction.

Bicycle Guidelines: A comprehensive bike system will be created that includes bicycle routes from every direction. To encourage a safe and attractive internal bicycle path, a system will be created that moves bicyclists from the north edge of the campus at Warner Milne Road to the land uses south of Beavercreek Road. A bicycle/pedestrian spine will be developed that runs north-south through the campus, connecting to each building and terminating at the park.

Infrastructure Guidelines: For more information on the proposed infrastructure, see the technical engineering diagrams contained in Appendix B.

Pedestrian Circulation

Main Path
Secondary Path
Main Sidewalk
Secondary Sidewalk

300 Feet

Bicycle Access

Water Guidelines: Fire and domestic water service for the campus buildings and irrigation needs will be provided per the City's public works design standards and the water system master plan.

The Master Plan will build on the existing network of public water mains to provide adequate water supply for domestic, irrigation and fire protection needs. A looped network of mains will provide redundant service insuring supply and providing for future maintenance, while allowing continuous service. Fire hydrants will be located to provide code required coverage to all buildings. Separate metered domestic services and fire service lines will provide service to all new buildings from the public mains.

It is anticipated that one 4-inch domestic meter with 6-inch service would be provided off of the public main along with an 8-inch fire service both with approved backflow prevention devices to serve the ADF. Three fire hydrants are required, two on the west and one on the east side of the ADF, per Fire Marshall requirements. The design will be further coordinated with the Fire Marshall to ensure access requirements, hydrant locations and FDC locations.

Stormwater Guidelines: The Master Plan will incorporate a number of detention and water qualities best management practices, including vegetative Type A treatment/detention ponds, underground detention pipes/vaults where above ground facilities are not feasible, and landscaped bio-filtration swales that are designed to treat sheet flow from all parking lots and the pedestrian/bike spine. The Master Plan will respect the two existing basins and preserve basin flow characteristics. Stormwater management will be provided for all new development per the City of Oregon City's Stormwater and Grading Design Standards.

Stormwater quantity control or detention facilities are required to detain runoff created by the new developed impervious surfaces. These facilities shall be designed per the following requirements:

The post-development peak stormwater discharge rate from the development site for the two-year, 24-hour duration design storm events shall at no time exceed 50% of the pre-development peak stormwater runoff rate for the same design storm event. The post-development peak stormwater discharge rate from the development site for the 5-year and 25-year, 24-hour duration design storm events shall at no time exceed the pre-development peak stormwater runoff rate for the same design storm events.

Water quality facilities are required for treatment of runoff from all new impervious surfaces. Water quality facilities shall be designed for treatment of 1/3 of the SCS 2-year, 24-hour design storm.

Water quality for parking areas shall be provided by bioswales (grassy swales) located within the landscape islands of the parking lot or other areas surrounding the building parking. Grading of the parking lots should allow for sheet flow of runoff directly to the swales through curb breaks, thus minimizing the need for excessive underground piped systems. If grading or site limitations prohibit the use of above ground vegetated surface facilities, below grade mechanical treatment systems may be used in accordance with City of Oregon City requirements.

The area around the proposed ADF drains to the Mud Creek basin. Stormwater management is required for both water quality and quantity in accordance with the City of Oregon City Stormwater and Grading Design Standards. The City and County encourage innovative design to stormwater management and will consider reasonable design strategies for water quality and quantity facilities with emphasis on "green" or sustainable strategies. Soil conditions in this area are typically not-conducive to infiltration of stormwater therefore retention of stormwater is unlikely, however the Geotechnical Investigation Report should be reviewed for infiltration feasibility. All stormwater management facilities shall provide adequate landscaping per section 4.2.2.3 T of the City of Oregon City Stormwater and Grading Design Standards.

Stormwater quantity control may be either buried underground detention vaults, or above ground detention ponds, or a combination of the two. Issues to consider include; sizing to accommodate full build-out of ADF, and location of pond with respect to the Water Quality Resource Area/Mud Creek vegetated corridor buffer.

Due to the above listed issues, a separate underground detention facility may be best suited for this phase. Anticipated detention volumes for the ADF roof drains, parking lot, and west side access road are estimated at between 12,000 and 15,000 cubic feet of volume. This facility must outfall to Mud Creek.

The existing dual purpose water quality/water quantity pond located northeast of the proposed ADF will need to be reconstructed in order to facilitate the ADF access road to Red Soils Court. This pond was constructed to manage storm flows from the Public Services Building parking lot and portions of Kaen Road. Reconstruction can be accomplished by re-grading the pond to include detention volume areas southeast of the access road with connections via pipe. A second option would be to create an underground storage system in order to place the road directly on top of the facility. Anticipated detention volumes for the existing pond redesign is estimated at between 8,000 and 12,000 cubic feet of volume.

Landscape irrigation may be provided by rainwater re-use. It is anticipated that this retention volume will be upstream and in series with the conventional stormwater detention and placed underground. Preliminary calculations indicate that the storage volume for the landscape irrigation will be around 15,000 gallons. It is anticipated that the storage volume will be created by Stormtech Arched Chambers or approved equal.

Sanitary Sewer Guidelines: Sanitary Sewer service to the Red Soils Campus is provided by two City owned and maintained lines, one in Beavercreek Road and one in Warner Milne Road. The campus re-development will provide new or re-configured sewer mains that will provide sewer service from new buildings to the existing City mains. Wastewater from these City mains will continue to be conveyed to the Tri-County treatment plant.

The ADF site is served with public sanitary sewer by an existing public sewer line that runs west from the existing jail, north, and then east to Beavercreek Road. The diameter of the public main at the connection area near the proposed ADF is 8 inches. This 8-inch line should be able to remain in its current location for the ADF construction. This needs to be verified against the final site plan/building location. It is anticipated that one or two laterals would be provided from the 8-inch sewer to the building along the west side, and connected to an existing public sanitary manhole in Kaen Road (approximately 150 feet south of the existing animal control driveway). The existing sanitary sewer system expands to 15-inch diameter prior to leaving the Red Soils Campus. A downstream analysis was conducted by Harper Houf Peterson Righellis, Inc. in January 2008. The results did not indicate any capacity issues resulting from the proposed ADF facility (City of Oregon City is currently reviewing).

Silver Oak is currently served directly from Red Soils Road. If required, additional service and/or connections should be easily made.

Grading Guidelines: Grading and Erosion Control shall be designed in accordance with Chapter 3 of the City of Oregon City Stormwater and Grading Design Standards, the IBC and the project Geotechnical Investigation Report. Grading activities within the Water Quality Resource Overlay shall comply with the City of Oregon City Municipal Code Chapter 17.49. A DEQ NPDES 1200-C permit is also required for the projects involving more than one acre of disturbed site area.

The site grading is planned to follow the natural slope characteristics, and to allow for the two natural drainage basins to be respected. Cut and fill slopes are intended to follow the requirements of the code and retaining walls are intended to be limited and are mainly utilized to protect the natural resource buffer areas. Roadway grades will be two to six percent and parking lot grades are anticipated to be less than five percent with ADA parking stalls at two percent maximum. Stormwater pond side-slopes are designed with a 4-foot horizontal to 1-foot vertical maximum grade. The Central Plaza area framed by the Courthouse, the Public Services Building, and the Development Services Building will be filled to create a level area for public gathering and use.

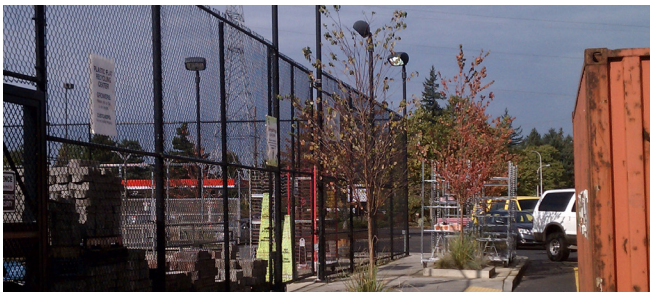
There is an approximate 13-foot fall across the proposed Adult Detention Facility building footprint, from north to south. The design of the building and site grading should consider options for stepping the building to accommodate the site grades and minimize site grading and site and foundation walls. Temporary gravel parking lots will be utilized to provide interim campus parking. Stormwater management for temporary gravel parking lots is not required. There is no regrading proposed in conjunction with the re-use of the Silver Oak building.

Temporary Flexible Space Guidelines: County functions occasionally require the use of flexible temporary space to accommodate peak-period staffing, isolation of work processes, or other factors. Such structures shall be allowed on the Red Soils campus when not located between a building and a public street frontage. When located between a building and non-County property, they shall be screened with fencing.

Temporary structures shall be allowed at the property located at 256 Warner Milne Road. Temporary spaces shall be exempt from the following criteria of the Oregon City Municipal Code when the temporary structures are screened with vegetation or a site obscuring fence and will not be located on the site for more than five years:

- 17.62.050(A)(9)- Pedestrian pathways and direct access to the street.
- 17.62.050(C)(5)- Increase front yard setback.
- 17.62.055(D)(2 and 3)- Front façade and primary entrance oriented towards street and maximum entry setback.
- 17.62.055 (G and H)- Variation in massing and minimum wall articulation.
- 17.62.055 (I)- Façade transparency.
- 17.62.055 (J)- Roof treatment.
- 17.62.080 (C)(1)- Main building entrances and transit streets.
- 17.52.060(A)(2)- Landscaping between temporary building and the property line.
- 17.52.060(C)- Landscaping between temporary and parking area.

Portland Dispatch Center's Forked Privacy Fence
Painted metal with forked top, 8-foot high.



Oregon City retail enclosure security fence

Central Utility Plant Equipment Enclosure
Fence: Split face CMU with metal panels

PSB generator equipment screening from Kaen Road
Slatted painted chain link, 6-foot high.

Fencing Guidelines: Providing a safe environment for public and staff safety is the most important consideration for the County. All departments in Federal, State and local agencies must be aware of a vast array of threats and incorporate recommendations from the Department of Homeland Security, State and local law enforcement agencies.

For buildings in the Front Room and Living Room, fencing and screening may be more decorative, and no taller than 6 foot, unless functional needs require screening to be higher. In the Back Room where screening and fencing are required for public safety related to law enforcement or emergency service activities, privacy fencing must be 8, 12 or 16-foot high unpainted chain link provided that appropriate landscape or other integrated environmental design is incorporated depending on the location.

Proposed allowed fencing types are:

Decorative Fence: Campus-wide application, to code allowable height:

- Louvered or perforated metal panel.
- Split-face Concrete Masonry Units (CMU).
- Slatted or un-slatted chain link, painted, 4- or 6-foot high.
- "Good neighbor" style, wooden rails or slats, painted or unpainted.
- Forked Privacy Fence, 6-foot (picture from Portland 911 Dispatch Center), painted.
- Tilt-up or site cast concrete, painted or unpainted.

Privacy Fence: At law enforcement or emergency service activities.

- Un-slatted, painted or unpainted chain link, 12-foot high.
- Un-slatted, painted or unpainted chain link for fences lower than 12-foot high with or without barbed or razor wire.
- Painted and slatted chain link, 12-foot high.

Louvered fence at DSB transformer, Library Court
Fence: Concrete and louvered metal panel, 12-foot high. Concrete and Mealt pane

Existing chain link fencing at Silver Oak easement
Fence: chain link, 4-foot high.

Garbage enclosure at Silver Oak
Fence: Slatted chain link and concrete, 6-foot high.

New medical wing addition at ADF
Fence: Chain link with barbed wire, 8-foot high.

Non-Conforming Existing Fences

300 Feet

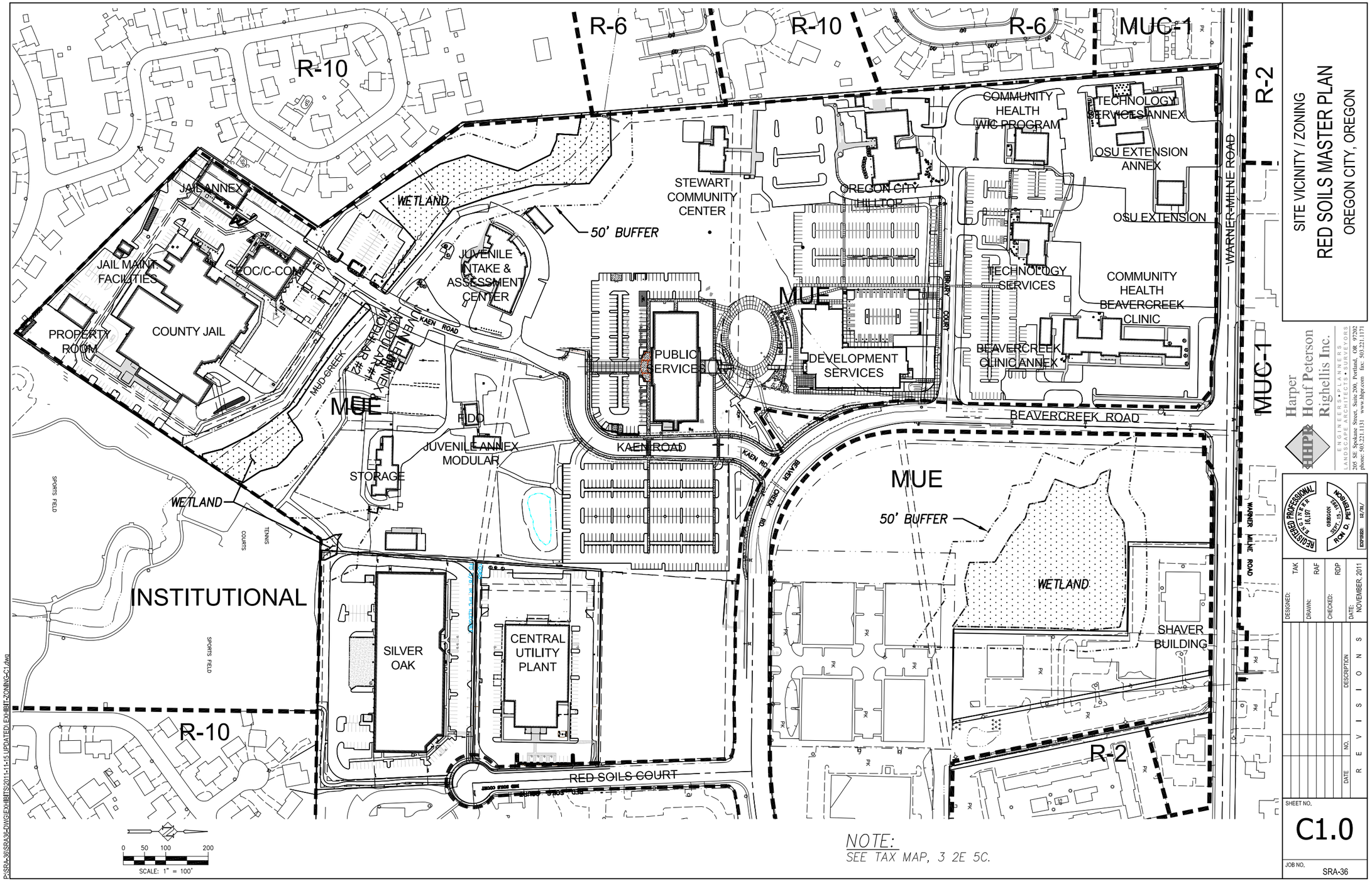
A Appendix

A. Not Used
D. Site Furnishings
E. Bicycle Parking Requirements
F. Proposed On-Site Parking

Revisions to Master Plan Summary

April 2019 - OSU Extension Master Plan Update

Revision	Page #	Description
1		Updates to acknowldedgements
2	2	Update purpose, last paragraph.
3	11	Updated building names in Legend on Full Build Out 2030 Plan
4	12	Updated the Area tabulations to change the description and area for Retail and Office SM to OSU Extension Building. The net campus building area stays the same, as building areas for County Office Building 1 & 2 were adjusted downward.
5	12	Updated table to change the name of the Existing OSU Extension and OSU Extension Annex Buildings.
6	12	Revised note 5. to remove reference to the retail building, now replaced by the OSU Extension Building in the 2018 update.
7	12	Add a column to reflect the areas associated with the 2018 Update.
8	12	Consolidated Existing, Phase 1 and 2012 Update into a single list of Existing Facilities.
9	12	Renamed County Office Building 2 to Health, Housing and Human Services building.
10	13	Updated building names in Legend on Full Build Out 2030 Plan
11	41	Updated graphic and Paragraph 2 of section 4.3 Rooms
12	46	Updated building areas on Program graphic
13	App. E	Revised Appendix E to reflect updated existing conditions.
14	App. E	Revised Appendix E to add a line for the OSU Extension Building Bicycle parking counts.
15	App. E	Revised Appendix E to remove a line for the small Retail and Office building in the full buildout phase (replaced by OSU Extension facility shown in the 2018 phase).
16	App. E	Revised Appendix E to update the bicycle counts based on the revised building areas of County Office Building 1 and Health, Housing and Human Services Building (formerly County Office Building 2).
17	App. F	Revised Appendix F, Proposed On-Site Parking to replace the 2012 Update parking summary with a 2018 parking summary with OSU Extension Building parking counts.


R-10
R-6
R-10
R-6
MUC-1
R-2
MUC-1
JAIL ANNEX
WETLAND
50' BUFFER
STEWART COMMUNITY CENTER
OREGON CITY HILLTOP
COMMUNITY HEALTH WIC PROGRAM
TECHNOLOGY SERVICES ANNEX
OSU EXTENSION ANNEX
OSU EXTENSION
WARNER-MILNE ROAD
JAIL MAINT. FACILITIES
EOC/C-COM
JUVENILE INTAKE & ASSESSMENT CENTER
PROPERTY ROOM
COUNTY JAIL
MUE
MODULAR #1
MODULAR #2
KAEN ROAD
MUD CREEK
PUBLIC SERVICES
DEVELOPMENT SERVICES
TECHNOLOGY SERVICES
COMMUNITY HEALTH BEAVERCREEK CLINIC
BEAVERCREEK CLINIC ANNEX
BEAVERCREEK ROAD
FIDO
JUVENILE ANNEX MODULAR
STORAGE
KAEN ROAD
BEAVER CREEK RD
MUE
50' BUFFER
WETLAND
SPORTS FIELD
COURTS
TENNIS
INSTITUTIONAL
SILVER OAK
CENTRAL UTILITY PLANT
SHAVER BUILDING
WARNER MILNE ROAD
R-10
R-2
RED SOILS COURT
0 50 100 200
SCALE: 1" = 100'
NOTE:
SEE TAX MAP, 3 2E 5C.
SITE VICINITY / ZONING
RED SOILS MASTER PLAN
OREGON CITY, OREGON
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171
REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 15, 1987
RICHARD D. PETERSON
EXPIRES: 12/31/
DESIGNED: TAK
DRAWN: RAF
CHECKED: RDP
DATE: NOVEMBER, 2011
DESCRIPTION
NO.
DATE
REVISIONS
SHEET NO.
C1.0
JOB NO.
SRA-36
P:\SRA-36\SRA36-CIVIL\EXHIBITS\2011-11-15 UPDATED EXHIBIT-ZONING-C1.dwg

EASEMENTS / RIGHTS OF WAY
RED SOILS MASTER PLAN
OREGON CITY, OREGON

JAIL ANNEX
JAIL MAINT. FACILITIES
EOC/C-COM
PROPERTY ROOM
COUNTY JAIL
JUVENILE INTAKE & ASSESSMENT CENTER
STEWART COMMUNITY CENTER
OREGON CITY HILLTOP
COMMUNITY HEALTH WIC PROGRAM
TECHNOLOGY SERVICES ANNEX
OSU EXTENSION ANNEX
OSU EXTENSION
TECHNOLOGY SERVICES
COMMUNITY HEALTH BEAVERCREEK CLINIC
BEAVERCREEK CLINIC ANNEX
DEVELOPMENT SERVICES
PUBLIC SERVICE
KENT'L PLAZA
JUVENILE ANNEX MODULAR #1 & MODULAR #2
FIDO
JUVENILE ANNEX MODULAR
STORAGE
KAEN ROAD
BEAVERCREEK ROAD
WARNER-MILNE ROAD
LIBRARY COURT
SILVER OAK
CENTRAL UTILITY PLANT
RED SOILS COURT
BEAVERCREEK ROAD

EXISTING PROPERTY LINE
EXISTING UTILITY EASEMENT
EXISTING STORM SEWER EASEMENT
EXISTING 8" WATERLINE
EXISTING ABANDONED SANITARY SEWER FORCE MAIN
EXISTING PUBLIC WATER EASEMENT
EXISTING PRIVATE SANITARY SEWER
EXISTING CLAIRMONT CONNECTION 2010
EXISTING 8" WATERLINE W/ 10' EASEMENT
EXISTING 12" WATERLINE W/ 15' EASEMENT
EXISTING 35' STORM EASEMENT
EXISTING 15' WATERLINE EASEMENT TO BE MODIFIED SEE WATER SYSTEM PLAN
PRIVATE METER AND MAIN REMOVED 2010
EXISTING 5' UTILITY EASEMENT
EXISTING 20' WATER EASEMENT
EXISTING 25' PED. ACCESS AND UTILITY EASEMENT
EXISTING 5' PED. EASEMENT
EXISTING 15' UTILITY EASEMENT
EXISTING 20' UTILITY EASEMENT
EXISTING 15' WATER EASEMENT
EXISTING 60' RED SOILS COURT R.O.W.
EXISTING 60' R.O.W.
EXISTING BEAVERCREEK R.O.W. SEE IMPROVEMENT PLAN FOR PROPOSED REALIGNMENT OF BEAVERCREEK ROAD
EXISTING PUBLIC 12" WATERLINE TO BE RELOCATED
EXISTING PUBLIC 12" CITY WATERLINE
EXISTING 15' STORM EASEMENT TO BE MODIFIED SEE STORM SEWER PLAN
EASEMENT TO BE MODIFIED SEE WATER SYSTEM PLAN AND SANITARY SEWER PLAN
EXISTING UTILITY EASEMENT TO BE MODIFIED SEE SANITARY SEWER PLAN
6" COUNTY WATERLINE REMOVED W/ PUBLIC SERVICE BUILDING PROJECT
SANITARY SEWER MAIN REMOVED W/ PUBLIC SERVICE BUILDING PROJECT
EXISTING 20' UTILITY EASEMENT
EXISTING 20' SANITARY SEWER EASEMENT
EXISTING 20' STORM SEWER EASEMENT
EXISTING 15' PUBLIC WATERLINE EASEMENT
PRIVATE KAEN ROAD
PRIVATE STORM
PRIVATE STORM DETENTION POND
MUD CREEK

0 50 100 200
SCALE: 1" = 100'

P:\SRA-36\SRA36-DWG\EXHIBITS\2011-1-15 UPDATED\ EXHIBIT-EASMNTS-C2.dwg

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

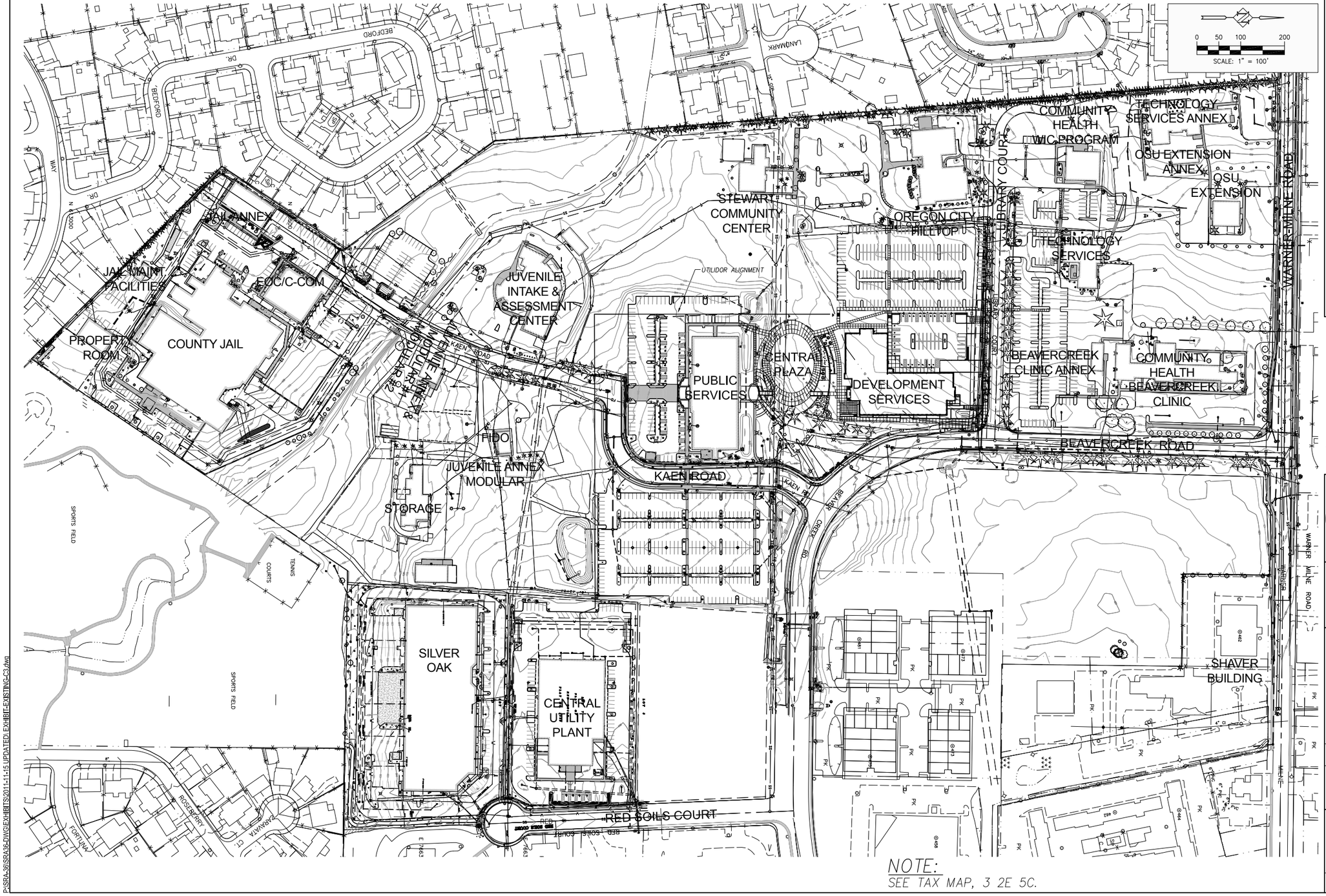
REGISTERED PROFESSIONAL ENGINEER — OREGON — JULY 15, 1978 — RON D. PETERSON — EXPIRES: 12/31/

DESIGNED:	TAK
DRAWN:	RAF
CHECKED:	RDP
DATE:	NOVEMBER, 2011

NO.	DESCRIPTION	DATE
	REVISIONS	

SHEET NO.
C2.0

JOB NO.
SRA-36



NOTE:
SEE TAX MAP, 3 2E 5C.

EXISTING CONDITIONS
RED SOILS MASTER PLAN
OREGON CITY, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 15, 1987
RON D. PETERSON
EXPIRES: 12/31/

DESIGNED:	TAK
DRAWN:	RAF
CHECKED:	RDP
DATE:	NOVEMBER, 2011

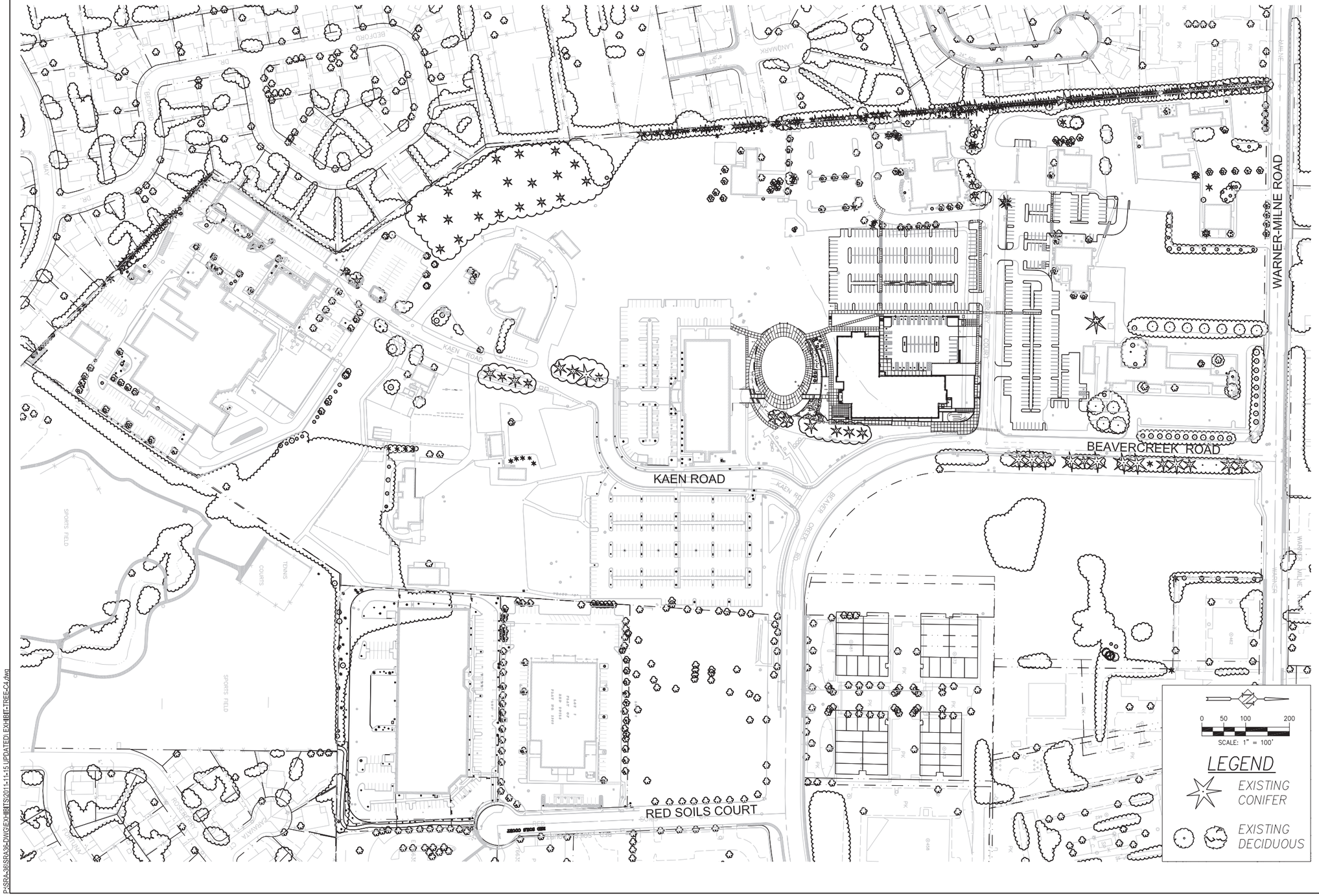
REVISIONS

NO.	DESCRIPTION	DATE

SHEET NO.
C3.0

JOB NO.
SRA-36

P:\SRA-36\SDA\36-DWG\EXHIBITS\2011-11-15 UPDATED EXHIBIT-EXISTING-C3.dwg



EXISTING TREE SURVEY

RED SOILS MASTER PLAN

OREGON CITY, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REGISTERED PROFESSIONAL ENGINEER
OREGON JULY 15, 1975
ROBERT D. PETERSON
EXPIRES: 12/31/

DESIGNED:	TAK
DRAWN:	RAF
CHECKED:	RDP
DATE:	NOVEMBER, 2011

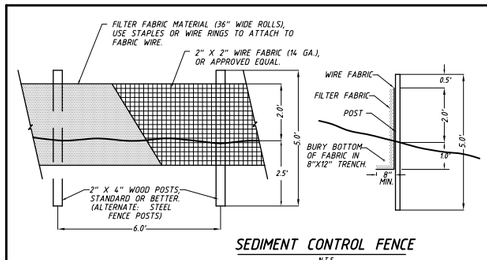
NO.	DESCRIPTION	DATE
	REVISIONS	

SHEET NO.

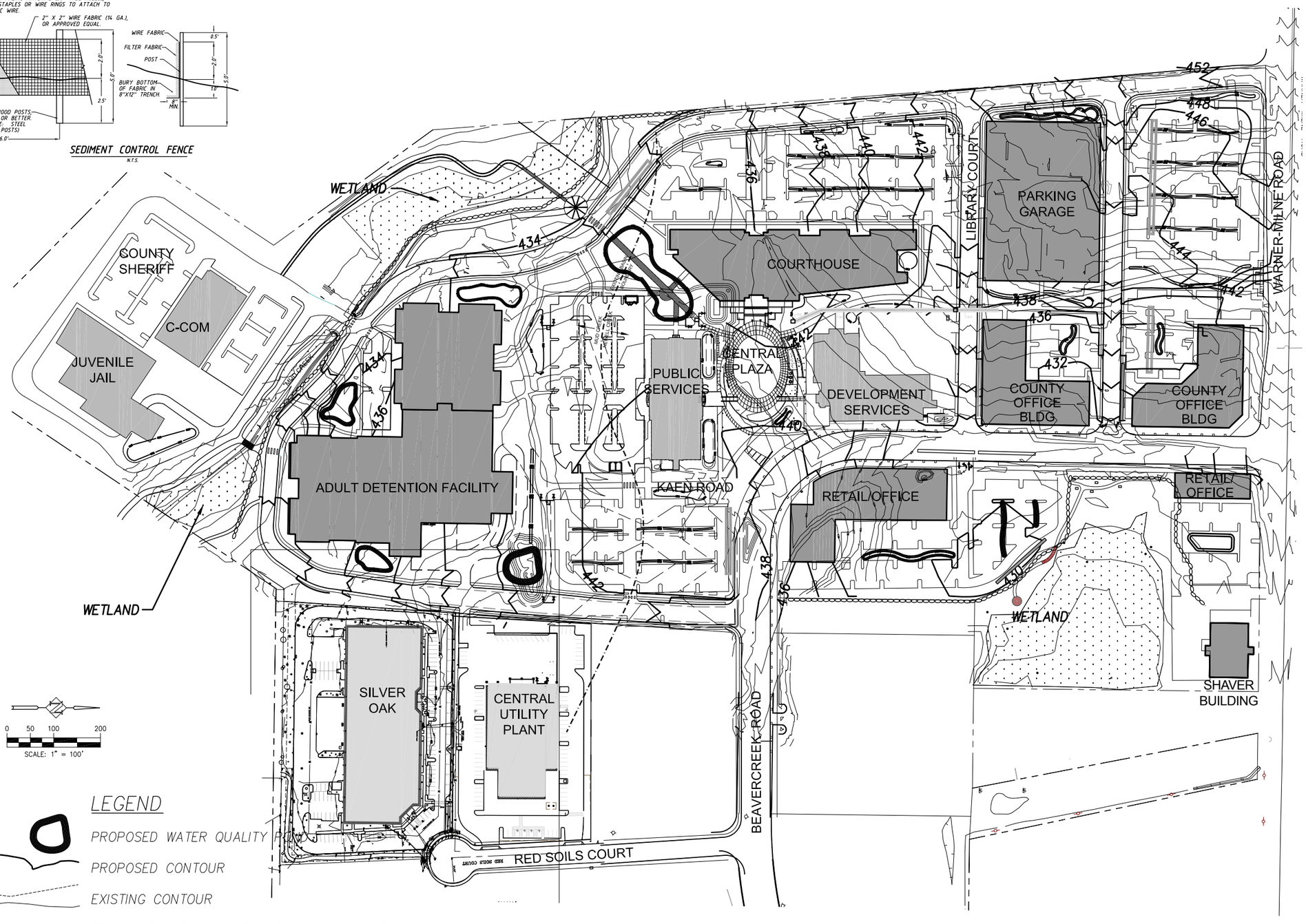
C4.0

JOB NO. SRA-36

P:\SRA-36\SRA36-DWG\EXHIBITS\2011-11-15 UPDATED\ EXHIBIT-TREE-C4.dwg



SEDIMENT CONTROL FENCE
N.T.S.



0 50 100 200
SCALE: 1" = 100'

LEGEND

PROPOSED WATER QUALITY POND

440 PROPOSED CONTOUR

EXISTING CONTOUR

TEMPORARY SEDIMENT FENCE DURING CONSTRUCTION

GRADING AND ESC PLAN

RED SOILS MASTER PLAN

OREGON CITY, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REGISTERED PROFESSIONAL ENGINEER
OREGON JULY 15, 2005 ROBERT D. PETERSON
EXPIRES: 12/31/

DESIGNED:	TAK
DRAWN:	RAF
CHECKED:	RDP
DATE:	JUNE, 2008

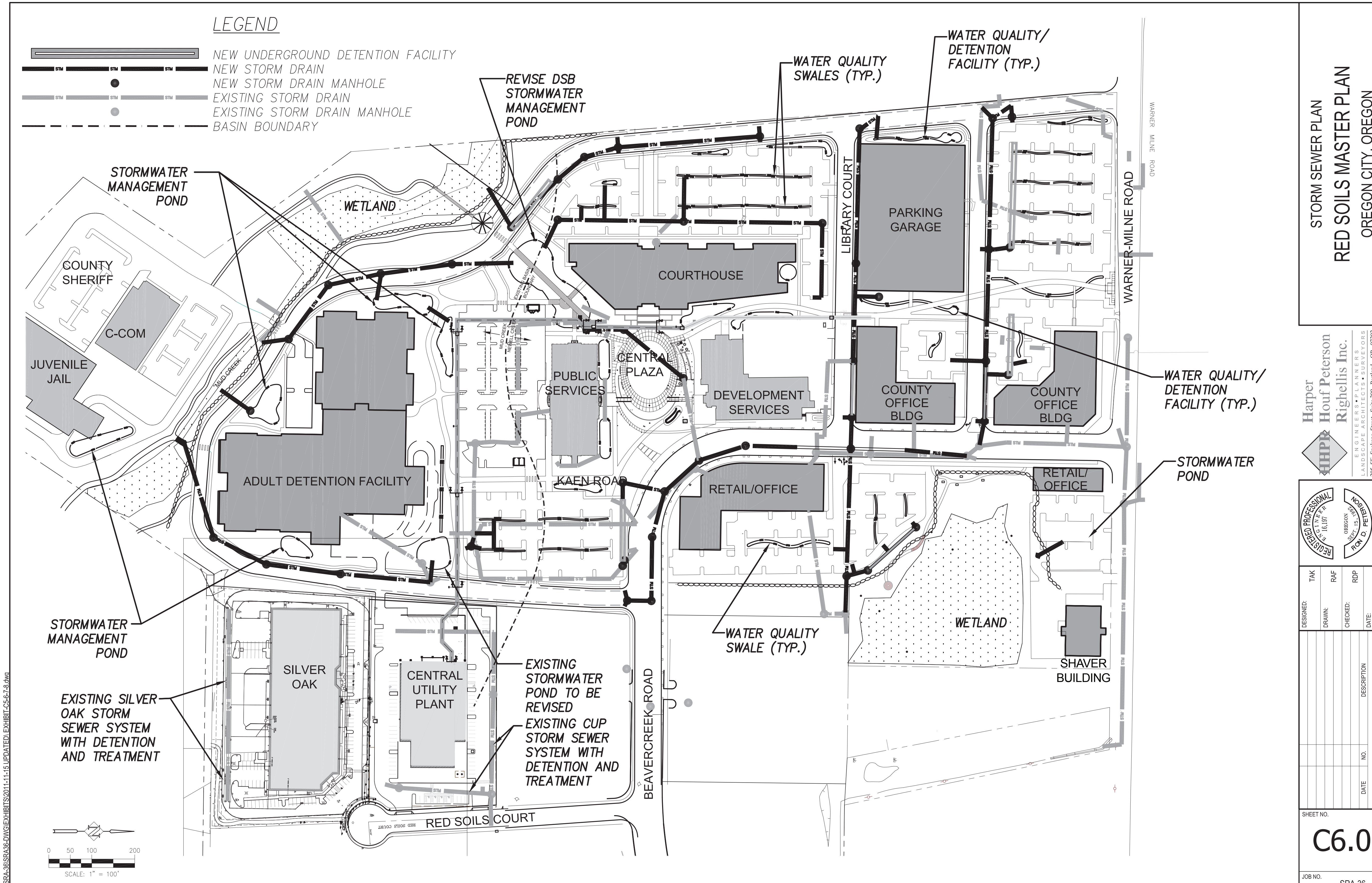
REVISIONS

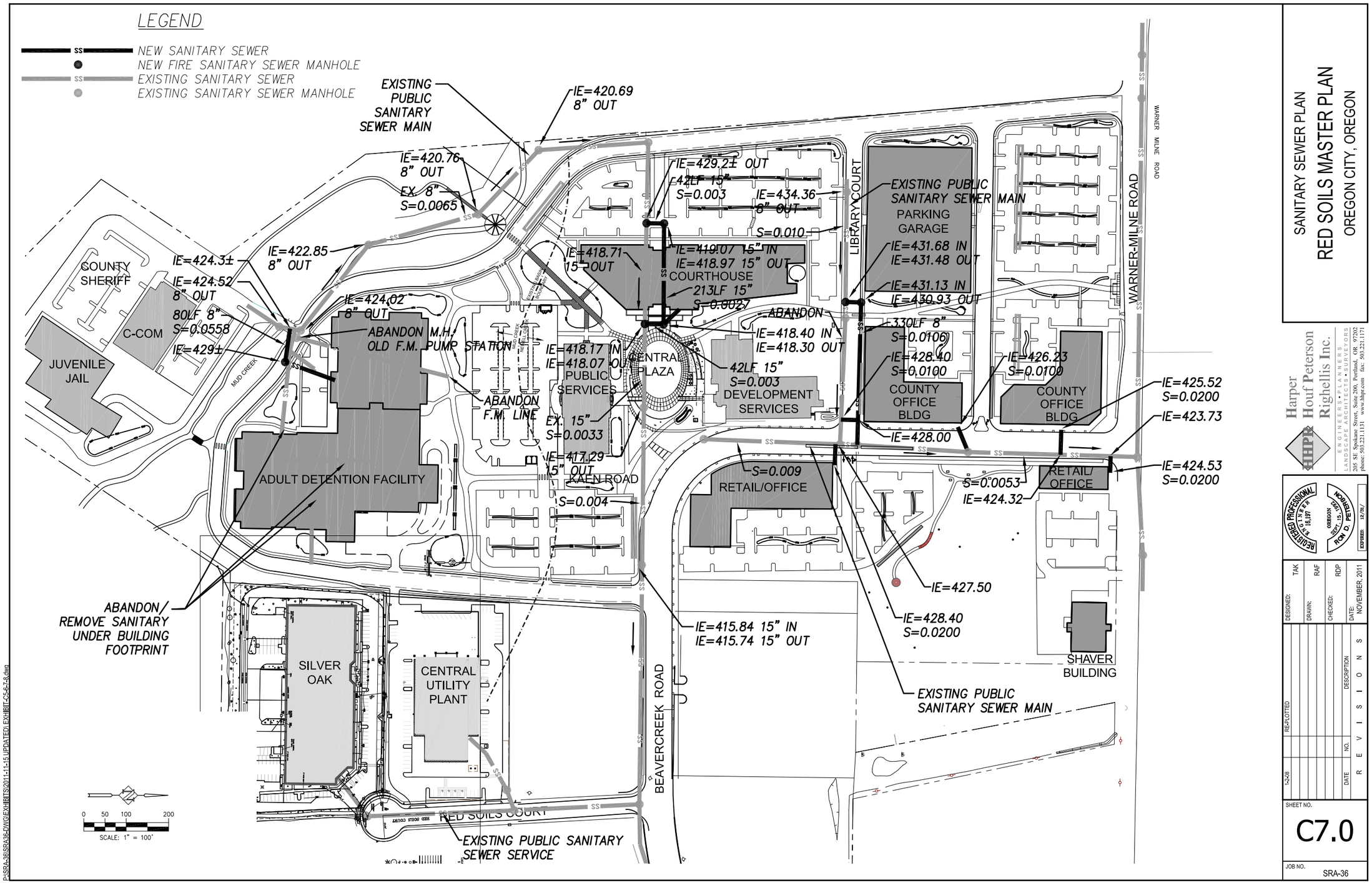
NO.	DESCRIPTION	DATE

SHEET NO.
C5.0

JOB NO.
SRA-36

P:\SRA-36\SRA36-DWG\EXHIBITS\2011-11-15 UPDATED EXHIBIT-C5-6-7-8.dwg


LEGEND
NEW UNDERGROUND DETENTION FACILITY
NEW STORM DRAIN
NEW STORM DRAIN MANHOLE
EXISTING STORM DRAIN
EXISTING STORM DRAIN MANHOLE
BASIN BOUNDARY
REVISE DSB STORMWATER MANAGEMENT POND
WATER QUALITY SWALES (TYP.)
WATER QUALITY/ DETENTION FACILITY (TYP.)
STORMWATER MANAGEMENT POND
WETLAND
COUNTY SHERIFF
C-COM
JUVENILE JAIL
ADULT DETENTION FACILITY
PUBLIC SERVICES
CENTRAL PLAZA
COURTHOUSE
PARKING GARAGE
LIBRARY COURT
WARNER-MILNE ROAD
DEVELOPMENT SERVICES
COUNTY OFFICE BLDG
COUNTY OFFICE BLDG
WATER QUALITY/ DETENTION FACILITY (TYP.)
KAEN ROAD
RETAIL/OFFICE
RETAIL/ OFFICE
STORMWATER POND
STORMWATER MANAGEMENT POND
WATER QUALITY SWALE (TYP.)
WETLAND
SHAVER BUILDING
SILVER OAK
CENTRAL UTILITY PLANT
EXISTING STORMWATER POND TO BE REVISED
EXISTING CUP STORM SEWER SYSTEM WITH DETENTION AND TREATMENT
EXISTING SILVER OAK STORM SEWER SYSTEM WITH DETENTION AND TREATMENT
BEAVERCREEK ROAD
RED SOILS COURT
0 50 100 200
SCALE: 1" = 100'
STORM SEWER PLAN
RED SOILS MASTER PLAN
OREGON CITY, OREGON
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171
DESIGNED: TAK
DRAWN: RAF
CHECKED: RDP
DATE: NOVEMBER, 2011
REVISIONS
SHEET NO.
C6.0
JOB NO.
SRA-36



SANITARY SEWER PLAN
RED SOILS MASTER PLAN
OREGON CITY, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REGISTERED PROFESSIONAL ENGINEER
OREGON JULY 15, 2005 ROBERT D. PETERS
EXPIRES: 12/31/

DESIGNED:	TAK
DRAWN:	RAF
CHECKED:	RDP
DATE:	NOVEMBER 2011

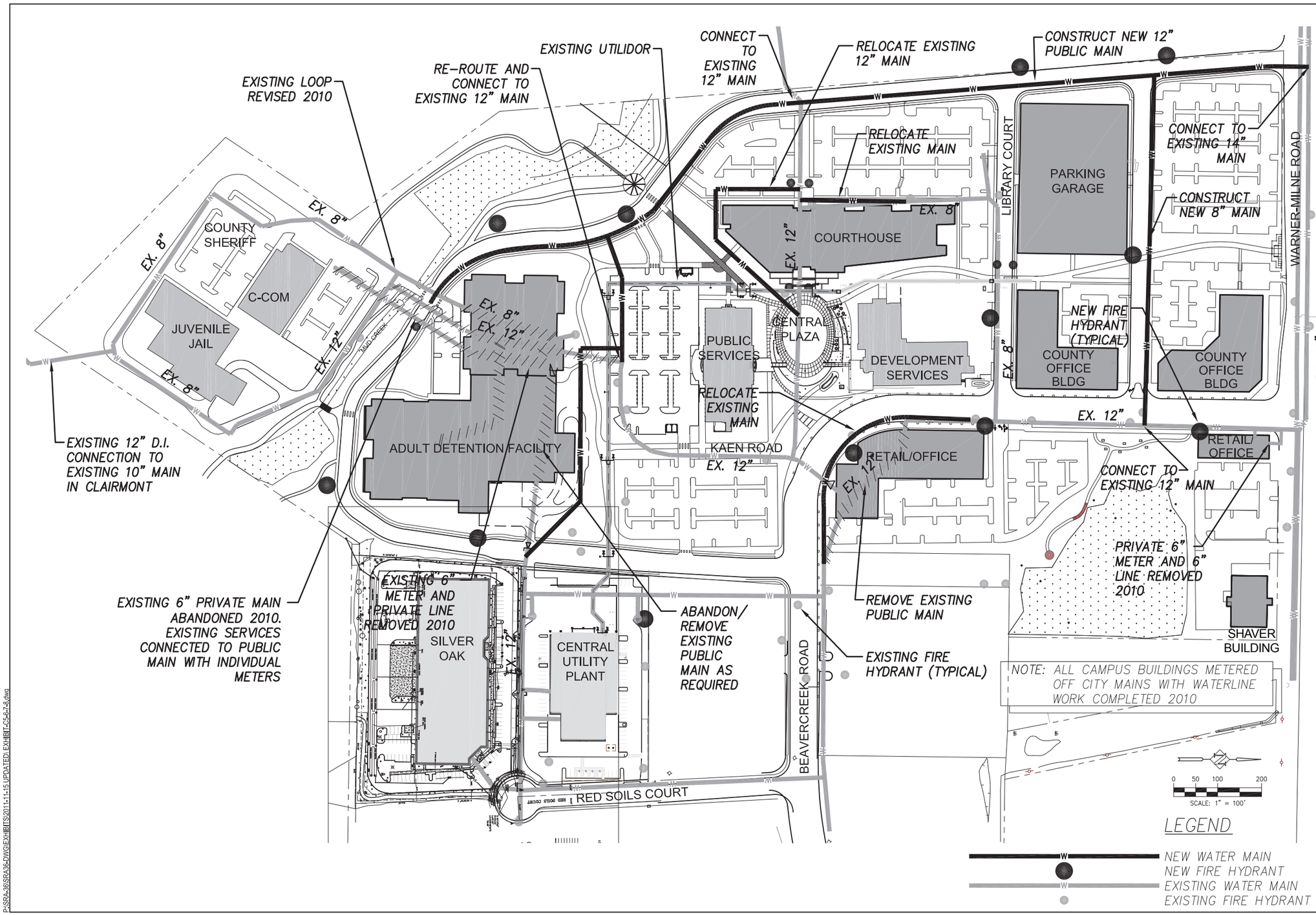
DATE	NO.	DESCRIPTION
1-2-08		RE-PLOTTED

REVISIONS

SHEET NO.
C7.0

JOB NO.
SRA-36

P:\SRA-36\SRA36-DWG\EXHIBITS\2011-11-15 UPDATED\ EXHIBIT-C5-6-7-8.dwg



WATER SYSTEM PLAN
RED SOILS MASTER PLAN
OREGON CITY, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REGISTERED PROFESSIONAL ENGINEER — OREGON JULY 15, 1987 — RON D. PETERSON — EXPIRES: 12/31/

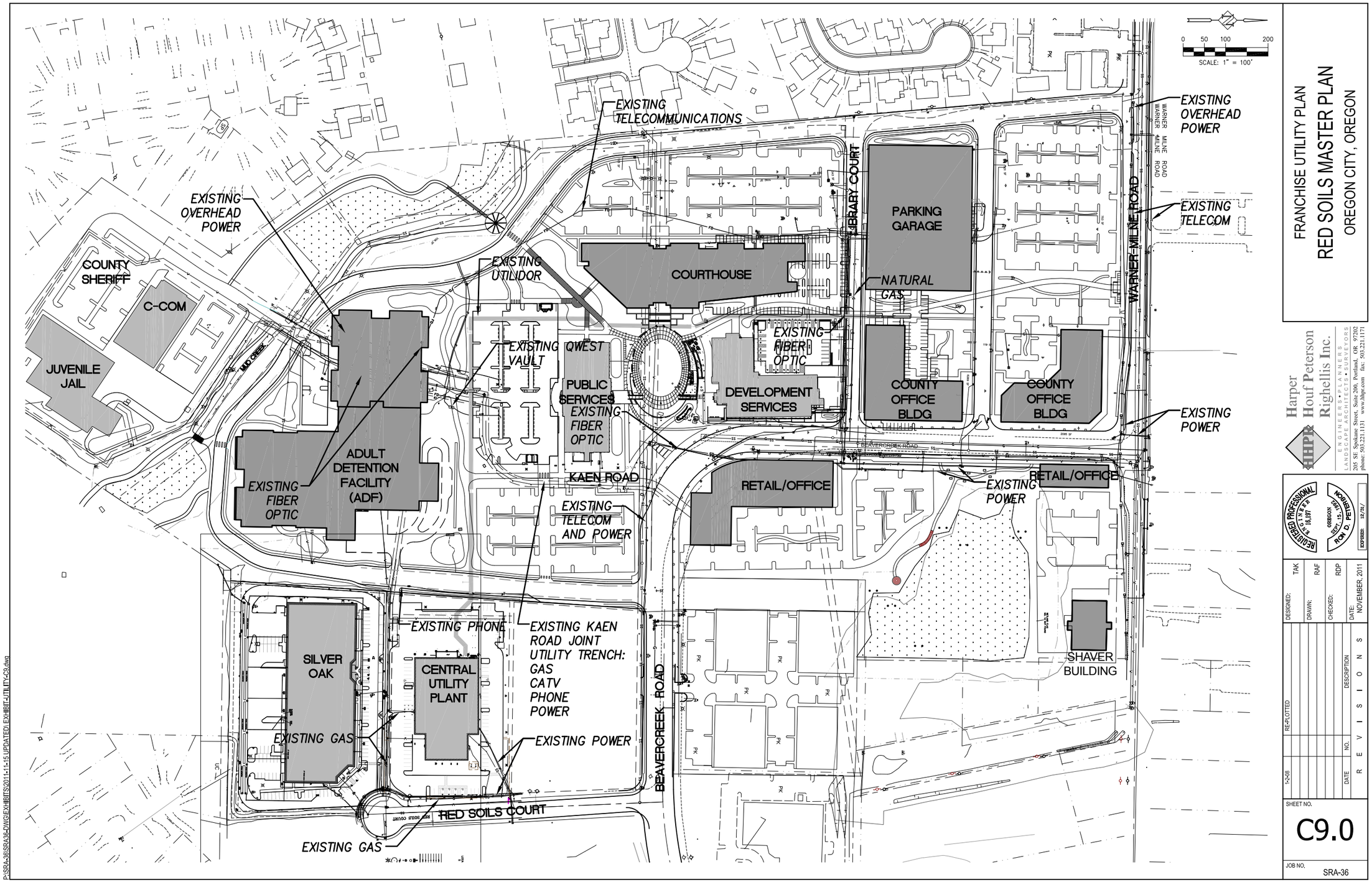
DESIGNED:	TAK
DRAWN:	RAF
CHECKED:	RDP
DATE:	NOVEMBER, 2011

NO.	DESCRIPTION	DATE
	REVISIONS	
	REPLOTTED	1-Oct-08

SHEET NO.
C8.0

JOB NO.
SRA-36

P:\SRA-36\SRA36-DWG\EXHIBITS\2011-11-15 UPDATED\ EXHIBIT-C5-7-8.dwg



FRANCHISE UTILITY PLAN
RED SOILS MASTER PLAN
OREGON CITY, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REGISTERED PROFESSIONAL ENGINEER 16,197
OREGON JULY 15, 1987 RON D. PETERSON
EXPIRES: 12/31/

DESIGNED:	TAK
DRAWN:	RAF
CHECKED:	RDP
DATE:	NOVEMBER, 2011

NO.	DESCRIPTION	DATE
	REVISIONS	
	RE-PLOTTED	1-2-08

SHEET NO.
C9.0

JOB NO.
SRA-36

P:\SRA-36\SRA36-DWG\EXHIBITS\2011-11-15 UPDATED\ EXHIBIT-UTILITY-C9.dwg

Type A Fence, Juvenile Department

Type H Fence, Public Services Building

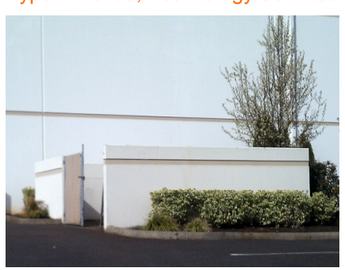
Type A Fence, Community Health

Type G Fence foreground, Storage Building
Type D Fence background, Adult Detention Facility

Type C Fence, Adult Detention Facility

Type D Fence, Adult Detention Facility

Type H Fence, Technology Services



Type A1 Fence,
Silver Oak

Type B Fence, Shaver Building

Type E Fence right, Adult Detention Facility
Type C Fence left, Adult Detention Facility

Type D Fence, Adult Detention Facility

Type F Fence, Adult
Detention Facility

Fence Type designations on Non-Conforming Existing Fences diagram

Site Furnishings and Lighting

Benches:

Landscape Forms - Sonoma series, metal-polyester powdercoat finish, color: silver, wood seat slats: jarrah

Bike Racks:

Columbia Cascade, CycLoops series, galvanized finish

Trash Receptacles:

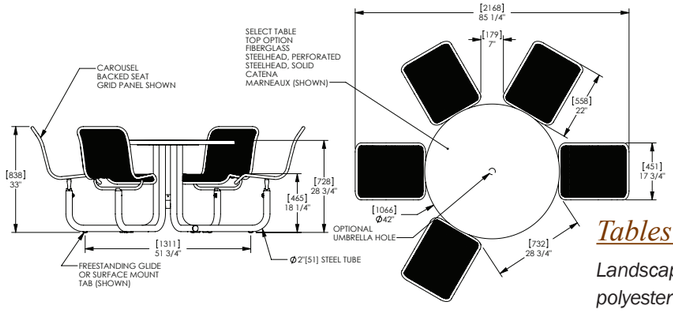
Landscape Forms - Presidio series, metal-polyester powdercoat finish, color: silver

Vehicular Area Lighting:

Emco, EcoLume ECA-18, metal halide, natural aluminum paint finish on a Valmont 20' high, 5" diameter non-tapered round aluminum pole, polyester powdercoat finish, color: natural aluminum

Pedestrian Lighting:

Lumec, Alura series, direct lighting, metal halide, color: light gray, on a Valmont 12" high, 5" diameter non-tapered round aluminum pole, poyester powdercoat finish, color: natural aluminum



Tables:

Landscape Forms - Carousel series, metal-polyester powdercoat finish, color: silver

Bollard Lights:

Landscape Forms - Annapolis series, metal-polyester powdercoat finish, color: silver

Bollards:

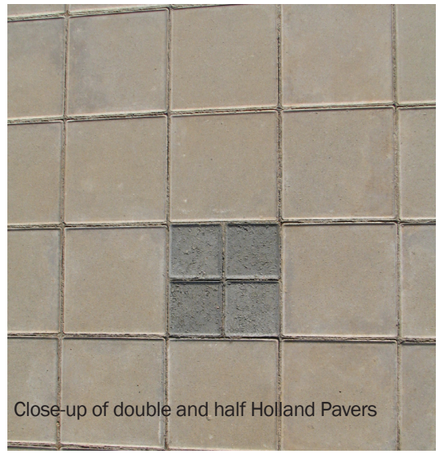
Landscape Forms - Annapolis series, metal-polyester powdercoat finish, color: silver

Pedestrian Lighting:

INVUE (MSA-70-MH-208-4S-FG-DP-L)

Typical Paving


Holland Pavers


Close-up of double and half Holland Pavers


Concrete header with Holland Pavers


Concrete walkway with detectable warning

Double Holland
Color: Mesa Buff
Texture: Face Mix
Size: 8” X 8” x 60mm

Half Holland
Color: “Granite”
Texture: Face Mix
Size: 4” X 4” X 60mm

Bicycle Parking Requirements Per City of Oregon City Standards
Updated July 2018

	Use	Auto Spaces	Required Bicycle Parking	Amount Required by Code	Existing Bicycle Parking	Proposed Bicycle Parking
Existing Facilities						-
Community Health	Commerical	56	1 per 20	3	5	-
Steward Community Center	Commerical	91	1 per 20	5	4	-
Oregon City Hilltop	Commerical	93	1 per 20	5	2	-
CCOM/County Jail	Institutional	163	1 per 30	5	5	-
County Buildings A&B *(former OSU Extension)*	Commerical	30	1 per 20	2	2	-
Technology Services	Commerical	26	1 per 20	1	0	-
Technology Services Annex	Commerical	20	1 per 20	1	0	-
Juvenile Intake & Assessment	Institutional	74	1 per 30	2	0	-
Juvenile Annex 1 (former Dog Services Admin)	Institutional	9	1 per 30	0.5	0	-
Juvenile Annex 2	Institutional	40	1 per 30	1	0	-
Storage Building (former Dog Services Shelter)	Institutional	15	1 per 30	0.5	0	-
Public Service Building	Commerical	366	1 per 20	18	19	-
Development Service Builidng	Commerical	416	1 per 20	21	47	-
Central Utility Plant	Institutional/Commercial	80	1 per 30+1 per 20	5	5	-
Silver Oak Building	Institutional/Commercial	19/73=92	1 per 30+1 per 20	5	10	-
2018 Update						
OSU Extension Service Building	Commercial	72	1 per 20	4	-	4
Subtotal for Current Condition at 2018 Update				**79**	**89**	**4**
Full Build Out (2030)						
Adult Detention Facility	Institutional	160	1 per 30	5	-	5
Central Communications	Commerical	80	1 per 20	4	-	4
Juvenile Facilities	Institutional	241	1 per 30	8	-	8
Courthouse	Commerical	718	1 per 20	36	-	36
County Office Building 1	Commerical	312	1 per 20	16	-	16
Health Housing and Human Services	Commerical	233	1 per 20	12	-	12
Retail and Office (Beavercreek)	Commerical	116	1 per 20	6	-	6
Shaver Building	Commerical	31	1 per 20	2	-	2

Notes:
1. See Appendix F: Proposed On-Site Parking for parking totals and calculations, parking total here do not reflect the reduction allowed for buildings within 1000 feet of public transit.
   For the purposes of this calculation the maximum parking allowed by code was used for Full Build-Out Building bicycle parking calculation.
2. For the purposes of the 2012 Update it is assumed that the Silver Oak Building will consist of 32% Office area and 68% Storage area.
3. The Development Services Building bicycle parking count includes secure bicycle parking for campus wide staff use only in the basement.

Range of On-Site Parking Based on City of Oregon City Zoning

Office Min = 2.7 per 1000 SF
Office Max = 3.33 per 1000 SF
Retail Min = 4.1 per 1000 SF
Retail Max = 5 per 1000 SF
Industrial Min = 1.3 per 1000 SF
Industrial Max = 1.6 per 1000 SF
Welfare/Corrections Min = 1 per 7 beds
Welfare/Corrections Max = 1 per 4 beds
Storage Warehouse Min = 0.3 per GSF
Storage Warehouse Max = 0.4 per GSF

Updated July 2018	**Proposed Building SF**	**Office**		Retail		Industrial, Correctional, Storage	
		Allowed Cars Max	Allowed Cars Min	Allowed Cars Max	Allowed Cars Min	Allowed Cars Max	Allowed Cars Min
2018 Update - Implemented Parking							
Public Service Building	110,000	366	297	-	-	-	-
Development Service Building	178,000	593	481	-	-	-	-
Central Utility Plant	52,159	32	26	-	-	52	50
Shaver Building	9,415	31	25	-	-	-	-
Silver Oak Building	85,697	91	74	-	-	23	17
OSU Extension Building	21,631	72	58	-	-	-	-
Total Parking Allowed		1,185	961	-	-	75	67
10% Reduction		119	96	-	-	8	7
Total Parking Range Provided		**1,067**	**865**	-	-	**68**	**60**
Full Build Out (2030)							
Public Service Building	110,000	366	297	-	-	-	-
Development Service Building	178,000	593	481	-	-	-	-
Central Utility Plant	52,159	32	26	-	-	52	50
Shaver Building	9,415	31	25	-	-		
Silver Oak Building	136,838	131	107	-	-	33	24
Adult Detention Facility	200,542	-	-	-	-	160	-
Central Communications	24,000	80	65	-	-	-	-
Juvenile Facilities	72,500	241	196	-	-	-	-
Courthouse	215,756	718	583	-	-	-	-
County Office Building 1	93,688	312	253	-	-	-	-
Health Housing and Human Services	70,000	233	189	-	-	-	-
OSU Extension Service Building	21,631	72	58	-	-	-	-
Retail and Office (Beavercreek)	70,000	116	95	175	144	-	-
Total Parking Allowed		2,925	2,375	175	144	245	74
10% Reduction		293	238	18	14	25	7
Total Parking Range Provided		**2,633**	**2,138**	**158**	**130**	**221**	**67**

Notes:

1. A 10% reduction was assumed in required parking for the campus given that the proposed buildings are within 1000 feet of public transit.
2. The proposed Adult Detention Facility will consist of 800 beds with 1 space required per every 5 beds.
3. With the completion of the Phase 3 Full Build-Out the campus will include 100 on-street parking spaces.
4. For the purpose of this exercise it is assumed that Beavercreek consists of 35,000 SF of GF Retail and 35,000 SF of Office.
5. In order to provide a total amount of parking within the range established thorugh zoning, the master plan includes a four-story parking garage with approximately 832 spaces.
6. For the 2012 Update the Silver Oak Building is proposed with 32% office and 68% storage; for the Full Build-Out, to maximize storage potential, the building is proposed with 18% office and 82% storage, with a full second level on the interior.

CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Policy Session Worksheet

Presentation Date: February 18, 2020 **Approx. Start Time:** 2:30 PM **Approx. Length:** 60 min

Presentation Title: Courthouse Replacement Project

Department: County Administration

Presenters: Gary Barth, *Project Director*; Marcel Ham, *IMG Rebel*

Other Invitees: Elizabeth Comfort, *Interim Finance Director*, Sue Hildick, *Director, Public and Government Affairs*, Eric Machado, *County Risk Manager* Kathie Steele, *Presiding Judge*, John Foote, *District Attorney*; Craig Roberts, *Sheriff;* Debbie Spradley, *Trial Court Administrator*

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Information only – no action required.

EXECUTIVE SUMMARY:

The county engaged IMG Rebel to conduct a Value-for-Money (VFM) county courthouse project. The purpose of a VFM analysis is to determine the optimal financial and delivery approach for a public project based on qualitative and quantitative analysis of alternative approaches over a project lifecycle.

The base case for how we deliver, fund and finance the courthouse project is referred to as the "Public Sector Comparator" (PSC) in the VFM analysis shown as Option 1. Four alternative options including a P3 Hybrid were also analyzed to determine if any of the alternatives are more "optimal" or outperform the PSC.

This analysis was conducted during the fourth quarter of 2019 with input provided by an internal VFM Advisory Committee over the course of three work sessions held in November and December, 2019. The final report is now complete after review by members of the Advisory Committee, the Courthouse Project Manager, the Interim Finance Director and the County Risk Manager. Staff and IMG Consultants will be presenting the results of their analysis to the Board at this policy session.

This report is intended to provide the Board with a comprehensive analysis of alternative delivery and financing approaches to aid in providing final direction on the project approaches at the Policy Session scheduled for March 10, 2020.

Previous Board Action:

At a Board of County Commissioners (BCC) Policy Session on October 22, 2019 staff and the Board discussed using a Public-Private Partnership (P3) as an alternative delivery approach to the county's traditional delivery and financing method. Staff informed the Board that IMG Rebel had been retained to conduct a comprehensive VFM analysis during the 4Q2019 that we would be prepared to present to the Board in early 2020.

After discussion the Board voted 4-0-1 to proceed with the courthouse project under Option 1.A.

***Option 1**. Proceed with the project under one of two approaches, subject to the comprehensive analysis being conducted during the fourth quarter of 2019:*

***A.** Utilize a P3 approach to finance, design, develop and maintain the new county courthouse. No payments would be due from the county until project completion. Continue to explore voter support for a General Obligation Bond during the four year design and construction process to reduce the amount of private financing and long-term lease payments at project completion.*

FINANCIAL IMPLICATIONS (current year and ongoing):

Is this item in your current budget?

- Total project costs have been estimated spanning multiple fiscal years through 2023. The County is currently covering the pre-planning effort through a $2.4 million budget split 50/50 between the County and the State and governed by an approved Intergovernmental Agreement. The State has approved an additional $31.5 for their 50% share of the first $63 million in Project costs incurred in FY19/21. With an approved Financing Plan by the Board, the County will develop a supplemental budget for FY 19/20 to reflect estimated costs in the current fiscal year. Subsequent years will then be budgeted in accordance with the Financing Plan, projected timing of costs, and State match fund reimbursements.

What is the cost?

- The total project cost is approximately $220 million (estimate)
  - Courthouse – $190 million (estimate),
  - On-campus parking additions, roadway changes and re-routing, intersection signalization Red Soils Master Plan updates, District Attorney office portion of the new Courthouse building , and related soft costs associated with the new Courthouse - $30 million (estimate)

  - **Total County cost of the project** - $125.5 million (estimate) plus $1.2 million County General Fund
  - **Total State Cost** - $94.5 million bonds plus $1.2 million State General Fund (50% match on Courthouse cost)

What is the funding source?

The State funds are coming from The Oregon Courthouse Capital Construction and Improvement Fund (OCCCIF). Depending on Board action, the County funds will come from one of three funding sources or combination of sources. 1) Full Faith & Credit (FF&C) bonds to be repaid from County discretionary funds 2) General Obligation Bonds which will require voter approval and generate new property tax revenue for repayment or 3) Private equity and debt provided by a P3 partner to be repaid through long-term lease payments. These options will be explored as part of the Financing Plan discussion.

STRATEGIC PLAN ALIGNMENT:

This project aligns with three of the Board's five Strategic Priorities:

- Ensure safe, healthy and secure communities – the new courthouse will be large enough to accommodate the number of judges available and needed for this community and eliminate overcrowding that cause intermixing of jurors, the public, and offenders providing adequate circulation.
- Build a strong infrastructure – the project will replace the outdated County courthouse in downtown Oregon City, which is too small to accommodate the number of judges needed for the community and is not seismically sound.
- Build public trust through good government – the project will improve access to justice for all residents of Clackamas County.

LEGAL/POLICY REQUIREMENTS:

1. The OCCCIF program requires that the County spend at least an equal amount of matching funds for courthouse related costs to those provided by the State OCCCIF.
2. The County must adhere to conditions and outcomes outlined in the IGA's with the State.
3. The Green Energy Technology program applies to public entities in Oregon and requires that 1.5 percent of the total cost for new construction of a public building must be spent on green energy technology, regardless of the funding source.
4. This project will be subject to Oregon City comprehensive plan and permit requirements.
5. The project will adhere to the County Green Building policy in effect as the building is being designed.

PUBLIC/GOVERNMENTAL PARTICIPATION:

The replacement County Courthouse Project was one of the County's top two initiatives along with I-205 for the recently concluded 2019 legislative session. Success with this priority lead to the State approving $31.5 million for FY 19/21 for the State share of courthouse design and pre-construction costs. The Courthouse Project is also one of 11 key strategic initiatives approved by the Board.

In addition to the State Legislature's continued involvement in this process, the project also includes participation of the Courts, Clackamas County Sheriff's Office, the Clackamas County District Attorney's Office, the Oregon Department of Human Services, the Association of Oregon Counties, the City of Oregon City, and additional key stakeholders throughout the community.

OPTIONS & RECOMMENDATIONS:

This is an informational session. Staff will be seeking input and direction from the Board at a Policy Session scheduled for March 10, 2020.

ATTACHMENTS:

1. Value-for-Money Assessment by IMG Rebel

SUBMITTED BY:

Division Director/Head Approval _____
Department Director/Head Approval _____
County Administrator Approval _____

For information on this issue or copies of attachments, please contact Mary Raethke @ 503-742-5912

Clackamas County Courthouse Value for Money Assessment

Final Report – 1/7/2020

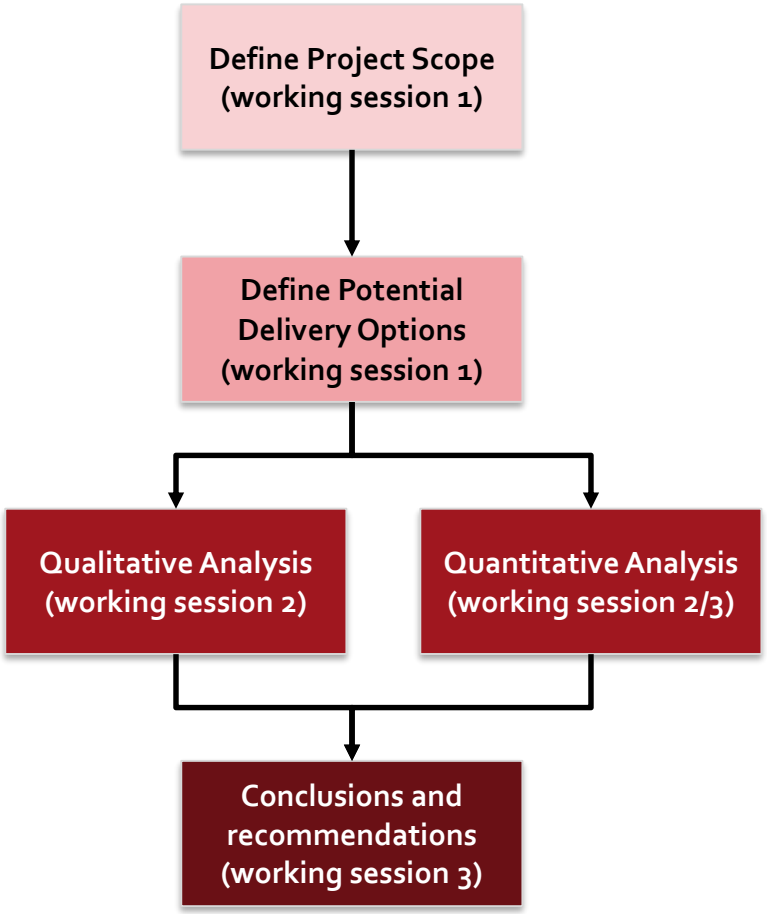
Table of Contents

Executive Summary

County objectives for the project and the Value for Money Assessment process

- Objective of this process: *Determine the optimal financial and delivery model for the Courthouse project.*
- Analysis based on the County's objectives:
  - Develop a modern, Class A replacement for the County Courthouse, which is beyond is useful life
  - Take advantage of rare opportunity for State to contribute 50% of capital value
  - Achieve best risk-adjusted value for money across a range of key value drivers, and over the useful life of the building
  - Tailor financial obligation around near-term constraints

Clackamas VFM Process



Five potential models, varying levels of cost and risk transfer

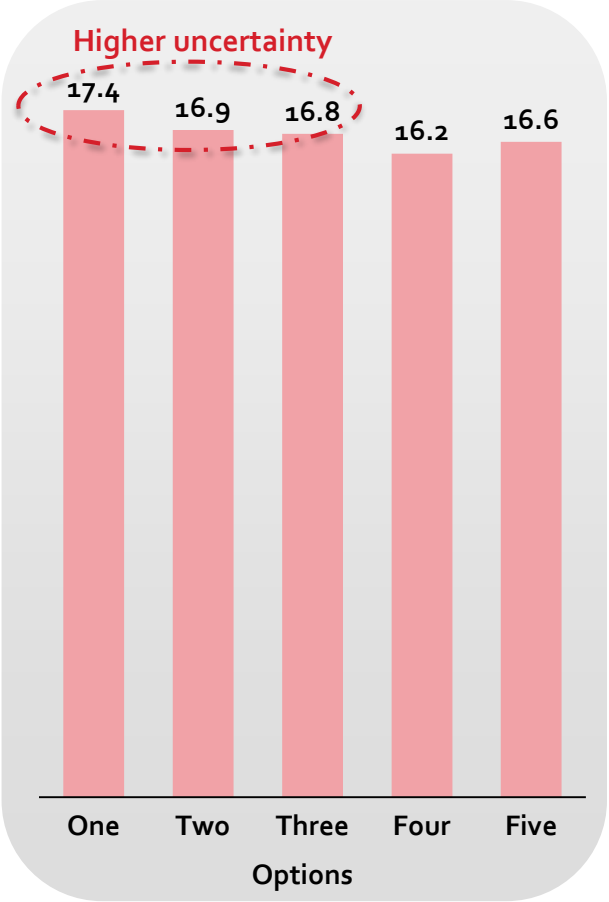
Option 1 DBB+M	Conventional delivery, defined as a design bid build (DBB) with conventional public financing and maintenance.
Option 2 DB+M	Conventional delivery, but with an integrated design build (DB) contract at construction phase.
Option 3 DBM	Integration of design, construction and maintenance (DBM) into a single contract, but without private financing.
Option 4 DBfM	Integration of design, construction, maintenance and partial private finance in a single contract.
Option 5 Tax-Exempt DBfM	Use of tax-exempt vehicle for the private tranches of finance in an integrated contract otherwise the same as Option 4.

not considered

Summary of the qualitative and quantitative analysis

- **Options 1 and 2** offer the County the greatest flexibility throughout the life of the project, but at higher risk-adjusted cost, with less risk transfer and limited certainty regarding long-term performance and costs.
- **Option 3** offers less flexibility, but without the long-term performance incentives and risk transfer of private financing, it does not deliver the full benefits of P3.
- **Options 4 and 5** create more opportunities for life cycle cost savings and risk transfer. They also offer more certainty regarding timely completion, costs and quality of service over the life of the contract. Option 5 has limited precedent and is more challenging to structure well.

Nominal annual risk-adjusted cost to the County in year 1 of full repayment



Conclusions and recommendations

- A P3 model with partial private financing (option 4) seems to be best aligned with the goals of the County and results in better value for money for the taxpayers of Clackamas County than more conventional delivery models and than P3 models with either tax-exempt financing through a conduit issuer or full private financing.
- The process of further project development allows for the further optimization of the precise project scope, risk allocation and funding and financing solution.

- The Clackamas County Board of Commissioners is recommended to:
  - decide on the preferred delivery and financing option considering the information in this report and the Advisory Board's recommendations;
  - approve further preparation of the procurement strategy and procurement documentation; and
  - direct 1) that the project team keeps the board informed of its progress and 2) that the project team will present the project documentation for approval prior to the launch of the procurement.

1. Project Definition

Project definition and scope (1/2)

Site

- Red Soils Campus (57 acres in Hillendale)
- Master Plan was first approved in 1998
- Courthouse is the heart of the campus
- Courthouse will have 'two front doors'

Scope

- 218,000 gsf of Courthouse space
  - 16 Courtrooms 20 Judicial Chamber sets
  - Court Operations and Administration
  - Grand Jury, Jury assembly and deliberation rooms
  - Sallyport, holding and support spaces for the Sheriff Civil Division
  - Secure parking for Judicial staff
  - Secure loading dock and staging
- 37,000 gsf DA's office
- Meets projected 2060 needs

Project definition and scope (1/2)

Project Scope for Analysis & Comparison

- $220M construction cost (under DBB delivery)
  - Including:
    - FF&E allowance
    - Green Technology Allowance
    - Preconstruction fees
    - 10% owner's contingency
  - Excluding:
    - Owner's rep fees
    - Compression of schedule
    - Environmental impact mitigation
    - Land and easement acquisition
    - Connection b/n courthouse and jail
    - Structured parking
    - Surface parking lot
- Routine and major maintenance
- Facility management: utilities, water & sewer, HVAC (taking into account , janitorial, landscaping, trash removal, window washing, snow removal, and insurance

Excluded from Analysis

- Relocation of existing uses and services in the existing courthouse
- Decommissioning existing courthouse
- Redevelopment of existing courthouse
- Relocation of existing buildings and services on new Courthouse site

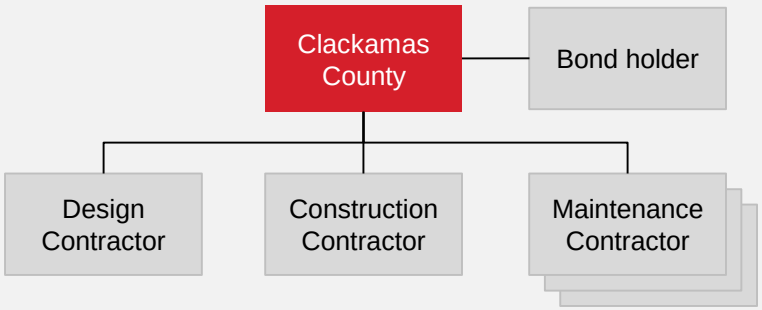
Term

- A construction period of 36 months
- A 30 year O&M period

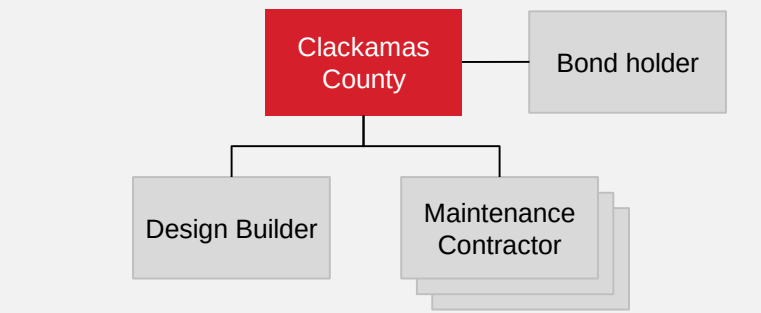
2. Financing and Delivery Options

Five main financing and delivery models (1/2)

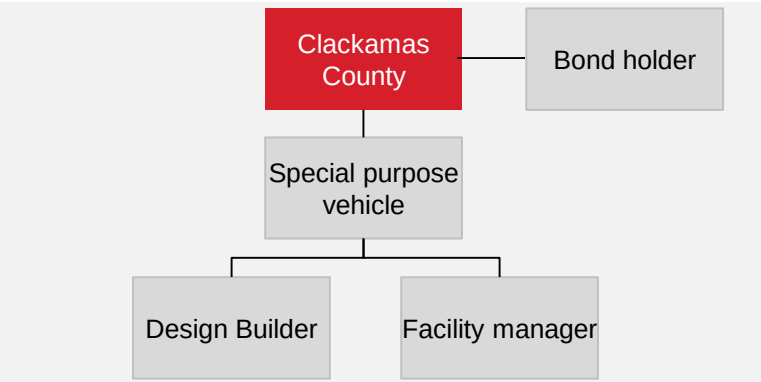
Option 1 DBB + M
All functions separated



Option 2 DB + M
Integration of design and construction

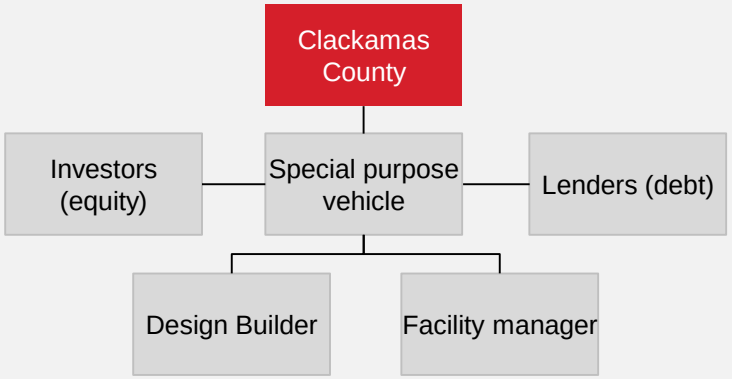


Option 3 DBM
Integration of design, construction and maintenance

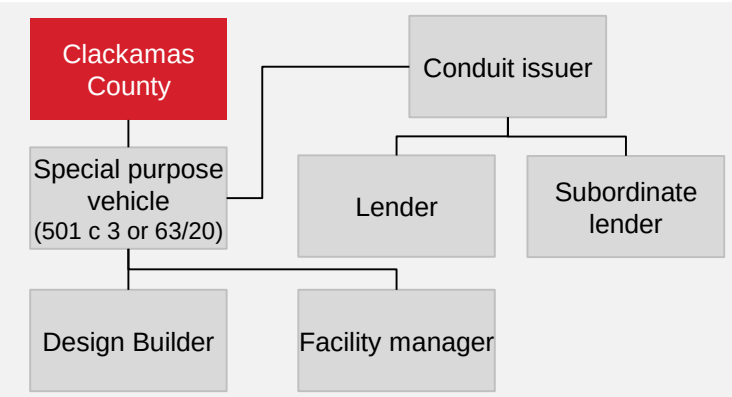


Five main financing and delivery models (2/2)

Option 4 DBfM
Integration of design, construction, finance, and maintenance



Option 5 Tax exempt DBfM
Integration of design, construction, finance, and maintenance with tax exempt financing

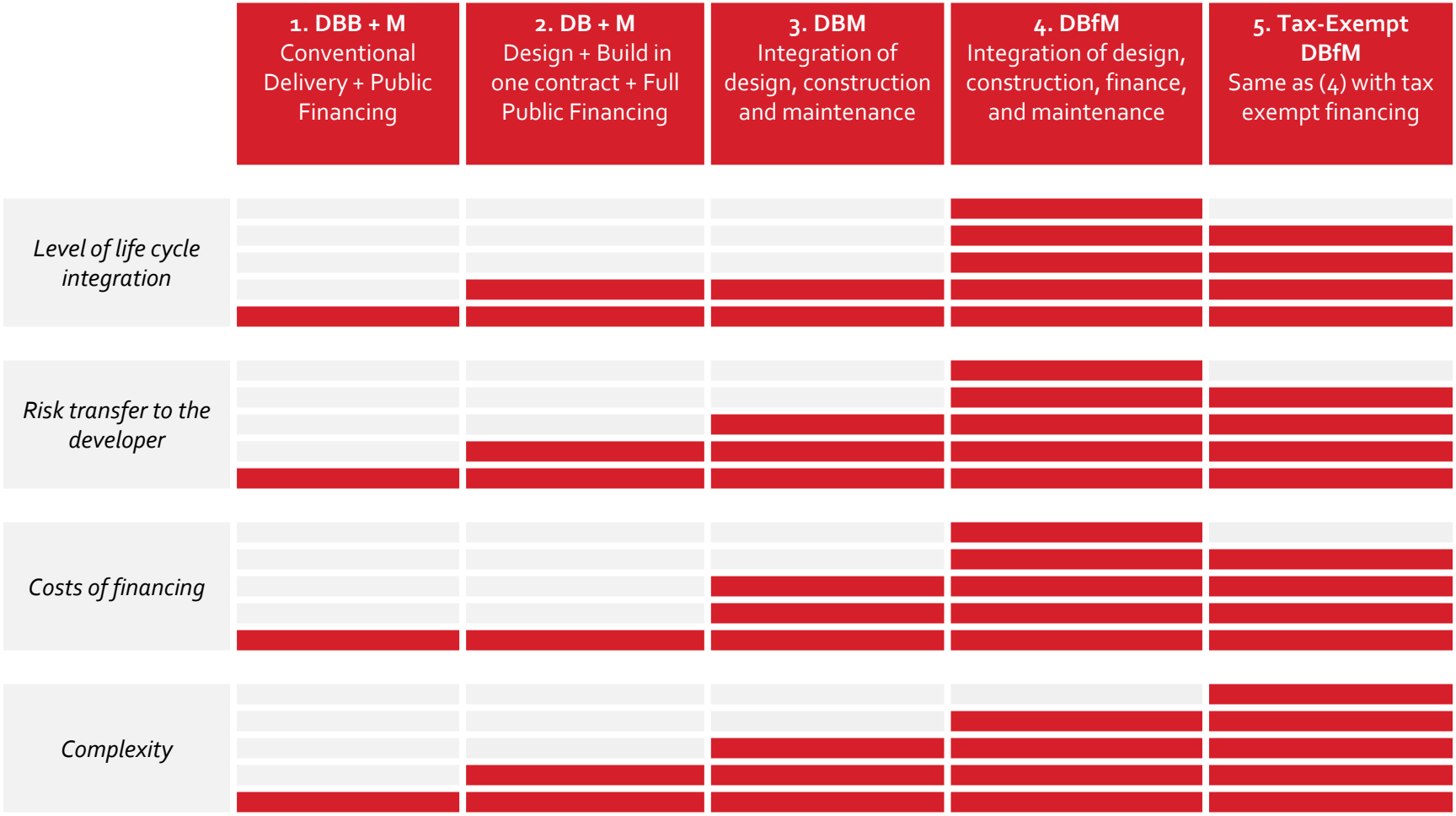


* Because most core operations will be conducted by the State or County, "Operating" contracts are not considered here. However, non-core activities like janitorial/custodial, catering, and security systems maintenance could be included in the maintenance contracts. Please note that DBFM with this scope is referred to as DBFOM in other projects (Long Beach Courthouse, Howard County Courthouse and Miami Dade Courthouse).

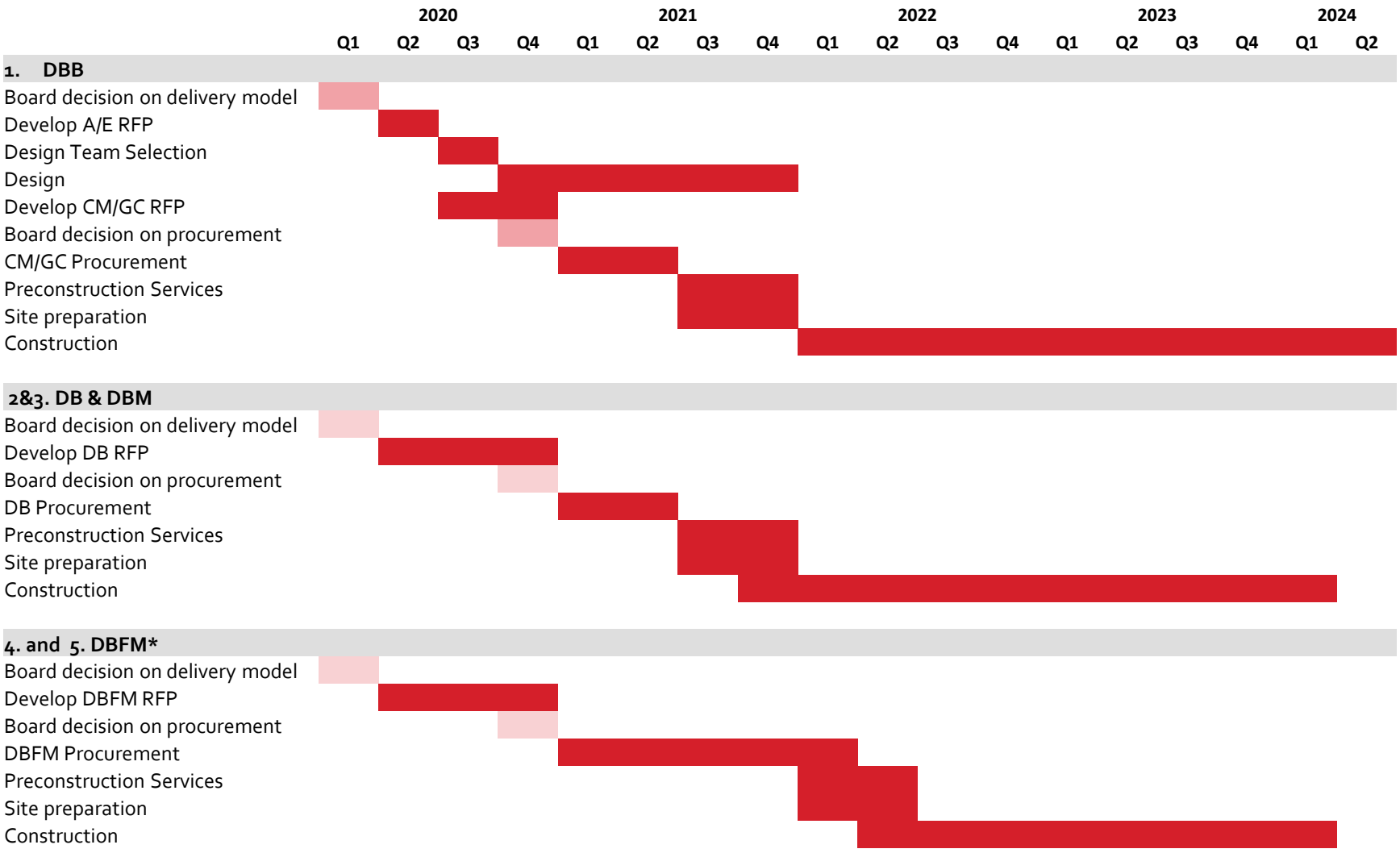
Financing and delivery model definitions (1/2)

	1. DBB + M Conventional Delivery + Public Financing	**2. DB + M** Design + Build in one contract + Full Public Financing	**3. DBM** Integration of design, construction and maintenance	**4. DBfM** Integration of design, construction, finance, and maintenance	**5. Tax-Exempt DBfM** Same as (4) with tax exempt financing
Contracting	Design Bid Build + multiple short term O&M contracts	Design-Build contract + multiple short term maintenance contracts	Integrated Design-Build and Maintenance contract (longer term)	One integrated Design, Build, Finance, Operate and Maintain contract	Integrated contract with tax exempt finance through a 501(c)(3) corporation
Financing	Public	Public	Public	Private (milestone payment = partial public)	Private with tax exempt component
Payment	Progress payments during construction and periodic payments for the various O&M contractors	Milestone payment at substantial completion and periodic payments for the various maintenance contractors	Milestone payment at substantial completion and periodic payments for the maintenance contractor	Partial Milestone payment at substantial completion and availability payments compensating for all the activities within the scope.	Same as 4
Evaluation criterion	Lowest construction price	Lowest design and construction price (with potential addition of quality of design scoring)	Best value (combination of whole life cycle costs and other relevant public objectives, for example design quality, risk acceptance, timing of completion)		

Financing and delivery model definitions (2/2)



Indicative timelines for all delivery models



** Tax-exempt option may add additional complexity which could impact timeline.*

Indicative risk allocation (1/2)

Project risks organized into categories	DBB	DB	DBM	DBfM	DBfM (TE)
Approval and funding process					
Political risk of deal termination or long delays	Public	Public	Public	Public	Public
Planning process and approvals for site	Public	Shared	Shared	Shared	Shared
Permitting and approvals					
Completion of site development process	Public	Public	Public	Shared	Shared
Permits and third-party approvals	Public	Shared	Shared	Shared	Shared
Geotechnical / environmental					
Relocation of utilities	Public	Shared	Shared	Shared	Shared
Geotechnical and environmental site conditions	Public	Public	Shared	Shared	Shared
Procurement					
Delays in procurement process	Public	Public	Public	Public	Public
Design					
Delays in design process	Public	Private	Private	Private	Private
Design errors	Public	Shared	Private	Private	Private
Construction risk					
Construction cost overruns	Private	Private	Private	Private	Private
Regular construction risks	Private	Private	Private	Private	Private
Construction delays	Public	Private	Private	Private	Private
Weather related events and force majeure	Public	Shared	Shared	Shared	Shared
Changes in labor and materials costs	Shared	Private	Private	Private	Private
Relocation of existing operations of Court	Public	Public	Public	Public	Public

Indicative risk allocation (2/2)

Project risks organized into categories	DBB	DB	DBM	DBfM	DBfM (TE)
Financing					
Interest rate risk after financial close	Public	Public	Public	Private	Private
Equipment and commissioning					
Relocation of operations to new courthouses	Public	Public	Public	Public	Public
Changes in equipment cost or equipment selection	Public	Shared	Shared	Private	Private
Changes in furniture and fixtures costs or selection	Public	Public	Public	Public	Public
Delay in schedule for equipment installation	Public	Private	Private	Private	Private
Lifecycle maintenance					
General capital maintenance cost overruns	Public	Public	Shared	Private	Private
Scheduled preventative maintenance cost overruns	Public	Public	Shared	Private	Private
Emergency maintenance cost overruns	Public	Public	Shared	Private	Private
Structural performance issues	Public	Public	Shared	Private	Shared
Operational					
Coordination between subcontractors	Public	Shared	Private	Private	Private
Long term performance risk	Public	Shared	Shared	Private	Shared
Changes in requirements / specifications	Public	Public	Public	Public	Public

3. Qualitative Analysis

Pros and cons of the delivery models (1/2)

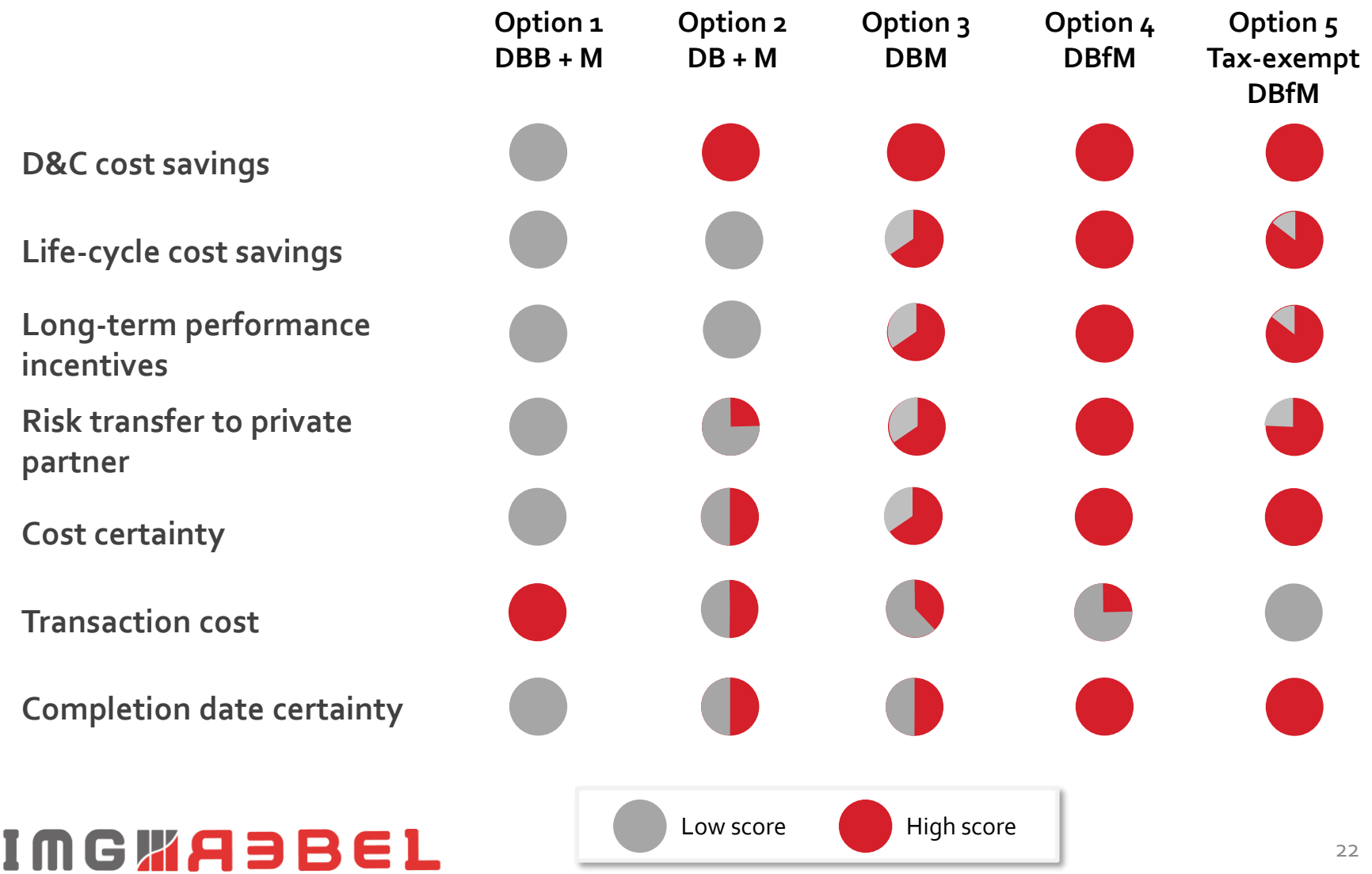
Model	Pro	Con
1. DBB + M	• Known and proven method for Clackamas County • Full control on design details, means and methods • Attractive FF&C bond pricing	• Forced marriage of designer and builder • Price is only selection factor • Slower delivery & higher cost • Can be dispute prone • Limited lifecycle focus • No lifecycle cost savings • Most risks are retained by County
2. DB + M	• Expedited delivery schedule • Early price certainty • Qualifications based selection • Best value selection • Lessens design and construction costs • Limited change orders • Promotes innovation • Significant risk transfer • Attractive FF&C bond financing	• Less familiarity to County • Greater transactional complexity • Less control over design details • Limited lifecycle focus • Longer procurement process

Pros and cons of the delivery models (2/2)

Option	Pro	Con
3. DBM	• DB + M pros + • Lifecycle cost savings • Long-term high-quality facility	• DB + M cons + • Even greater transactional complexity • Limits County's ability to defer maintenance
4. DBfM	• DBM pros + • Enhanced performance security • Long term budget certainty • More effective long-term risk transfer	• DBM cons + • Higher cost of private capital due to partial taxable financing

5. Tax-exempt DBfM	• DBM pros +
	• Long term budget certainty
		• DBM cons +
		• Compared to DBfM:
		  • Even greater transactional complexity
		  • Less long-term risk transfer
		  • Less performance security
		  • Less interest from P3 bidders

Qualitative comparison of delivery models

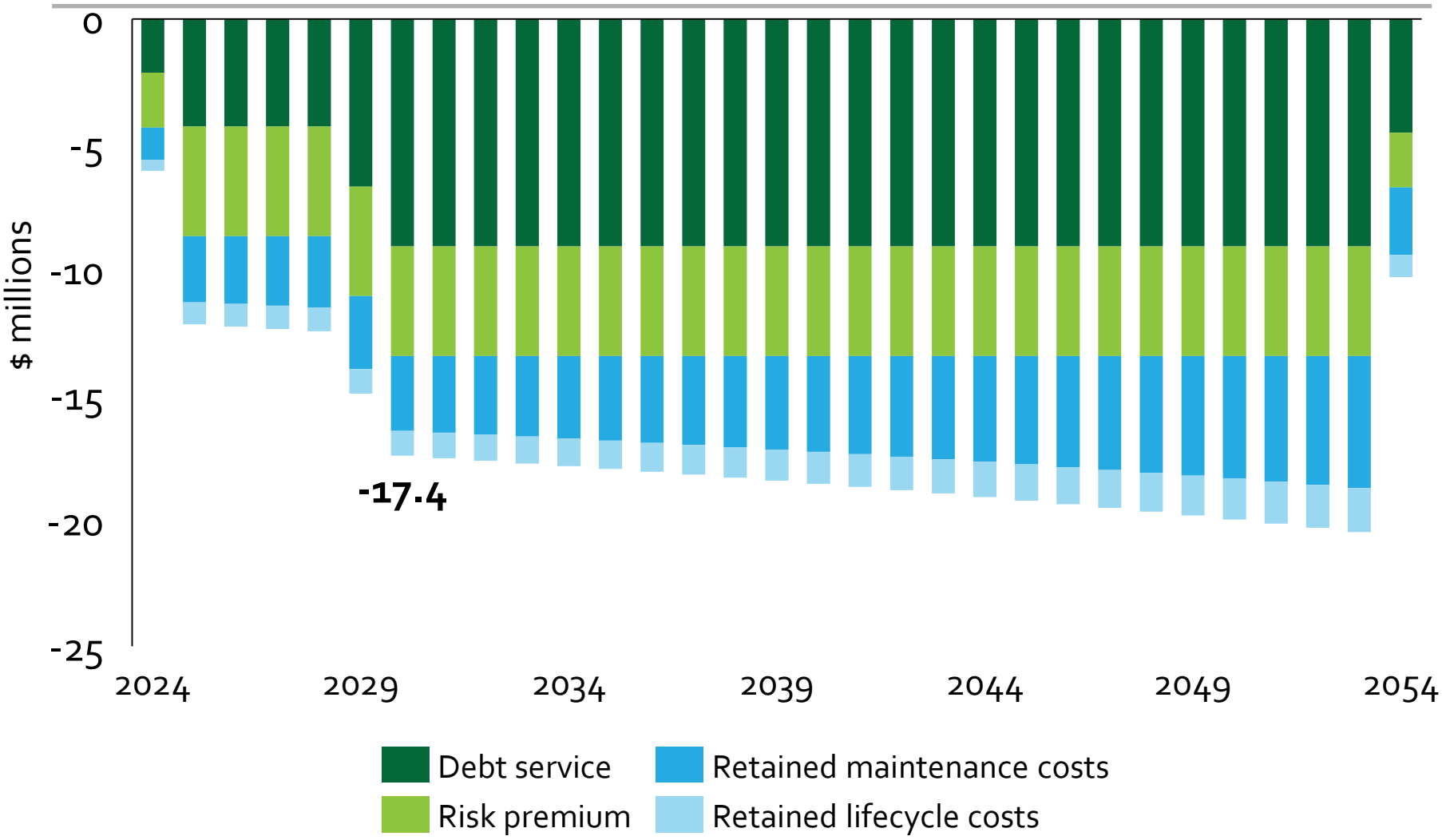


4. Quantitative Analysis

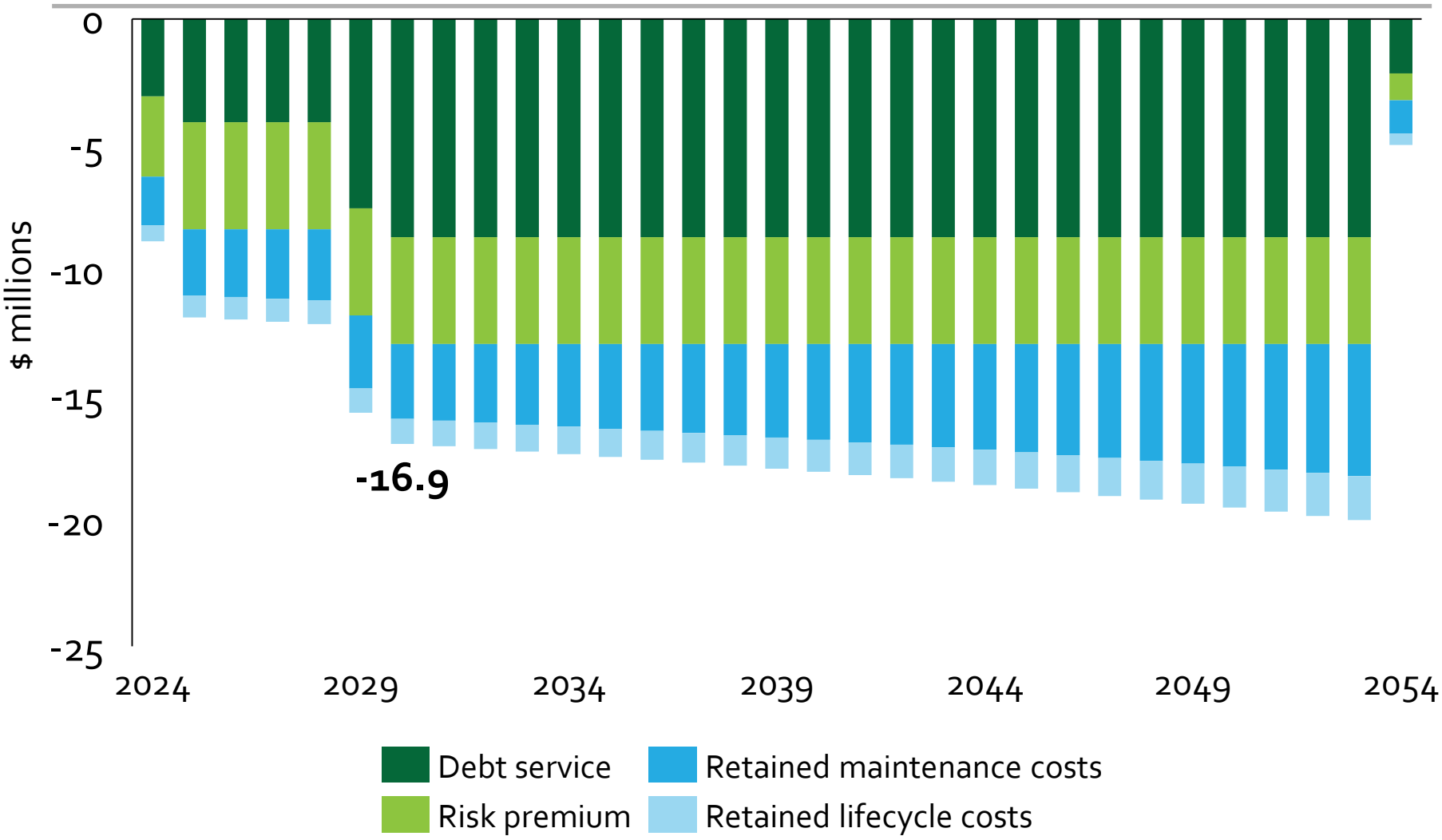
Approach to estimated cash flows

- The quantitative analysis is driven by key assumptions about the cash flows and timing of each of the scenarios, shown in detail in Appendix 3.
- Assumptions are based on our experience, research, and discussions with the County, and should be agreed by all parties. Assumption categories include:
  - Baseline cost estimates for conventional delivery;
  - O&M assumptions;
  - Financing assumptions; and
  - Efficiencies, cost allocation and other assumptions.
- Key assumptions driving the shape of the cash flows shown, are:
  - Costs incurred before substantial completion are rolled into long term debt, financed over the short term by a Bond Anticipation Note;
  - Lifecycle costs shown as a smooth annual value rather than as usual lumpy intermittent values; and
  - The same roughly $85M State funding available to reduce financing need for all delivery models.
- As a result of the above assumptions, all costs are expressed as long-term obligation after substantial completion.

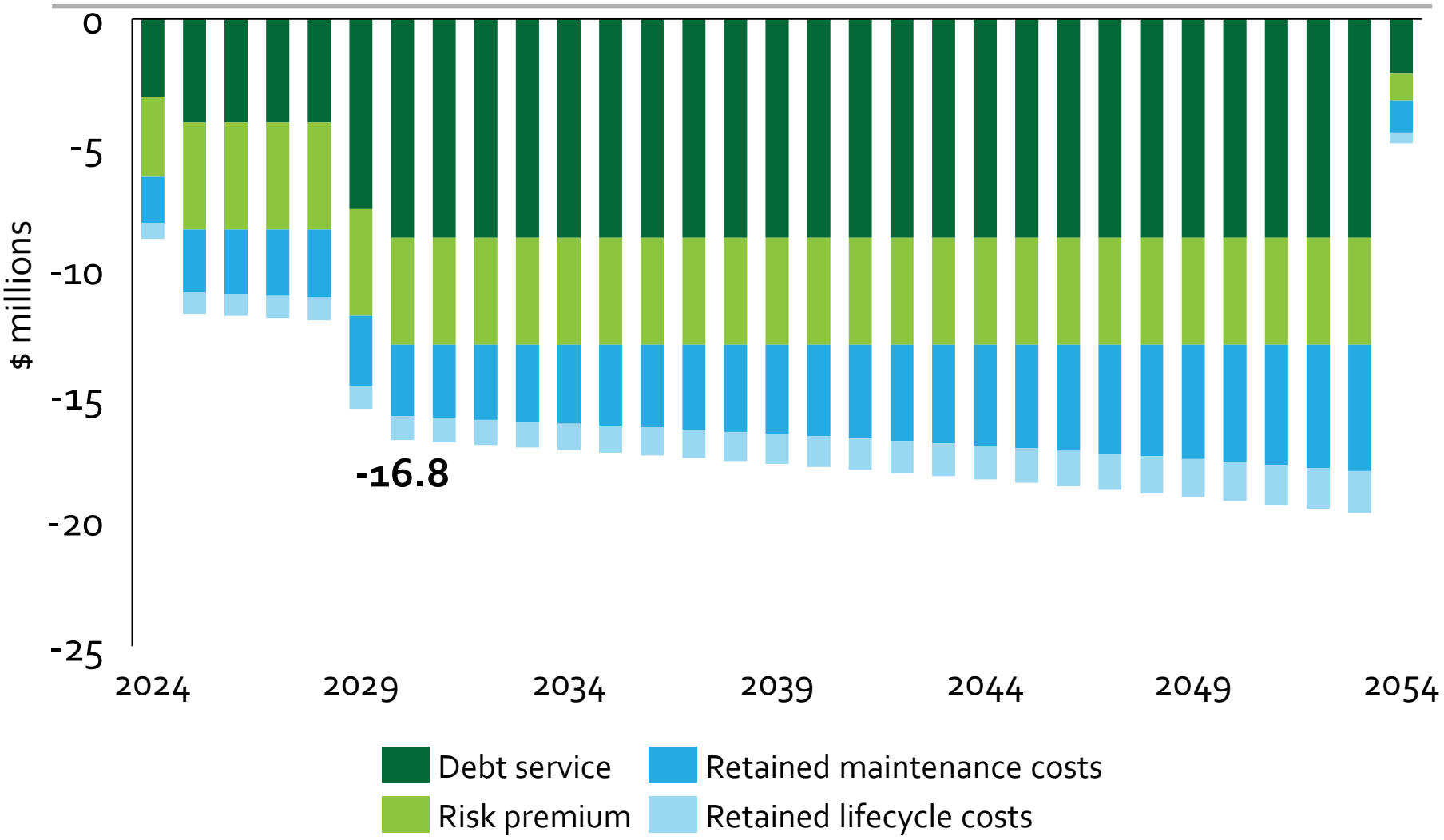
Option 1: DBB + M



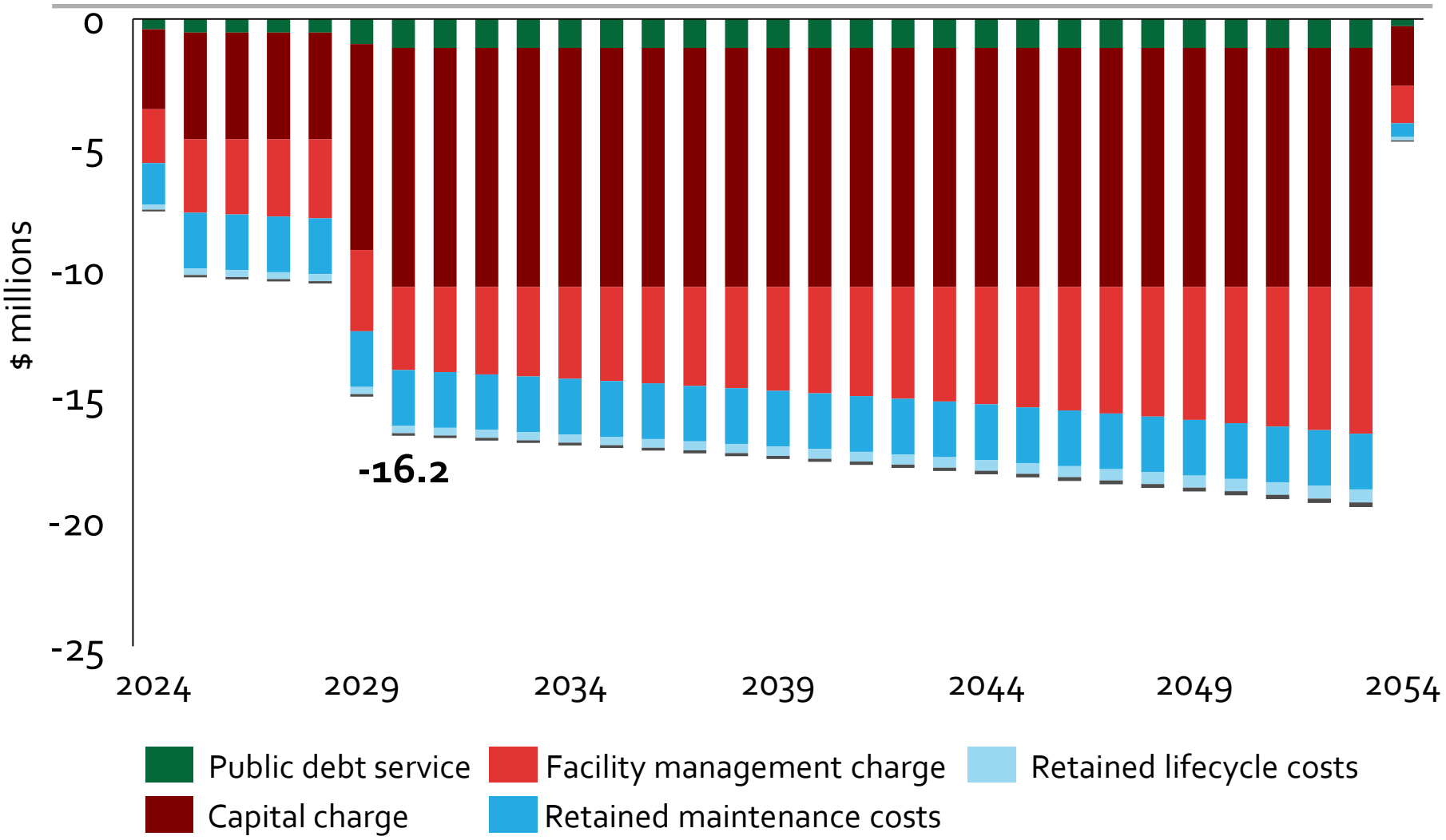
Option 2: DB + M


0
-5
-10
-15
-20
-25
$ millions
-16.9
2024
2029
2034
2039
2044
2049
2054
Debt service
Risk premium
Retained maintenance costs
Retained lifecycle costs

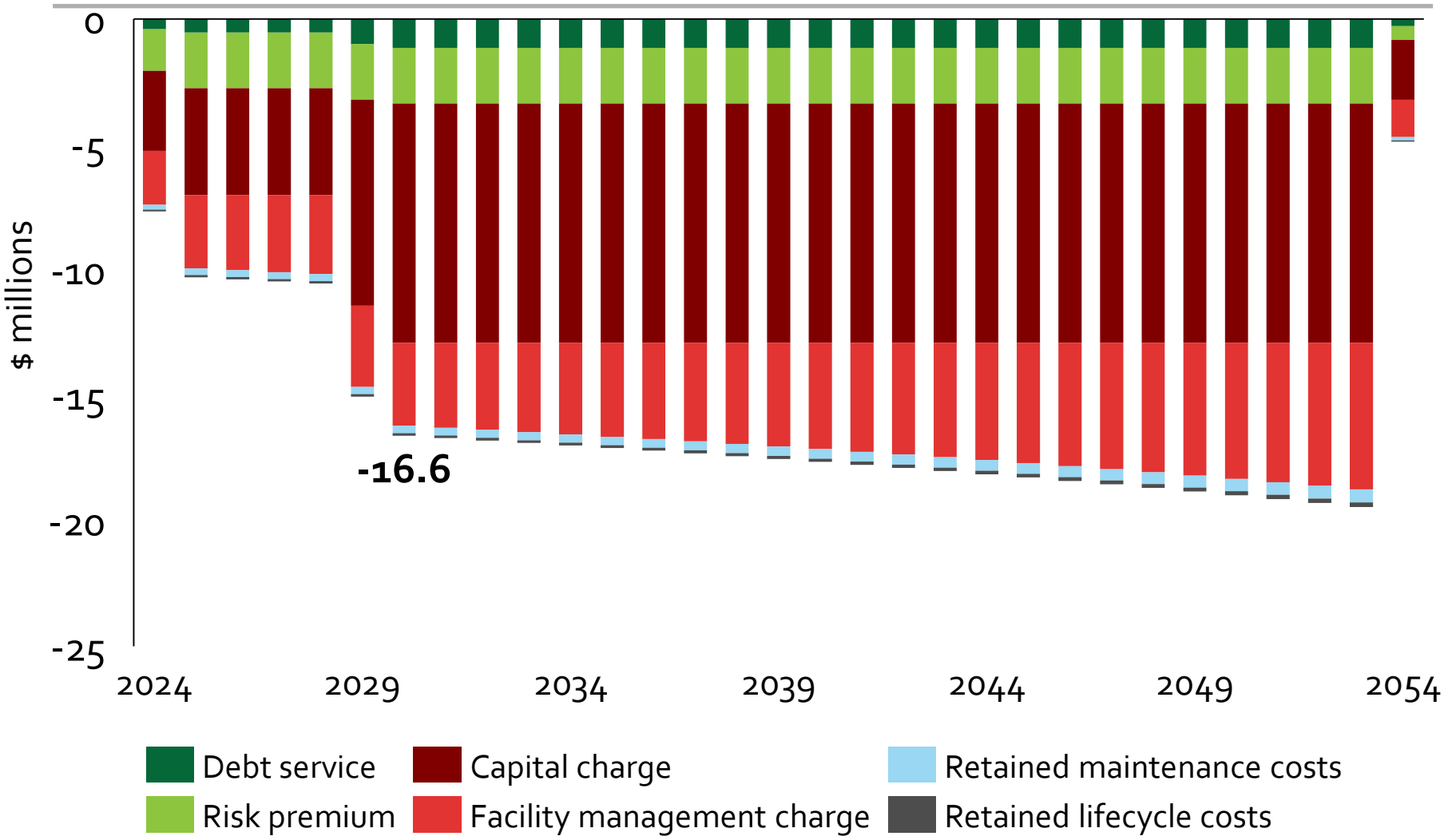
Option 3: DBM


0
-5
-10
-15
-20
-25
$ millions
-16.8
2024
2029
2034
2039
2044
2049
2054
Debt service
Risk premium
Retained maintenance costs
Retained lifecycle costs

Option 4: DBfM



Option 5: Tax Exempt DBfM



Cashflow in 2030 for each delivery option

Delivery model	Downside	Base case	Upside
1. DBB + M	N/A	$17.4M	N/A
2. DB + M	$17.3M	$16.9M	$16.6M
3. DBM	$17.2M	$16.8M	$16.4M
4. DBfM	$16.8M	$16.2M	$15.7M
5. Tax exempt DBfM	$17.1M	$16.6M	$16.2M

* The upside and downside scenarios are based on the minimum and maximum assumptions regarding the efficiencies expected under the various delivery models as per appendix 3.

Net Present Values for each delivery option

Delivery model	Downside	Base case	Upside
1. DBB + M	N/A	$210.4M	N/A
2. DB + M	$211.0M	$207.3M	$204.0M
3. DBM	$210.0M	$205.0M	$200.4M
4. DBfM	$198.0M	$191.5M	$185.1M
5. Tax exempt DBfM	$203.3M	$198.0M	$192.6M

* The upside and downside scenarios are based on the minimum and maximum assumptions regarding the efficiencies expected under the various delivery models as per appendix 3.
** The Net Present Values (NPVs) are the calculated by discounting all cashflows to January 1st, 2020 at a discount rate of 5%.

5. Conclusion and next steps

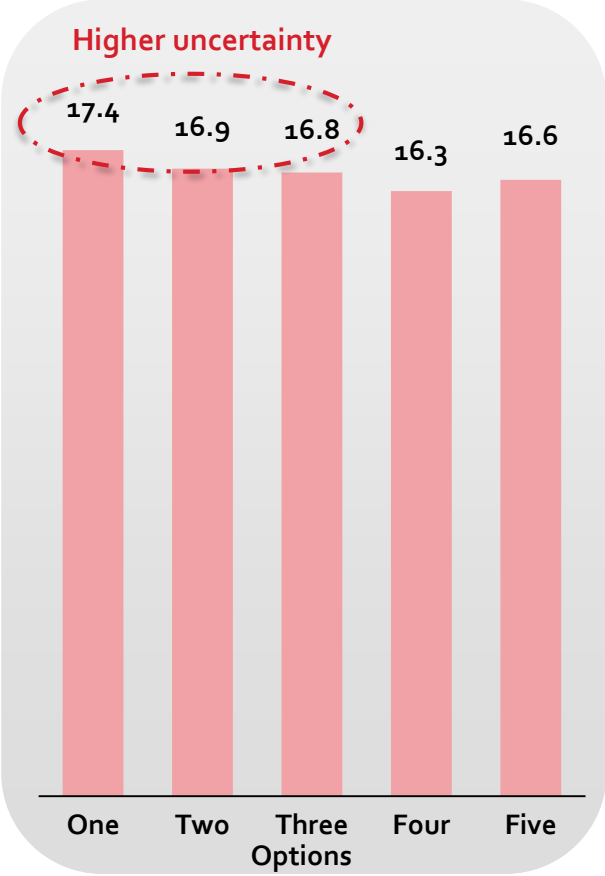
Summary of qualitative analysis

1. DBB + M	The greatest flexibility throughout the life of the Project, but at highest risk-adjusted cost to the County and with lowest risk transfer and long-term cost certainty.
2. DB + M	Better efficiency and integration of design and construction risks than option one. High flexibility but low efficiency and certainty over project lifecycle and particularly during O&M phase.
3. DBM	Less flexibility than conventional options, but without the long-term performance incentives and risk transfer of private financing. This option has limited precedent and is more challenging to structure well.
4. DBfM	Performs well along most qualitative value drivers and is expected to result in better value for money for the taxpayers of the County than more conventional delivery models.
5. TE DBfM	Advantage of lower financing cost but also lower alignment with key qualitative drivers. This option has limited precedent and is more challenging to structure well.

Summary of quantitative analysis

- The nominal annual risk-adjusted cost to the County in year 1 of full repayment (2030) ranges from $16.3 to $17.4 million, depending on the delivery model.
- The DBfM risk-adjusted costs are the lowest of all delivery models; the DBB risk-adjusted costs are the highest of all delivery models, and the most uncertain as well.
- Whereas the DBfM model results in a committed bid including financing during the procurement, the DB and the DBM model only lock in the interest rate in 2024, which leaves more uncertainty for the County.
- The tax-exempt DBfM model as envisaged by the County, involves higher uncertainty because of limited precedent.

Nominal annual risk-adjusted cost to the County in year 1 of full repayment

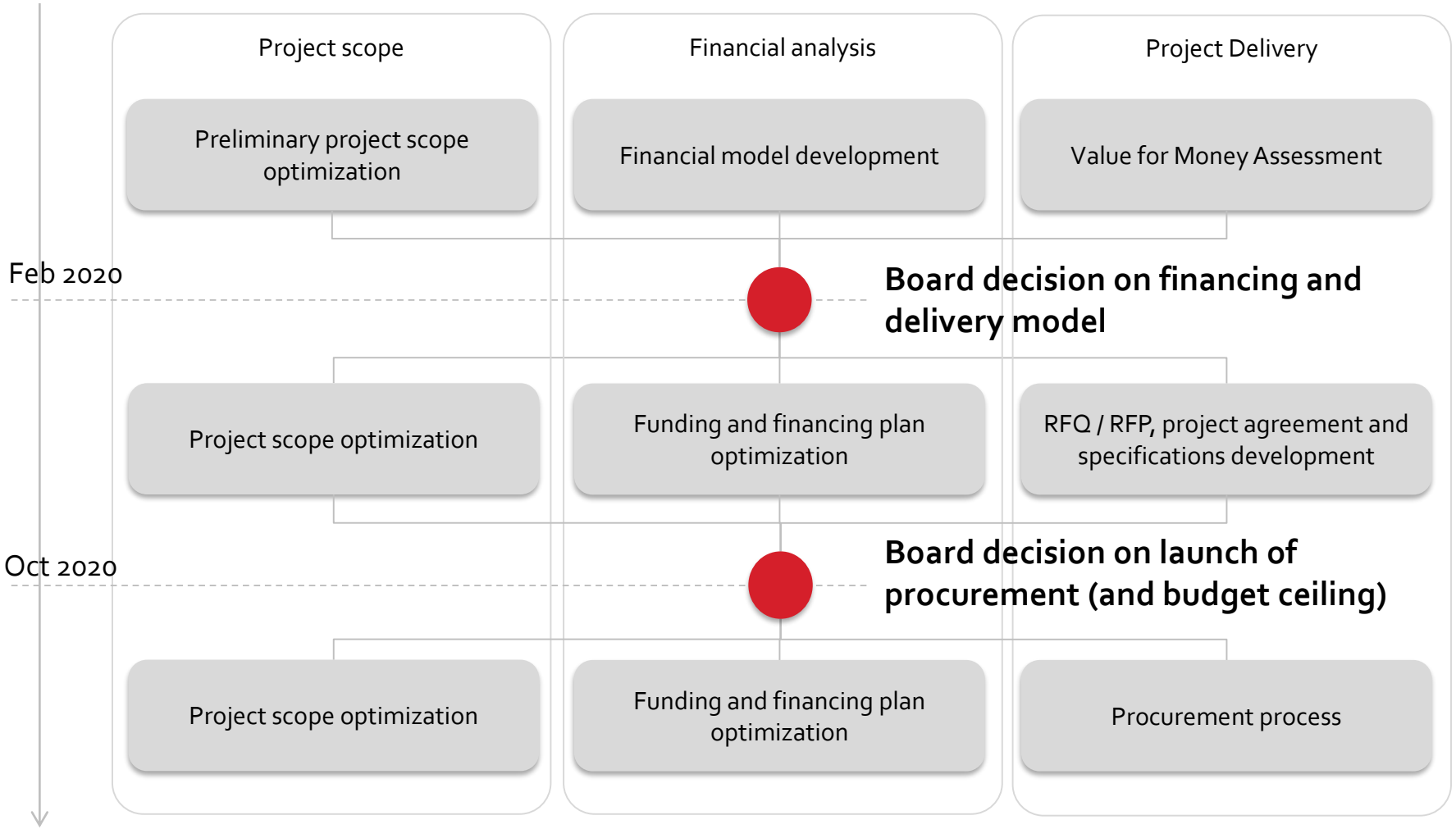


Conclusions and recommendations

- A P3 model with partial private financing (option 4) seems to be best aligned with the goals of the County and results in better value for money for the taxpayers of Clackamas County than more conventional delivery models and than P3 models with either tax-exempt financing through a conduit issuer or full private financing.
- The process of further project development allows for the further optimization of the precise project scope, risk allocation and funding and financing solution.

- The Clackamas County Board of Commissioners is recommended to:
  - decide on the preferred delivery and financing option considering the information in this report and the Advisory Board's recommendations;
  - approve further preparation of the procurement strategy and procurement documentation; and
  - demand 1) that the project team keeps the board informed of its progress and 2) that the project team will present the project documentation for approval prior to the launch of the procurement.

Two-Step Board Decision making

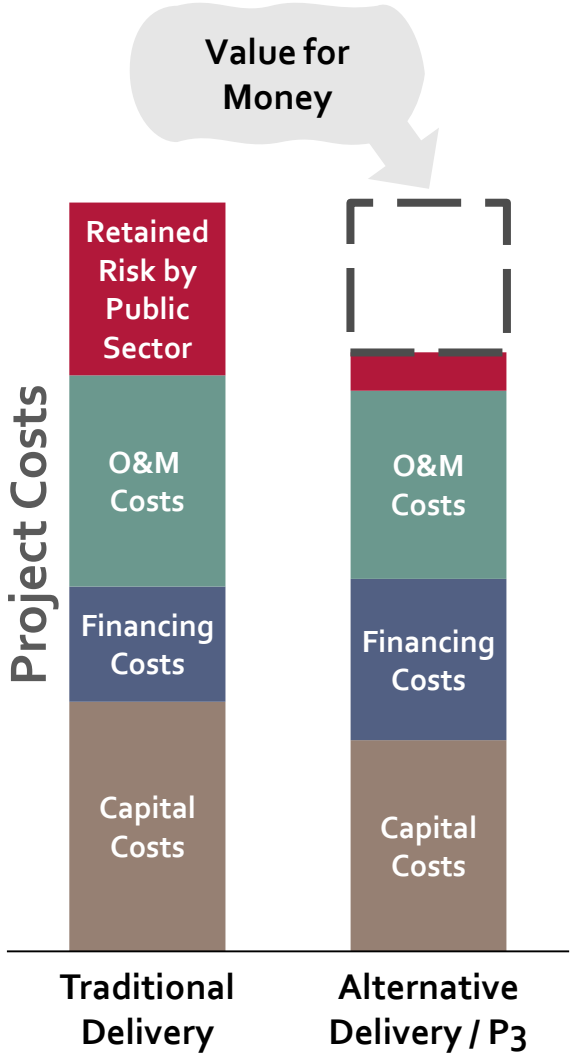


Appendices

Appendix 1: Value for Money Approach and Value Drivers

Value for money concept

- The VfM concept is used to compare P3 and conventional delivery methods for the same investment project.
- Quantitative VfM assessment comes down to a comparison of the NPV of (expected) cash flows of the P3 and conventional approaches.
- Qualitative VfM assessment comes down to a comparison along key P3 value drivers, identified in the following slides.
- VfM assessment:
  - Answers the question, "Which delivery method provides the 'best deal' for implementing a specific project?"
  - Should create an understanding of the differences between the P3 and conventional delivery methods
  - Contributes to a better understanding of the potential value-driving mechanisms of the P3 option
  - Provides decision makers with better information to determine and optimize all of the project delivery alternatives



Value driver 1: Integration and life cycle costing

- Large and long-term P3 contracts integrate different components and phases of public service delivery.
- This allows the contractor to minimize interface problems and optimize life cycle costs and quality of service.
- For social infrastructure this effect typically is even bigger because of the integration of 'hard services' and 'soft services'.

Value driver 2: Specifications allowing for innovation

- Output-based contracting leaves room for the private sector to decide how to deliver the envisaged services.
- Under competitive pressure this leads to creative solutions, life cycle cost savings and better quality of service.
- Setting long-term performance requirements turns out to be difficult.
- If the specifications are not structured well, the payment mechanism does not work either and the service will be low.
- As in other delivery methods, changing the requirements comes at a cost.

Value driver 3: Financial incentives – Evaluation criteria

- In a competitive process the goal of all bidders is to win. Bidders can win if they score best on the evaluation criteria.
- In other words, the evaluation criteria can be used to focus the bidders on the public sector objectives.
- In order to do that, evaluation is not just price-based, but value-based (economically most advantageous bids).
- There are several systems of including quality of services and risk allocation in the evaluation criteria.
- Complicated and opaque evaluation criteria do not point bidders in the right direction and can lead to unexpected results.

Value driver 3: Financial incentives – Payment mechanism

- The private sector can best be incentivized through both carrots and sticks, aligning public and private interests.
- Poor performance should trigger penalties, which will suppress the private sector's financial performance.
- Good performance improves the private sector's profits directly (through higher payments) or indirectly (through lower costs).
- Such penalties should be set to tickle, then hurt, but not kill a private operator.
- Key is the financing component in P3 deals, making sure that the contractor has 'money at stake'.

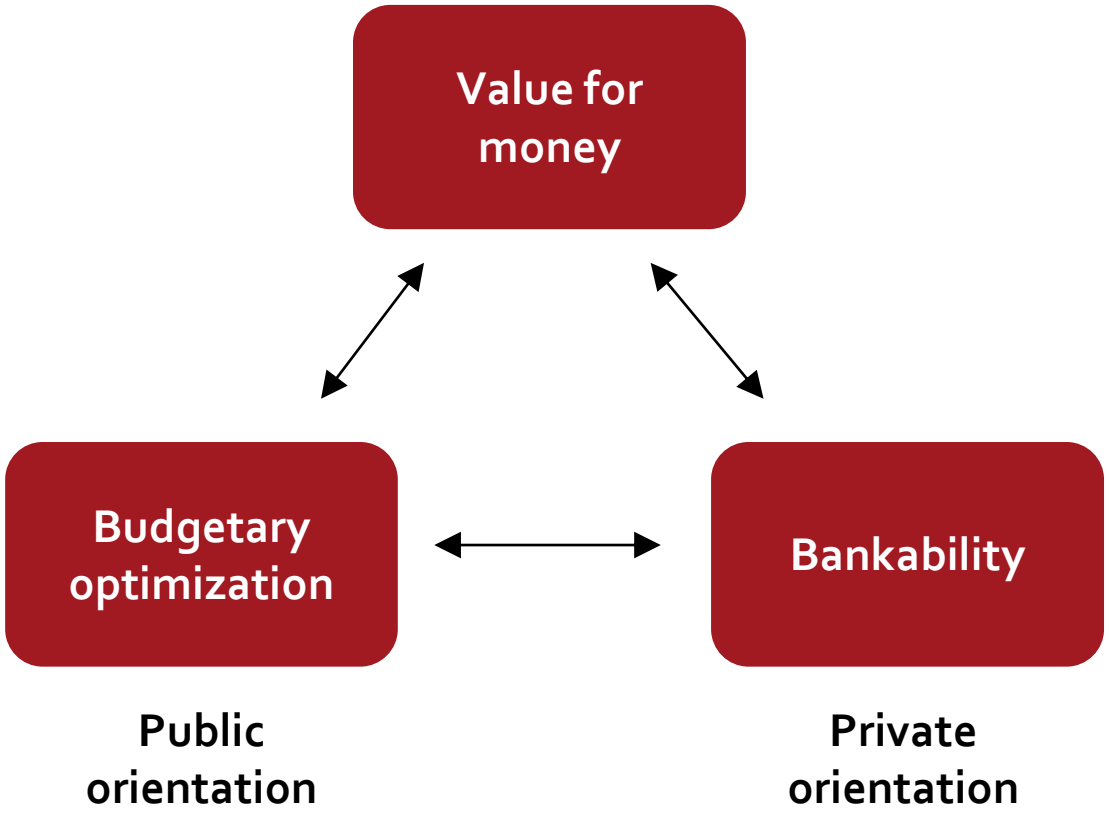
Value driver 4: Competition

- The benefits of a P3 will only materialize if there is market appetite and market capacity.
- This creates a competitive environment for procuring the public service.
- Competition for P3 projects is typically different from competition for conventional projects.
- The expected transaction costs and shortlisting procedure affect the market appetite, so procurement strategy does matter!

Value driver 5: Efficient risk allocation

- Risk allocation is at the core of P3 deal: the P3 contract is all about the risk allocation (different from conventional).
- The private sector should be able to take responsibility for the delivery of a public service (i.e. take on the performance risks).
- The private sector is not willing to take just any risks, for example sovereign risks, and sometimes not revenue risks.
- Risk allocation based on the principle that the party best able to manage these risks should indeed bear them increases VfM.

Value driver 5: Efficient risk allocation – Conflicts



Risk attitude

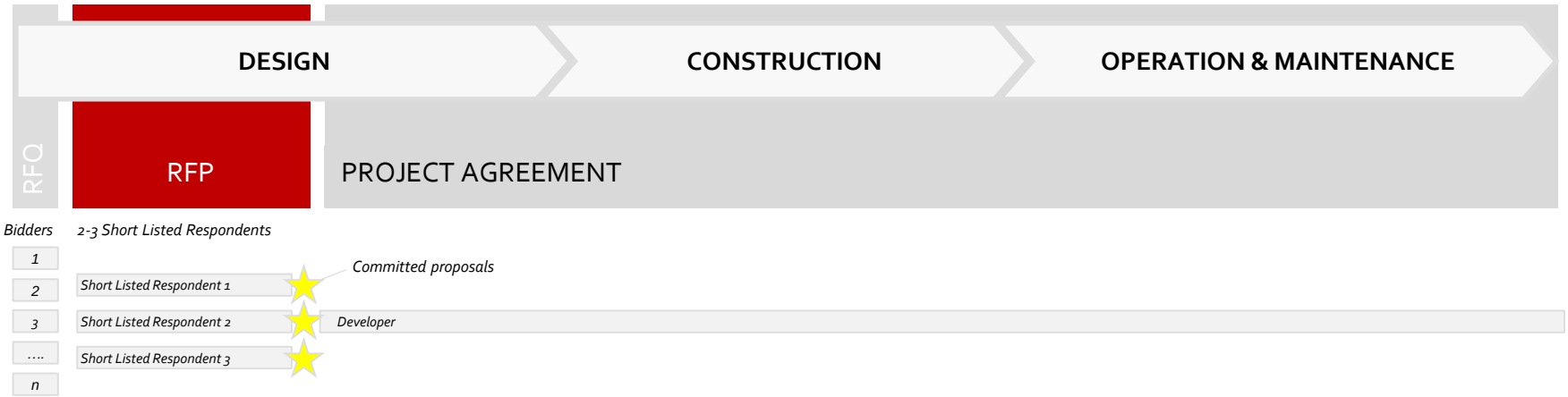
Allocation of project risks to those parties best able to manage them

Low risk to private sector, high risk to public sector

Appendix 2: Alternative project Development Approaches

A competitive two-step procurement process is most commonly used for alternative delivery

- The two-step competitive procurement works as follows:
  1. public initiation and preparation of the project and procurement documentation;
  2. shortlisting of multiple integrated bidding teams that are best qualified for the project (RFQ phase);
  3. followed by an interactive yet competitive process leading to proposals that are based on a single standardized contract and that supply fixed prices and minimize additional post-selection negotiation, which usually includes private sector penalties for failure to close (RFP phase); and
  4. selection of the preferred bidder that proposed the "best value" solution to the agency.



Some agencies consider alternative procurement and project development processes

- Some agencies consider alternative project development processes, especially if they lack technical or financial capacity to develop and structure projects. This process works as follows:
  1. public or private initiation and preparation of the project;
  2. competitive selection of the project partner on the basis of experience and indicative pricing and committed developer fees;
  3. collaborative project development and design, under a Pre-Development Agreement and/or guaranteed maximum price arrangement;
  4. direct negotiation of the project agreement, potentially with competitive procurement of various project components and financing.

Experiences with alternative procurement processes are not all positive

- Our review of processes in which the developer has a leading role in project development and directly negotiates a comprehensive development agreement with the procuring agency, concluded that:
  - Such alternative procurement approaches help governments with little internal capacity to identify, develop and implement their infrastructure projects and generate innovative solutions to infrastructure challenges;
  - Alternative procurement approaches are not necessarily easier to implement than standard procurements and have caused public controversies that delayed projects and/or resulted in renegotiations several years later;
  - Such alternative procurements are subject to corruption allegations, which, although often unproven, shows that this approach is highly sensitive to public-perception issues and may be vulnerable to being challenged in the future.

Appendix 3: Quantitative Analysis Assumptions

Baseline cost estimate for conventional delivery

Capex item	Cost (2019 $ thousands)
Construction costs eligible for funding	
Building: courthouse	116,464
Building: Judge's parking	1,173
Site: Courthouse site	6,889
Soft costs eligible for funding*	21,294
Total	**145,819**
Construction costs non-eligible for funding	
Building: DA + Office	18,117
Loop Road	2,086
Gravel Lot	174
Soft costs*	3,484
Total	**23,861**
Design Costs	**15,215**
Owner's contingency	**14,490**
Project costs	**199,385**

Please note that this cost estimate is in 2019 dollars and is the exact equivalent of the $220M cost estimate that is expressed in year of expenditure dollars.

Maintenance cost assumptions

- Routine maintenance costs are estimated at $9 / sqft / year, based on the following inputs:
  - A benchmark of routine O&M costs for comparable courthouses shows a range of $8 - $10 / sqft / year
  - Current routine O&M spending on the existing courthouse is in the range of $7 / sqft / year, but is considered insufficient

- Life cycle costs are estimated at $3 / sqft / year, based on the following inputs:
  - A benchmark of lifecycle costs for comparable courthouses shows a range of $2 - $5 / sqft / year
  - The new courthouse will be connected to the central plant on campus for heating and cooling, which allows for below-average life cycle costs

Additional transaction cost assumptions

Assumption	DBB + M	DB + M	DBM	DBfM	DBfM + TE
Additional preparation costs for Clackamas County	-	$0.5M	$1M	$3M	$3.25M

Additional preparation costs are difficult to specify prior to procurement, some costs would be typical of social infrastructure procurements, such as technical advisors for architecture and engineering. Conventional delivery requires multiple procurements for design, construction and multiple short-duration O&M contracts—this could lead to a situation where a P3 procurement can be less costly than all of the combined procurement processes needed during the entire lifecycle of a project that is delivered conventionally. On the other hand, the additional costs associated with P3 procurements are due to the complexity of executing competitive P3 procurements and drafting P3 contracts. Many agencies hire external legal counsel and financial advisors to support them through a P3 procurement. The costs of external advisors are dependent on 1) duration and complexity of procurement and 2) P3 experience of the agency. The transaction costs associated with the tax-exempt P3 model are higher than a "regular" P3, because of the 1) lack of precedent for this specific model and 2) the costs associated with the 501 c 3 structure and 3) the required changes to "regular" P3 model.

Bond issuance costs for Clackamas County	1%	1%	1%	-	-

For delivery models 1 – 3, a 30 –year FF&C bond will be issued in order to provide public financing for the project.

Additional bid costs for successful bidder	-	$0.5M	$1M	$2M	$2.25M

Additional costs associated with submitting a winning bid under a competitive P3 procurement vary based on project complexity, procurement duration, and the predictability of the procurement process. It is typical for bidders to engage external legal counsel, financial advisor. The financing and due diligence process for successful bidders is lengthy and P3 bidders typically engage external advisors to help them through this process.

Stipends for unsuccessful bidders	-	$0.5M	$0.5M	$1M	$1M

Providing stipends to unsuccessful bidders is considered a best practice and common for competitive P3 procurements. Stipends demonstrate the commitment of the agency and enhances market appetite and competition. Stipends range from several hundreds of thousands up to $1M per unsuccessful bidder. Clackamas County can determine if it wants to use a stipend – and if so at what level – in the development of its procurement strategy. Note that the total shown above is the total cost for Clackamas County to pay multiple unsuccessful bidders.

Efficiencies and cost allocation assumptions

Assumption	DBB + M	DB + M	DBM	DBfM	DBfM + TE
Efficiencies					
Design efficiencies	-	2.5-7.5%	2.5-7.5%	7.5-12.5%	7.5-12.5%
Capex efficiencies	-	2.5-7.5%	2.5-7.5%	7.5-12.5%	7.5-12.5%
Routine maintenance efficiencies	-	-	2.5-7.5%	7.5-12.5%	7.5-12.5%
Lifecycle efficiencies	-	-	2.5-7.5%	7.5-12.5%	7.5-12.5%
Costs & Risks retained by County					
Retained design costs	100%	30%	30%	30%	30%
Retained preparation & procurement costs	100%	100%	100%	100%	100%
Retained contract management costs	100%	20%	20%	20%	20%
Retained routine O&M costs	100%	100%	10%	10%	10%
Retained lifecycle costs	100%	100%	10%	10%	10%
Design & Construction Risks	100%	40%	40%	40%	40%
Maintenance Risks	100%	100%	100%	40%	40%

Inflation, term, funding and financing assumptions

Project term and inflation

- Concession period: 30 years
- Construction costs escalation: 5%
- Maintenance cost escalation: 2.5% (long-term historical average CPI)

  Source: U.S. Department of Labor, Bureau Of Labor Statistics

Funding

- State funding: 50% of eligible costs (for the purpose of this analysis a ~$85M State contribution was used for all options)

Financing

- 4-year Bond anticipation note interest rate: 1.5%
- FF&C Bond interest rate: 2.6%
- P3 weighted average cost of capital: 5.6% (next slides)
- P3 weighted average cost of capital - tax exempt): 4.0% (next slides)
- Term: 30 years, starting with 5 years of interest only after substantial completion

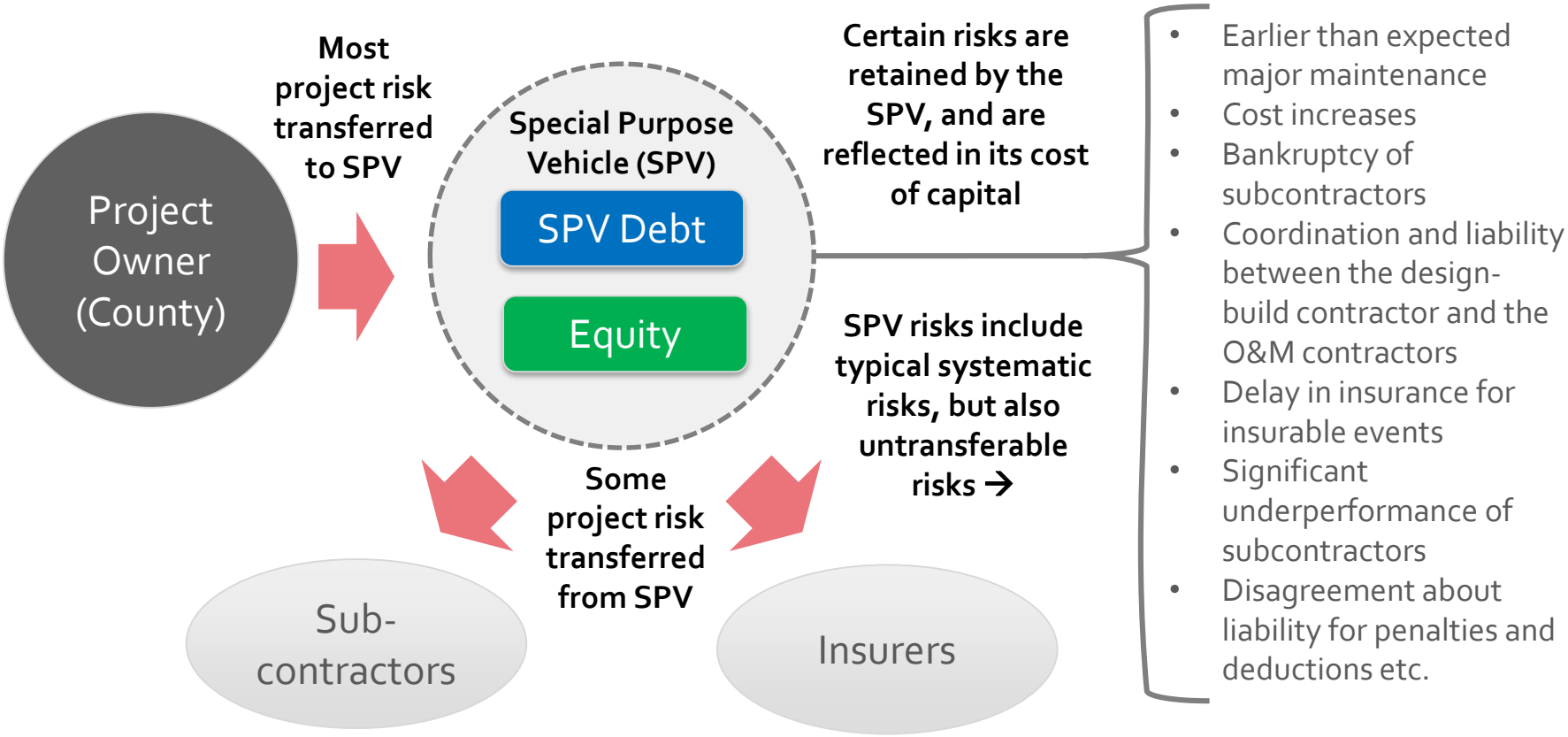
Option 4 financing assumptions

Assumption	Low	Medium	High	Source
Long term debt under taxable P3				
Base rate	2.25%	2.85%	3.50%	• 2.16% 20-year US Treasury • Assumed average life / tenor: 20 years • Source: 20-year US Treasury (11/15/2019) • UST is a typical base rate for a bond or private placement solution. The 20-year rate is a proxy for the average loan life of a 30-year P3.
Credit spread	165 bps	180 bps	200 bps	Data from comparable transactions
Cost of debt	3.90%	4.65%	5.50%	Calculated
Equity				
Equity IRR (pre tax)	11%	12%	13%	Data from comparable transactions (based on pre-tax IRR)
Leverage	91:09	90:10	88:12	Assumes the subordinate lien in the 501c3 solution is the same % of the capital structure as equity
WACC				
	4.79%	5.64%	6.65%	WACC calculation, upward correction of 0.25% to account for reserve accounts and changes in leverage over time

Option 5 financing assumptions

Assumption	Low	Medium	High	Source
Tax-Exempt debt				
Base rate	2.10%	2.60%	3.10%	• 20-year AAA GO Municipal Market Data (MMD) on 11/15/2019: 1.97%. Source: Bond Buyer • + 10 bp Low Case "Buffer" (rounded) • 20 year used to reflect average life and serial bond structure of municipal debt.
Spread for 501(c)(3)	0 bps	25 bps	50 bps	IMG Rebel analysis
Debt rate	2.10%	2.85%	3.60%	Calculated
Tax-Exempt sub-debt				
"Equity" / Sub-debt	11%	12%	13%	Data from comparable transactions (based on pre-tax IRR)
Leverage	91:09	90:10	88:12	Assumes the subordinate lien in the 501c3 solution is the same % of the capital structure as equity
WACC				
	3.15%	4.02%	5.00%	WACC calculation, upward correction of 0.25% to account for reserve accounts and changes in leverage over time

Certain P3 developer risks cannot be transferred, and are reflected in a higher cost of capital



Without a P3 transaction, the County will retain these risks, or insure them at its expense.

We use a "risk premium" approach to valuing SPV risk in cash flows

- The table below describes three common approaches to valuing SPV risk in value for money analysis.
- Approaches 2 and 3 assume financial markets are efficient: the additional cost of capital incurred by a P3 SPV is the best estimate of the cost of risks retained by the SPV.
- We use a risk premium approach. Because modelled cash flow profiles between models are similar, and this approach allows cash flows in each period to be directly compared.

Method	Description	Pros	Cons
(1) Direct valuation of risks	Independent risks are identified, with the estimated cost impact and probability of each risk modeled	• Conceptually straightforward • Risk valuation can be used to refine project structuring	• High-cost and long process • "Unknowns" remain unconsidered and unvalued
(2) Risk-adjusted NPV discounting	Nominal, non risk-adjusted public-sector cash flows are forecast for each model. Each model's cash flows discounted at a "risk-adjusted" WACC	• Allows risk valuation estimate with less time and lower cost • Likely to capture "unknowns" better than top-down approaches	• Does not allow comparison in an individual period • Cannot identify the contribution of each SPV risk to overall cost
(3) Risk premium approach	A risk adjustment is added to nominal cash flows in each period, based on a WACC premium corresponding to SPV risks.	• Allows cash flows in each period to be directly compared	• Timing impacts of risk impact may be considered slightly less precisely than in Method 2.

What the literature is saying about the comparability of public and private financing

"Arrow and Lind conclude that, under certain conditions, the social cost of public-sector-provided capital is lower because project risk can be spread more broadly across taxpayers than across relatively concentrated private investors. (…) We find that institutional arrangements that have evolved over decades to reduce the cost of private-sector risk bearing are unavailable to taxpayers in their capacity as public investment's ultimate risk bearers. Our analysis of the arrangements surrounding public- versus private-sector risk bearing casts doubt on Arrow and Lind's conclusions."

Institutional Economics Meets the Cost of Capital: Implications for Public Versus Private Infrastructure Delivery, Rick Geddes

"…the low cost of borrowing by governments does not reflect superior capabilities to choose or manage projects. Instead, it reflects the fact that governments have recourse to taxpayers, who de facto provide a fairly open-ended credit insurance to the government. If taxpayers were remunerated for the risk they assume in the case of tax-financed projects, then ex ante there would be no capital cost advantage to government finance. The risk premium on government finance would, in principle, be no different from that of private investors."

The risk premium for evaluating public projects, Michael Klein

Marcel Ham
Marcel.Ham@imgrebel.com

Jim Ziglar
Jim.Ziglar@imgrebel.com

Herb Ladley
Herb.Ladley@imgrebel.com

Elisa Donadi
Elisa.Donadi@imgrebel.com

1015 15th St NW
Suite 600, Washington, DC 20005

Office: 301-907-2900
www.imgrebel.com