

**THURSTON COUNTY**  
**FACILITY CONDITION ASSESSMENT**  
**FINAL REPORT**  
**MAY 27, 2016**



**MENG**  
ANALYSIS

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## I. EXECUTIVE SUMMARY

### 1.1 Introduction

Thurston County engaged MENG Analysis to conduct Facility Condition Assessments (FCAs) of 21 County owned, operated, and managed facilities. This report includes both summary and detailed results of that assessment.

The purpose of this FCA is to assist County staff and leadership in more proactive management of the County's facility assets, including planning and budgeting for short-term correction of Observed Deficiencies (ODs), and long-term major maintenance –Predicted Renewals (PRs).

This FCA report also includes an inventory list of County-owned equipment installed in the surveyed facilities. The Equipment Inventory List is included in Section V.

The FCA scope of work includes:

- I. FCA Preparation:
  - Project scoping
  - Prioritization
  - Facility inventory
  - Operations and Maintenance (O&M) records
  - Condition information
  - O&M workshops
- II. Field surveys:
  - Facility condition assessments of selected buildings
- III. Reporting
- IV. Database:
  - Preparation and data analysis
- V. Draft FCA report
  - Review by County
  - Incorporation of County's comments
- VI. Final FCA report
- VII. Presentations of findings

The following 21 facilities and two parking lots at 14 separate sites are included in the Thurston County FCA.

1. Accountability and Restitution Facility
2. ARC Work Release Building
3. Evaluation & Treatment Facility
4. Expo Hall
5. Heritage Hall
6. McLane Building
7. McLane Annex
8. Thurston County Coroner's Building
9. Thurston County Courthouse Bldg. #1
10. Thurston County Courthouse Bldg. #2
11. Thurston County Courthouse Bldg. #3
12. Thurston County Courthouse Bldg. #4
13. Thurston County Courthouse Bldg. #5 / TwinStar Building
14. Thurston County Emergency Services
15. Thurston County Family Justice Center
16. Thurston County Health
17. Tilley Complex Shop A
18. Tilley Complex Shop B
19. Tilley Complex Building C
20. Tilley Complex Building D
21. Tilley Complex Building E
22. G Lot
23. J Lot



## 1.2 General Findings

The surveyed sites and buildings are well maintained by knowledgeable, dedicated maintenance staff given limited resources available. Highlights include:

- The majority of County's facilities are newer with the exception of Thurston County Courthouse Bldg. #1 through Bldg. #3 and the McLane Building.
- Observed Deficiencies show that the highest cost building systems in need of short-term action are HVAC and Interior Finishes followed by Electrical.
- The highest Predicted Renewal cost, projected for a single building is Thurston County Courthouse Bldg. #3.



### 1.3. General Condition Scores

The condition assessment process rates each subsystem in a facility with a qualitative score of 1 through 5 where:

1 = excellent

2 = good

3 = fair

4 = poor

5 = unacceptable

Subsystem scores are weighted by the cost of that subsystem relative to the total replacement value of the facility. A weighted average scores is compiled for each of the County's facilities. The following table summarizes these qualitative assessment scores (sorted from best to worse condition) for the surveyed facilities:

Facility	Weighted Average Condition Score
Tilley Complex Building C	2.00
Tilley Complex Building E	2.00
Tilley Complex Building D	2.00
Accountability and Restitution Building	2.09
Tilley Complex Shop B	2.16
ARC Work Release Building	2.20
Thurston County Health Building	2.23
Expo Hall	2.32
Thurston County Coroners Building	2.32
Tilley Complex Shop A	2.36
Evaluation and Treatment Building	2.47
Thurston County Family Justice Center	2.50
McLane Annex	2.75
TwinStar Credit Union Building #5	2.77
Heritage Hall	2.81
Thurston County Emergency Services Building	3.07
Thurston County Courthouse Bldg. #2	3.25
Thurston County Courthouse Bldg. #4	3.30
Thurston County Courthouse Bldg. #3	3.31
McLane Building	3.33
Thurston County Courthouse Bldg. #1	3.34

#### 1.4. Facility Condition Index

A Facility Condition Index (FCI) is an industry standard used for benchmarking and evaluating a portfolio of facility assets over time. The FCI is the ratio between a facility's Backlog of Maintenance and Repair (BMAR) and the Current Replacement Value (CRV) of the facility. Please see the list of FCA terminology in Appendix section 6.3 for further explanation of FCI. The following list is sorted from lowest (best) to highest (worst) FCI.

Facility	FCI
Tilley Complex Building D	0.04
Tilley Complex Building C	0.05
Tilley Complex Building E	0.05
ARC Work Release Building	0.06
Accountability and Restitution Building	0.06
Tilley Complex Shop B	0.06
Thurston County Health Building	0.07
Thurston County Coroners Building	0.07
Expo Hall	0.08
Tilley Complex Shop A	0.08
Thurston County Family Justice Center	0.10
Evaluation and Treatment Building	0.10
McLane Annex	0.10
TwinStar Credit Union Building #5	0.13
Heritage Hall	0.16
Thurston County Emergency Services Building	0.16
Thurston County Courthouse Bldg. #2	0.20
Thurston County Courthouse Bldg. #4	0.22
McLane Building	0.24
Thurston County Courthouse Bldg. #1	0.24
Thurston County Courthouse Bldg. #3	0.24

### 1.5. Projected Cost Summary

Estimated costs are calculated for both short-term Observed Deficiencies (ODs) as well as for long-term Predicted Renewals (PRs). The costs summarized here include typical construction markups as well as project development markups (design, management, etc.) and are calculated as 2016 present value costs.

- Current Observed Deficiencies (2016 - 2021) = \$26,583,000 for all building and site systems
  - Approximately 143 deficiencies
  - Items with a direct cost of less than \$5,000 are not included in OD report but may be noted in subsystem comments if considered significant
- Observed Deficiencies Peak Cost Years:
  - 2019 = \$10,549,000
  - 2021 = \$4,723,000
- Observed Deficiencies System Deficiencies:
  - HVAC: \$6,978,000
  - Interior Finishes: \$5,744,000
  - Interior Construction: \$2,257,000
  - Electrical: \$1,972,000
  - Exterior Closure: \$1,922,000
- 20-year (2016-2035) Predicted Renewal = \$109,008,000
- Predicted Renewal Peak Cost Years:
  - 2024 = \$19,417,000
  - 2026 = \$17,522,000
  - 2027 = \$14,552,000
- Predicted Renewal System Deficiencies:
  - Electrical: \$30,094,000
  - HVAC: \$29,051,000
  - Interior Finishes: \$14,336,000
  - Exterior Closure: \$9,772,000

*Note 5-year Observed Deficiencies should not be added to 20-year Predicted Renewals. Observed Deficiencies are short-term condition issues observed by field surveyors, while Predicted Renewals are long-term based on a predictive model that factors system costs, condition scores and life cycles.*

## 1.6 Additional Observations

Additional notes on observations made in the field that do not necessarily constitute a renewal cost or deficiency are listed below. These items may have contributing factors to current building systems or may require additional review or other corrective action.

**Tilley Complex Building A** The ramp at second floor walkway appears non-compliant with current code. Additional ADA review is recommended.

**Heritage Hall** This building should be reviewed for code compliance for exiting from the basement area. Surveyors observed that doors were locked and hardware sets for panic systems were not present. Additionally, the ramp from the interior hall to the storage area appears to not meet ADA requirements. There is ADA access to the stage but we recommend additional review and possible reconfiguration.

**Emergency Services Building** The exterior glazing appears to be a retrofit of dual-glazed windows in original frames. Although this dramatically increases thermal comfort and lowers energy costs, the original frames are expected to continue to under-perform in regards to the ideal energy conservation level. We recommend infrared thermography to review the heat loss/gain that may still be occurring from the frames.

### Accountability and Restitution Building

Surveyors identified substandard roofing detailing for flashing systems and downspouts shows signs of additional water leaks at the exterior. Although the report scores these problems in overall scores of subsystems, we recommend additional review by building envelop specialist to make recommendations for long-lasting, corrective action to lengthen the subsystems life expectancy. In isolated locations, the water leaks are prematurely affecting the building structural elements.



Code compliant issues were observed for roof top venting for building HVAC as well as sanitary systems. Roof top equipment is set on less than ideal sleeper systems and not on long term, long lasting sleeper systems.

*\*Photo from midpoint of ARC Mezzanine showing rusting near repaired leak area.*

**Family Justice Center** This building's structure reflects some differential settlement at C Pod near the main entrance into the detention area. We recommend more in-depth, seismic review, and analysis of this condition.

**Thurston County Courthouse Bldg. #3** The building envelope shows signs of previous water penetration along the east side of the newer detention addition. Although

surveyors did not observe any signs of current leaks, we recommend continual monitoring, thermal infrared imaging and review from a building envelope specialist.

**County Health Building** Surveyors noted that along the south side of the building, the roof gutters are in need of maintenance. Due to safe access to the tall roof area, roof anchors are recommended and roof-top access be considered for addressing future maintenance needs.

**Evaluation and Treatment Building** At the site parking adjacent to the neighboring lumber yard, it appears that storm water drains runs off that property and onto Thurston County property. We recommend code review for treatment of water runoff for additional considerations and mitigation.



*\*Area circled in red shows approximate location where water runoff is coming from adjacent property at the Evaluation and Treatment Building.*

## 1.7 Conclusions

The condition assessments found that Thurston County has mostly newer facilities with the Courthouse Campus buildings and the original McLane building being the oldest and most difficult to maintain. As expected, those facilities have generated the highest renewal and deficiency costs. County facilities with systems near, or at end of useful life should be scheduled for upgrade or replacement. Other newer facilities should be scheduled for regular maintenance. With good regular attention, these facilities should perform well over their expected life span. Overall, assessment shows that County staff has done a good job maintaining systems and responding to issues notwithstanding limited resources.



## II. SUMMARY REPORTS – OBSERVED DEFICIENCIES

### 2.1 Observed Deficiencies Summary

The majority of the costs for addressing Observed Deficiencies (ODs) for the five-year period of 2016 - 2021 are found in the Courthouse Campus buildings, comprised of Thurston County Courthouse Bldg. #1 through Bldg. #3. Terminal and Package Units represent the largest single subsystem cost items in the 2019 budget year. Overall Courthouse Campus buildings make up over 75% of the total of all ODs. The Thurston County Courthouse Bldg. #3 Commercial and Institutional Equipment are in most immediate need of attention. Facilities that lack Fire Sprinklers are also identified to be addressed this year due to code compliance.

#### OD by Year

DeficiencyBudget..	
<b>2016</b>	<b>3,287,382</b>
<b>2017</b>	<b>836,931</b>
<b>2018</b>	<b>3,801,760</b>
<b>2019</b>	<b>10,548,995</b>
<b>2020</b>	<b>3,385,606</b>
<b>2021</b>	<b>4,722,561</b>

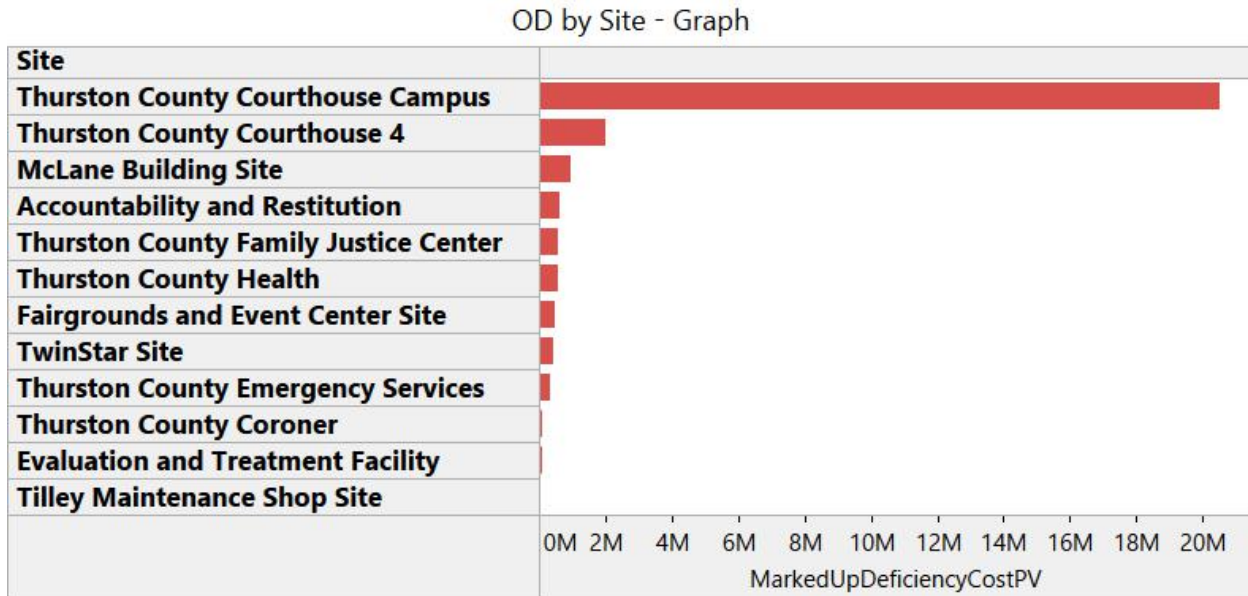
### Exhibit 1A. Observed Deficiency Costs by Site

#### OD by Site

Site	
<b>Accountability and Restitution</b>	<b>598,856</b>
<b>Evaluation and Treatment Facility</b>	<b>75,610</b>
<b>Fairgrounds and Event Center Site</b>	<b>494,196</b>
<b>McLane Building Site</b>	<b>944,332</b>
<b>Thurston County Coroner</b>	<b>83,474</b>
<b>Thurston County Courthouse 4</b>	<b>1,993,087</b>
<b>Thurston County Courthouse Campus</b>	<b>20,489,604</b>
<b>Thurston County Emergency Services</b>	<b>351,850</b>
<b>Thurston County Family Justice Center</b>	<b>559,437</b>
<b>Thurston County Health</b>	<b>551,020</b>
<b>Tilley Maintenance Shop Site</b>	<b>23,456</b>
<b>TwinStar Site</b>	<b>418,313</b>
<b>Grand Total</b>	<b>26,583,235</b>

\*costs shown marked up at 2016 present value

## Exhibit 1B. Observed Deficiency Costs by Site



Sum of MarkedUpDeficiencyCostPV for each Site. The data is filtered on DeficiencyBudgetYear, which has multiple members selected.



## 2.1.2 Observed Deficiency Costs by Facility

The following table summarizes the 2016 - 2020 OD costs at each site:

### Exhibit 2A. Observed Deficiency Costs by Facility

OD by Facility	
Facility	
Accountability and Restitution Building	492,424
Accountability and Restitution Infrastructure	18,281
ARC Work Release Building	88,151
Evaluation and Treatment Building	75,610
Expo Hall	0
Fairgrounds and Event Center Infrastructure	32,480
Heritage Hall	461,716
McLane Annex	191,869
McLane Building	707,429
McLane Building Site Infrastructure	45,034
Thurston County Coroners Building	83,474
Thurston County Courthouse 4	1,946,688
Thurston County Courthouse 4 Infrastructure	46,399
Thurston County Courthouse Building #1	5,705,454
Thurston County Courthouse Building #2	4,282,558
Thurston County Courthouse Building #3	9,785,917
Thurston County Courthouse Campus Infrastructure	715,675
Thurston County Emergency Services Building	351,850
Thurston County Family Justice Center	540,308
Thurston County Family Justice Center Infra	19,129
Thurston County Health Building	551,020
Tilley Building C	11,728
Tilley Building E	11,728
TwinStar Credit Union Building #5	401,057
TwinStar Site Infrastructure	17,256
Grand Total	26,583,235

### 2.1.3 Observed Deficiency Costs by System

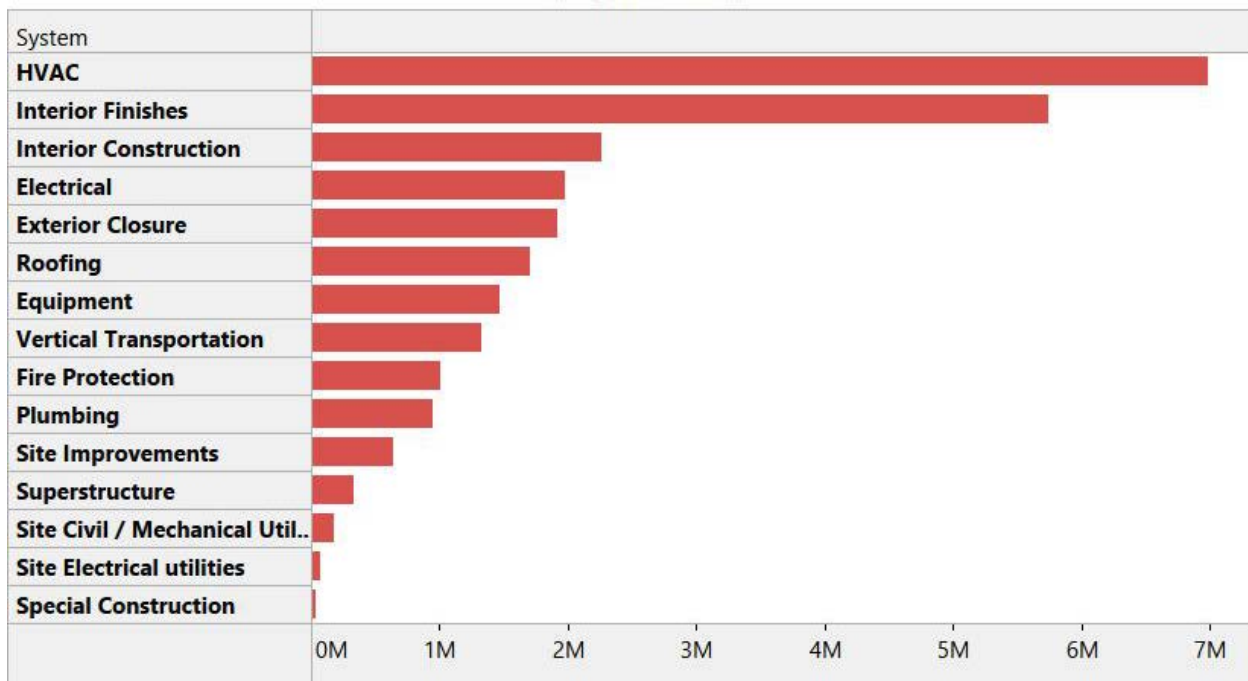
The adjacent table summarizes OD costs by system. HVAC, interior finishes and interior construction are the systems in greatest need of major maintenance.

It is customary to see HVAC system at or near the top of the listing but we are showing interior finishes and interior construction as the next two systems. Interior finishes includes all wall, floor and ceiling finishes and the cost shown here includes ceiling finishes at all three main courthouse campus buildings with a combined square footage of over 162,000 square feet of deficient ceiling conditions. Combine those costs with floor finishes at most of these locations as well as selected other buildings such as Emergency Services, Evaluation and Treatment and County Health, the deficiency cost are higher compared to other systems. Interior construction includes subsystems such as walls, finishes and interior doors and the deficiencies show door and hardware replacement as well as basic painting at most of the interior doors for the Courthouse Campus.

OD by System

System	
Electrical	1,972,167
Equipment	1,462,500
Exterior Closure	1,921,929
Fire Protection	1,006,003
HVAC	6,978,468
Interior Construction	2,256,994
Interior Finishes	5,744,161
Plumbing	941,714
Roofing	1,706,973
Site Civil / Mechanical U..	179,669
Site Electrical utilities	71,056
Site Improvements	643,529
Special Construction	39,724
Superstructure	332,008
Vertical Transportation	1,326,340
Grand Total	26,583,235

### Exhibit 2. Observed Deficiency Costs – by System



\*Cost shown with markups in present value

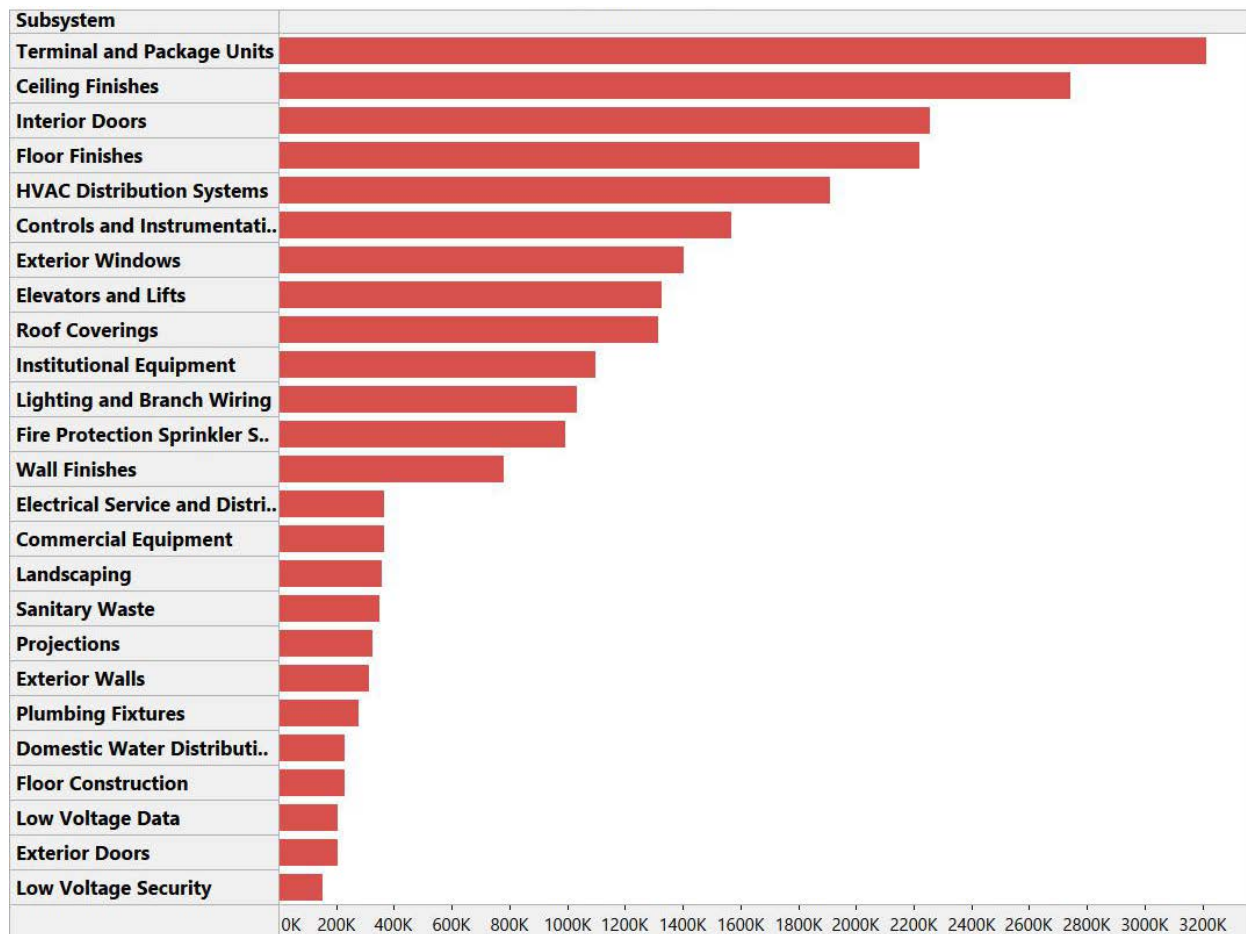
The following table shows the percentage of deficiency costs by site.

Site	
Accountability and Restitution	2.25%
Evaluation and Treatment Facili..	0.28%
Fairgrounds and Event Center Si..	1.86%
McLane Building Site	3.55%
Thurston County Coroner	0.31%
Thurston County Courthouse 4	7.50%
Thurston County Courthouse Ca..	77.08%
Thurston County Emergency Ser..	1.32%
Thurston County Family Justice ..	2.10%
Thurston County Health	2.07%
Tilley Maintenance Shop Site	0.09%
TwinStar Site	1.57%
Grand Total	100.00%

## Exhibit 3A. Observed Deficiency Costs – by Subsystem

System	Subsystem	
Electrical	Electrical Service and Distribu..	367,730
	Lighting and Branch Wiring	1,033,642
	Low Voltage Communication	60,938
	Low Voltage Data	205,906
	Low Voltage Fire Alarm	17,550
	Low Voltage Security	152,454
	Other Electrical Systems	133,947
Equipment	Commercial Equipment	365,625
	Institutional Equipment	1,096,875
Exterior Closure	Exterior Doors	204,087
	Exterior Walls	313,366
	Exterior Windows	1,404,476
Fire Protection	Fire Protection Sprinkler Syst..	993,815
	Other Fire Protection Systems	12,188
HVAC	Controls and Instrumentation	1,569,919
	Energy Supply	117,277
	HVAC Distribution Systems	1,908,914
	Heat Generating Systems	83,474
	Other HVAC Systems and Equ..	85,313
	Terminal and Package Units	3,213,571
Interior Construct..	Interior Doors	2,256,994
Interior Finishes	Ceiling Finishes	2,744,294
	Floor Finishes	2,218,443
	Wall Finishes	781,424
Plumbing	Domestic Water Distribution	230,091
	Plumbing Fixtures	276,773
	Rain Water Drainage	83,771
	Sanitary Waste	351,079
Roofing	Projections	326,414
	Roof Coverings	1,314,884
	Roof Openings	65,675
Site Civil / Mechanical Utilities	Cooling Distribution	69,026
	Heating Distribution	69,026
	Sanitary Sewer	11,728
	Storm Sewer	17,933
	Water Supply	11,956
Site Electrical utili..	Site Lighting	71,056
	Landscaping	356,484
Site Improvements	Parking Lots	111,163
	Pedestrian Paving	29,554
	Roadways	129,590
	Site Development	16,738
Special Constructi..	Integrated Construction	39,724
Superstructure	Floor Construction	229,088
	Roof Construction	102,920
Vertical Transport..	Elevators and Lifts	1,326,340
Grand Total		26,583,235



**Exhibit 3B. Observed Deficiency Costs by Subsystem**

\*Subsystems cost above show only top 25 cost items

**2.1.4 Projected Annual Cost of Observed Deficiencies**

2019 is projected as a peak year for addressing ODs, with large costs for HVAC terminal and package units, controls and instrumentation, elevators and a variety of items covering most building subsystems.

### III. SUMMARY REPORTS – PREDICTED RENEWALS

#### 3.1 20-Year Predicted Renewals (PRs)

PRs for Building Systems are based on 2016 dollars for a 20-year period spanning 2016 through 2035.

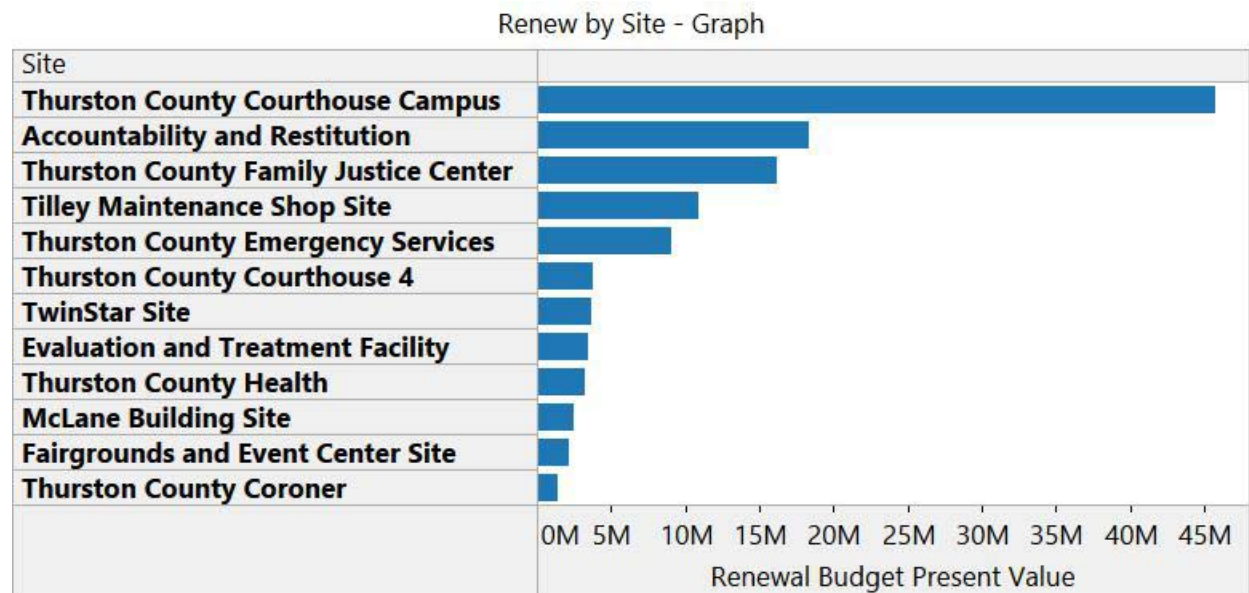
#### 3.2 20-Year Predicted Renewals (PRs)

The MENG Analysis Facility Condition Analysis (FCA) Database generates parametric cost estimates for the renewal or replacement of all facility subsystems as they reach the end of their predicted life cycle. For Thurston County, a 20-year horizon was selected, which will support planning and budgeting for long-term major maintenance needs. Renewal costs are projected to be \$109M for this period.

Site	
<b>Accountability and Restitution</b>	<b>16,998,031</b>
<b>Evaluation and Treatment Facility</b>	<b>3,200,497</b>
<b>Fairgrounds and Event Center Site</b>	<b>2,019,813</b>
<b>McLane Building Site</b>	<b>2,127,124</b>
<b>Thurston County Coroner</b>	<b>1,136,901</b>
<b>Thurston County Courthouse 4</b>	<b>3,664,139</b>
<b>Thurston County Courthouse Campus</b>	<b>41,601,342</b>
<b>Thurston County Emergency Services</b>	<b>6,869,946</b>
<b>Thurston County Family Justice Center</b>	<b>16,158,068</b>
<b>Thurston County Health</b>	<b>3,281,844</b>
<b>Tilley Maintenance Shop Site</b>	<b>8,487,887</b>
<b>TwinStar Site</b>	<b>3,462,417</b>
<b>Grand Total</b>	<b>109,008,009</b>

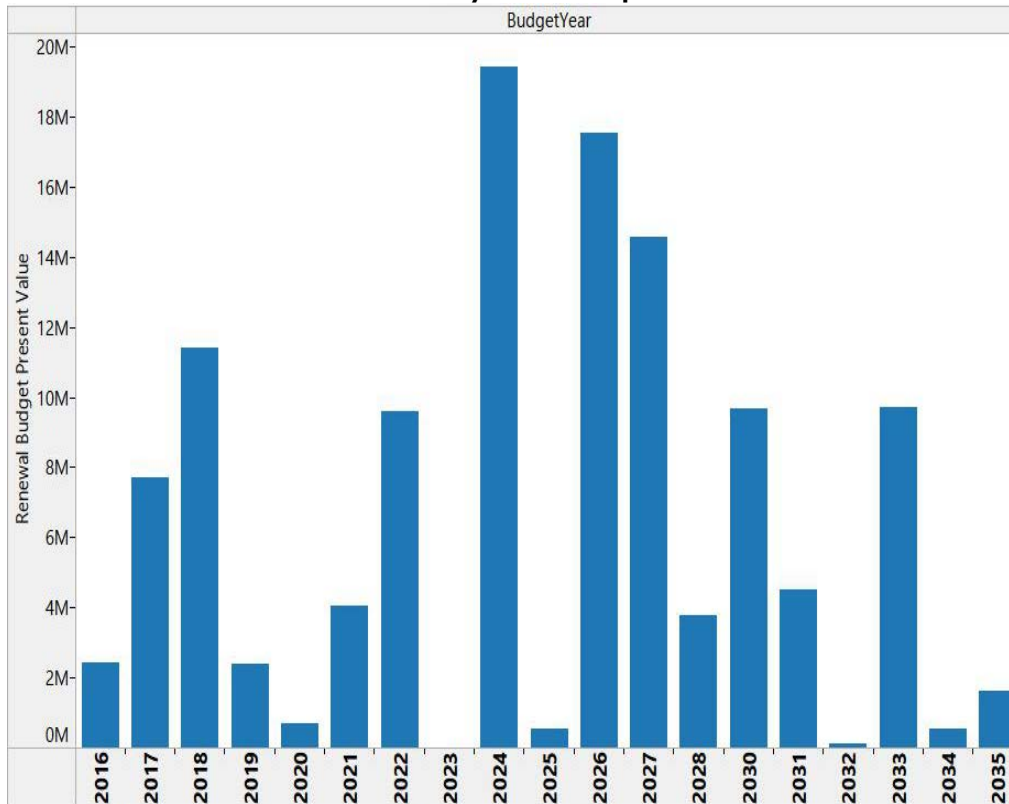
Due to facility age and size, the Courthouse Campus HVAC and Electrical systems are predicted for the County's highest Predicted Renewal costs.

#### Exhibit 4. 20-Year Predicted Renewals by Site Including Infrastructure and Buildings



\*Graph shows cost from 2016 to 2035 for all buildings and systems

It is important to note that for planning and budgeting purposes, one should not add both the 2016-2020 ODs and the 2016-2020 PRs. ODs are Observed Deficiencies that are specifically identified by the FCA Survey Team, whereas the predicted renewals from the same period are theoretical projections that factor the age of systems, their relative conditions, and modeled costs of systems. PRs are useful to highlight systems that may not have been observable.

**Exhibit 5A. Predicted Renewals by Year Graph**

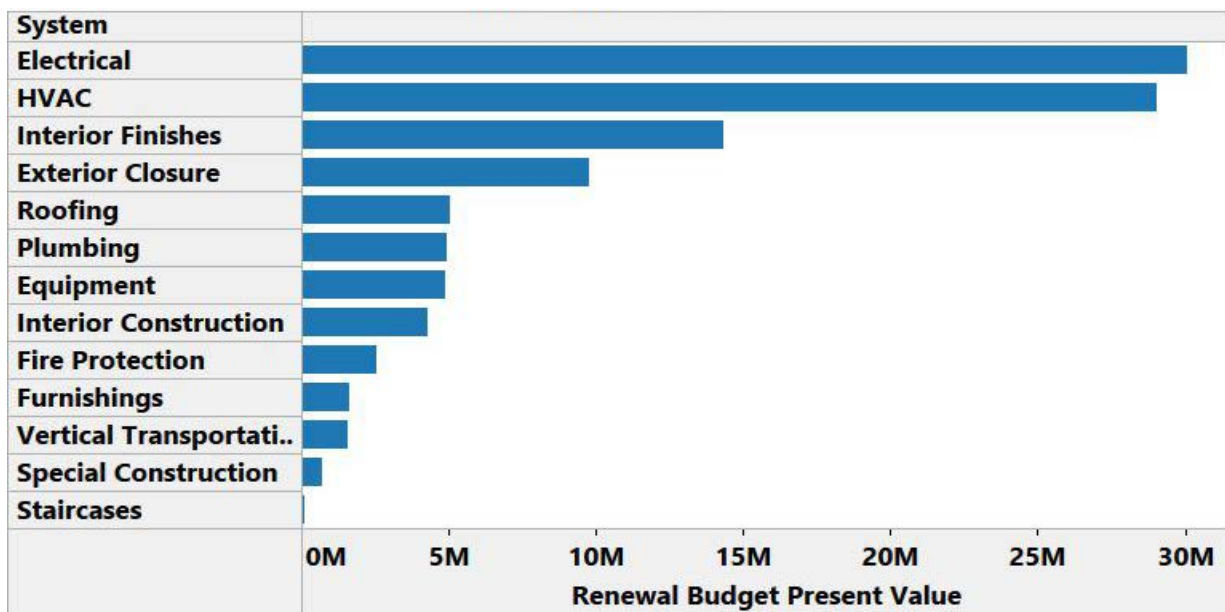
\*Graph shows cost from 2016 to 2035 for all buildings and systems

**Exhibit 5B. Predicted Renewals by Year Table**

BudgetYear	
2016	2,414,271
2017	7,716,791
2018	11,391,974
2019	2,392,875
2020	681,495
2021	4,062,639
2022	9,589,381
2023	190
2024	19,417,162
2025	534,840
2026	17,522,354
2027	14,551,681
2028	3,776,335
2030	9,659,928
2031	4,514,004
2032	132,284
2033	9,702,486
2034	539,477
2035	1,636,874
<b>Grand Total</b>	<b>120,237,041</b>



Exhibit 6A. Predicted Renewals by System Graph

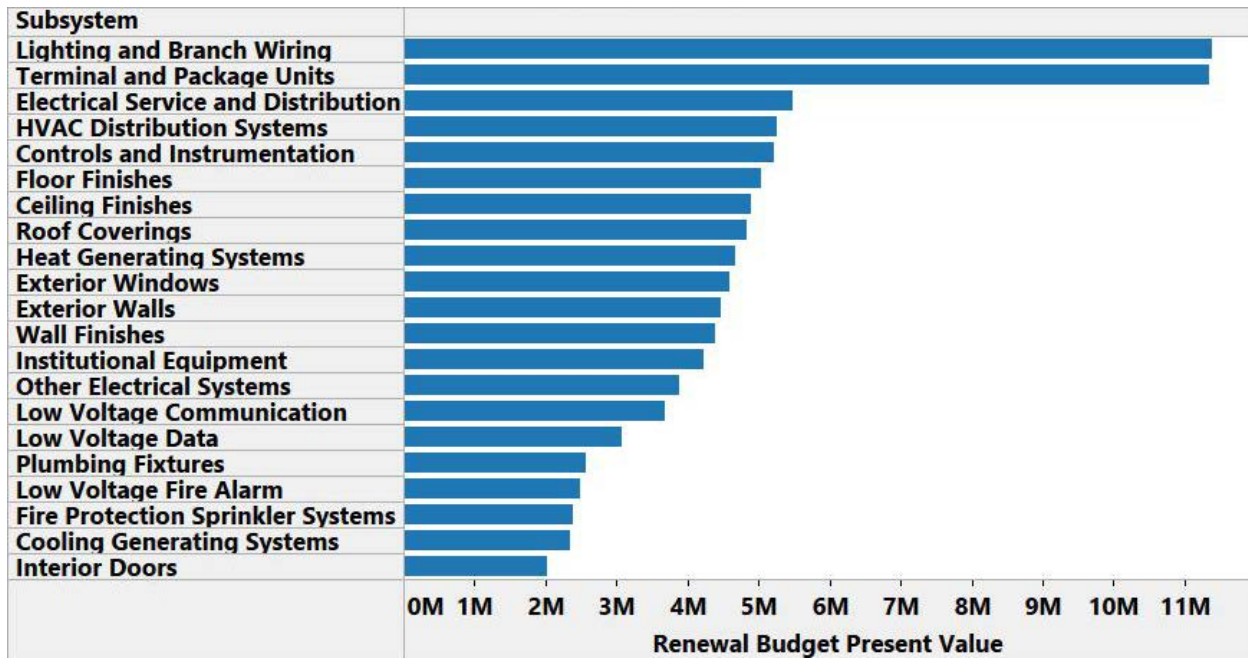


\*Graph shows cost from 2016 to 2035 for all buildings and systems

Exhibit 6A. Predicted Renewals by System Table

Renew by System	
System	
Electrical	30,094,145
HVAC	29,051,479
Interior Finishes	14,335,597
Exterior Closure	9,771,844
Roofing	5,050,599
Plumbing	4,940,183
Equipment	4,906,410
Interior Construction	4,289,574
Fire Protection	2,529,849
Furnishings	1,640,158
Vertical Transportat..	1,593,550
Special Construction	704,217
Staircases	100,404
Grand Total	109,008,009

Exhibit 7. Predicted Renewals by Subsystem Graph



\*Cost shown are top 25 subsystems only

## IV. FACILITY REPORTS

### 4.1 Facility Reports

The three primary reports documenting current facility system conditions and costs include:

- a) **Facility Summary** – The overall facility condition, including Facility Condition Index (FCI), systems and sub-systems condition scores and remaining useful life. Also includes qualitative assessments with system descriptions and condition comments from field surveys.
- b) **Observed Deficiency Cost with Markups** – Break down of Observed Deficiencies by Unifomat system with markups. For repair cost planning purposes, the following project mark-ups are used:

<b>Contingency</b>	30%
<b>General Contractor Mark-ups</b> (overhead & profit)	20%
<b>Project Soft Costs</b>	45%

Project Soft Costs include:

Design Fees	14%
Permitting	2%
*Thurston County Management Cost	10%
Project Contingency	10%
Sales Tax	9%
	<hr/>
	S/T 45%

Observed system deficiencies for each facility include a detailed itemization of facility system components that are in need of major maintenance or repair in order to maintain functionality. All building systems (e.g. exterior shell, mechanical systems, electrical systems, etc.) are evaluated and estimates presented for noted deficiencies.

- c) **Detailed Assessment – Observed Deficiency Report** – Qualitative assessments and costs including condition score, remaining useful life, and cost estimates of Observed Deficiencies.

## Facility Summary

### Thurston County

### Accountability and Restitution

### Accountability and Restitution Building

3491 Ferguson St SW  
Tumwater, WA 98512

#### Facility Code

Facility Size - Gross S.F.	100,000
Year Of Original Construction	2010
Facility Use Type	Detention Center - Low rise
Construction Type	Heavy
# of Floors	2
Energy Source	Gas
Year Of Last Renovation	2010
Historic Register	No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	2.1			
Facility Condition Index (FCI)	0.06			
Current Replacement Value (CRV)	\$56,385,000	Predicted Renewal Budget (6 yrs)	\$249,000	\$239,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$19,914,000	\$15,622,000
		Observed Deficiencies (6 yrs)	\$519,000	\$492,000
		Observed Deficiencies (ALL)	\$519,000	\$492,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

The structure is in good condition but several systems are showing premature age due to age and from the building un-occupied for over four years. Interiors and equipment in good condition. The building HVAC, plumbing, and electrical systems are typically of high quality in good condition and will provide dependable service to the building.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	2010	2010	2		JWB 04/25/16	Concrete foundations in good condition.
A1030 Slab On Grade	2010	2010	2		JWB 04/25/16	Concrete slab on grade in good condition.

## Facility Summary

Thurston County

Accountability and Restitution

Accountability and Restitution Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Facility Components								
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments	
B Shell				2.0				
Superstructure								
B1010	Floor Construction	2010	2010	2	JWB	04/25/16	Concrete slab on metal deck on steel beams in good condition.	
B1020	Roof Construction	2010	2010	2	JWB	04/25/16	Metal deck on steel beams on load bearing, reinforced concrete walls in good condition.	
Exterior Closure								
B2010	Exterior Walls	2010	2010	2	JWB	04/25/16	Tilt-up concrete panels in good condition. Upper wall area above roof EFIS panels in poor condition showing several cracks and water leaks, <\$5,000 to repair. Upper concrete wall above roof has several locations where water is penetrating the roofing flashing, <\$5,000 to repair.	
B2020	Exterior Windows	2010	2010	2	JWB	04/25/16	Dual glazed units in HM frames in good condition.	
B2030	Exterior Doors	2010	2010	2	JWB	04/25/16	HM doors in HM frames with ADA hardware in good condition.	
Roofing								
B3010	Roof Coverings	2010	2010	2	JWB	04/25/16	Thermoplastic polyolefin (TPO) single-ply roofing membrane in good condition.	
B3020	Roof Openings	2010	2010	2	JWB	04/25/16	Dual glazed roof monitors in good condition.	
B3030	Projections	2010	2010	2	JWB	04/25/16	Steel framed canopies in some locations and loading dock in good condition.	
C Interiors				2.1				
Interior Construction								
C1010	Partitions							

## Facility Summary

Thurston County

Accountability and Restitution

Accountability and Restitution Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments	
Systems									
C Interiors			2.1						
Interior Construction									
C1010	Partitions		2010	2010	2		JWB	04/25/16	Some framed, most CMU or cast in place concrete in good condition.
C1020	Interior Doors		2010	2010	2		JWB	04/25/16	HM doors in HM frames with ADA hardware in good condition. Detention areas have steel doors in steel frames in good condition. Several motorized sliding detention style doors in fair condition.
C1030	Fittings		2010	2010	2		JWB	04/25/16	Solid plastic restroom and detention area partitions, metal lockers all in good condition.
Staircases									
C2010	Stair Construction		2010	2010	2		JWB	04/25/16	Metal stairs to mezzanine areas in good condition.
Interior Finishes									
C3010	Wall Finishes		2010	2010	2		JWB	04/25/16	Wall paint in fair condition, some stainless steel in kitchen in good condition, FRP in scullery in fair condition due to wear and tear, <\$5,000 to replace, repair. Painting at holding cells in Intake area in poor condition, <\$5,000 to repaint.
C3020	Floor Finishes		2010	2010	3		JWB	04/25/16	Mostly sealed concrete, carpet in offices and sheet vinyl in main lobby, good condition except floor painting peeling and worn off in several places, <\$5,000 to prep and repaint where needed.
C3030	Ceiling Finishes		2010	2010	2		JWB	04/25/16	2x4 ACT in most areas, some 12x12 tiles, all in good condition.
D Services			2.2						

## Facility Summary

Thurston County

Accountability and Restitution

Accountability and Restitution Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.2			
<b>Plumbing</b>							
D2010	Plumbing Fixtures	2010	2010	2		JDH 04/25/16	Plumbing fixtures are in good condition.
D2020	Domestic Water Distribution	2010	2010	2		JDH 04/25/16	Domestic water distribution via copper piping is in good condition.
D2030	Sanitary Waste	2010	2010	3		JDH 04/25/16	Roof vents terminate within 5' of outside air intakes for several intake penthouse style vents (penthouse style roofhoods both intake and relieve are labeled "RV-#"). Multiple key plumbing cleanouts are not installed. Trap primers are not working. Trap seals at several floor drains (end of plumbing branches from cell blocks) do not hold against system pressure (typical of not fully vented or no trap). Sanitary waste system is in fair condition.
D2040	Rain Water Drainage	2010	2010	3		JDH 04/25/16	Rain water scuppers from the highroof above the mechanical mezzanine spill to the lower roof with free falling water over 8' in distance (except for one location). The impact of the concentrated water on the lower roof is causing damage to the roof. System is in fair condition.
<b>HVAC</b>							
D3010	Energy Supply	2010	2010	2		JDH 04/25/16	Natural gas boiler, with on-site propane back-up. Electric (Dx) cooling. System is in good condition.
D3020	Heat Generating Systems	2010	2010	3		JDH 04/25/16	Hydronic boiler system, two natural gas fired pulse boilers. Working clearance at top of units is very tight and galvanized condensate drainage piping is failing. Cost to replace condensate pipe less than \$5,000 (use plastic pipe and install acid neutralization kits). System is in fair condition.
D3030	Cooling Generating Systems	2010	2010	2		JDH 04/25/16	Dx cooling at split system air handling units. System is in good condition.

## Facility Summary

Thurston County

Accountability and Restitution

Accountability and Restitution Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.2			
HVAC						
D3040 HVAC Distribution Systems	2010	2010	3		JDH 04/25/16	EF-10 has vibration in housing. Exhaust louvers from mechanical penthouse are close to roof surface. East AHU undersized OSA intake. External electrical disconnects are not installed for all mechanical equipment on roof. Multiple equipment on roof lacks adequate distance from unprotected roof edge for service. Commercial laundry exhaust and make-up-air unit are not properly coordinated with application (Laundry HVAC equipment is currently under contract to be replaced with system coordinated with commercial laundry equipment and room, cost not included in corrections). System is in fair condition.
D3050 Terminal and Package Units	2010	2010	2		JDH 04/25/16	VAV boxes are in good condition.
D3060 Controls and Instrumentation	2010	2010	2		JDH 04/25/16	Building Management System (BMS) should be expanded to provide monitoring of outdoor sewer grinder pump. Cost of correction <\$5,000. System is in good condition.
Fire Protection						
D4010 Fire Protection Sprinkler Systems	2010	2010	2		JDH 04/25/16	NFPA 13 fire protection sprinkler system is in good condition.
D4030 Fire Protection Specialties	2010	2010	2		JDH 04/25/16	Riser equipment and PIV are in good condition
Electrical						
D5010 Electrical Service and Distribution	2010	2010	2		JDH 04/25/16	MDP-1 is 2,000 amps at 480 V, three-phase four-wire with MCB. MDP-2 is 800 amps at 480 V, three-phase four-wire with MCB. Although a privately owned primary system is considered a single electrical service point, industry standard is to label multiple electrical services within building clearly to indicated multiple service points. Cost of correction < \$5,000. System is in good condition.



## Facility Summary

Thurston County

Accountability and Restitution

Accountability and Restitution Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.2			
<b>Electrical</b>						
D5010 Electrical Service and Distribution						
D5020 Lighting and Branch Wiring	2010	2010	2	JDH	04/25/16	Lighting fixtures in recreational yards are failing from water entrance at mounting point. Cost for correction at four locations <\$5,000. Locker room shower has no light fixture and does not meet required light levels cost of correction <\$5,000. System is in good condition.
D5032 Low Voltage Communication	2010	2010	2	JDH	04/25/16	Phone and intercom systems are operational and in good condition.
D5037 Low Voltage Fire Alarm	2010	2010	2	JDH	04/25/16	Commercial dryer system is not monitored by building fire alarm system. Cost for correction <\$5,000. Fire alarm system is in good condition.
D5038 Low Voltage Security	2010	2015	2	JDH	04/25/16	Major upgrade to video surveillance system in 2015. Analog cameras remain using encoders. Additional cameras are needed in day room. Cost of correction <\$5,000. System is in good condition.
D5039 Low Voltage Data	2010	2010	3	JDH	04/25/16	Structured cable system consisting of data outlets, station cables and modular patch panels mounted in 19" equipment racks are in fair condition.
D5090 Other Electrical Systems	2010	2010	2	JDH	04/25/16	Computer grade UPS systems are having controls issues with pulsing HID exterior lighting ballasts when lamps fail. Current solution has been to replace fixtures with LED and remove ballast from service. Investigation of UPS and sensitivity settings by certified manufactures technician recommended. System is in fair condition.

### E Equipment and Furnishings

1.9

#### Equipment

## Facility Summary

Thurston County

Accountability and Restitution

Accountability and Restitution Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
E Equipment and Furnishings				1.9			
Equipment							
E1020	Institutional Equipment	2010	2010	2	JWB	04/25/16	Light commercial washers and dryers in detention areas, heavy duty commercial washers and dryers at Laundry, kitchen equipment, all in good condition.
E1030	Vehicular Equipment	2010	2010	2	JWB	04/25/16	Dock leveler in good condition.
E1090	Other Equipment	2010	2010	1	JWB	04/25/16	One 1,000 lbs motorized crane at mezzanine in good condition.
Furnishings							
E2010	Fixed Furnishings	2010	2010	2	JWB	04/25/16	Window blinds at offices, modern casework and reception areas in good condition.
F Special Construction				2.0			
Special Construction							
F1020	Integrated Construction	2010	2010	2	JWB	04/25/16	Walk in coolers and freezers in good condition with motorized sliding doors. Steel detention style tables in good condition. High density storage in good condition.
F1040	Special Facilities	2010	2010	2	JWB	04/25/16	Metal detectors at main entrances in good condition.
F1050	Special Controls and Instrumentation	2010	2010	2	JWB	04/25/16	Detention controls system in good condition.

## Facility Summary

### Thurston County

### Accountability and Restitution

### Accountability and Restitution Infrastructure

3491 Ferguson St SW  
Tumwater, WA 98512

## Facility Condition Summary

Site systems in good condition, parking includes pervious and impervious, roadways in good condition, landscape and security fencing in good condition. Utilities are connected to city systems at multiple points for domestic water, fire protection water, sewer, storm, and communications. The campus is serviced by a single primary power connection from PSE. The power sectionalizing cabinet has significant physical damage which will require repair.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2010 Roadways</b>	2010	2010	2	JWB	04/25/16	AC paved drives with concrete curbs, some pervious paving, all in good condition.
<b>G2020 Parking Lots</b>	2010	2010	2	JWB	04/25/16	AC paved parking with concrete curbs, some pervious paving, all in good condition.
<b>G2030 Pedestrian Paving</b>	2010	2010	2	JWB	04/25/16	Concrete walks and ramps in good condition.
<b>G2040 Site Development</b>	2010	2010	2	JWB	04/25/16	High security fencing with rolling gates in good condition. Perforated metal coiling door at sally port in good condition. Some CMU screen walls in good condition.
<b>G2050 Landscaping</b>	2010	2010	2	JWB	04/25/16	Irrigated lawn areas, juvenile trees and shrubs all in good condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	2010	2010	2	JDH	04/25/16	Hot box for RPBP near generator installation for Jail building is in good condition. Loc-box for RPBP for work release is not heated (this is a potential freeze hazard). System is in good condition.
<b>G3020 Sanitary Sewer</b>						

## Facility Summary

### Thurston County

### Accountability and Restitution

### Accountability and Restitution Infrastructure

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3020 Sanitary Sewer</b>	2010	2010	2		JDH 04/25/16	Grinder pump sump does not have adequate drainage and a temporary sump pump is installed. Grinder pump only services a third of building. Provide permanent sump pump or drainage method for vault. Vault type grease interceptor installed near loading dock.
<b>G3030 Storm Sewer</b>	2010	2010	2		JDH 04/25/16	Storm system is operational and in good condition.
<b>G3060 Fuel Distribution</b>	2010	2010	2		JDH 04/25/16	Natural gas system, 23,000 CFH. 1,000 gallon propane tank installed near gas meter used for back up fuel source for Jail boiler system. Separate meter with earthquake valve services Work Release. System is in good condition.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	2010	2010	2		JDH 04/25/16	Primary electrical distribution system on site is owned by the County and has a single point connection and primary meter from PSE. Sectionalizing gear downstream from meter is damaged and needs to be tested and repaired. Overall the site electrical distribution system is in good condition except as noted above.
<b>G4020 Site Lighting</b>	2010	2010	2		JDH 04/25/16	Mix of original HID fixtures and new LED fixtures. HID lamp failure pulsing is causing failures in control of the Jail building UPS system. See comments for facility UPS system. System is in good condition.
<b>G4030 Site Communications and Security</b>	2010	2010	2		JDH 04/25/16	Camera system installed on site specific to each of the two building surveyed. Systems are in good condition.
<b>Other Site Construction</b>						
<b>G9090 Other Site Systems</b>	2010	2010	2		JDH 04/25/16	990 kW diesel with NG assist generator installed

## Facility Summary

Thurston County

Accountability and Restitution

Accountability and Restitution Infrastructure

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
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### G Sitework

#### Other Site Construction

G9090 Other Site Systems

for Jail, 250 kW diesel generator installed for  
work release. Systems are in good condition.

## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Accountability and Restitution

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Accountability and Restitution Building	Plumbing	\$70,000	\$21,000	\$22,750	\$56,875	\$170,625	\$164,643
	HVAC	\$50,000	\$15,000	\$16,250	\$40,625	\$121,875	\$121,875
	Electrical	\$93,000	\$27,900	\$30,225	\$75,563	\$226,688	\$205,905
	<b>Facility Total</b>	<b>\$213,000</b>	<b>\$63,900</b>	<b>\$69,225</b>	<b>\$173,063</b>	<b>\$519,188</b>	<b>\$492,424</b>
Accountability and Restitution Infrastructure	Site Electrical utilities	\$7,500	\$2,250	\$2,438	\$6,094	\$18,281	\$18,281
	<b>Facility Total</b>	<b>\$7,500</b>	<b>\$2,250</b>	<b>\$2,438</b>	<b>\$6,094</b>	<b>\$18,281</b>	<b>\$18,281</b>
ARC Work Release Building	Exterior Closure	\$30,000	\$9,000	\$9,750	\$24,375	\$73,125	\$71,733
	Roofing	\$7,000	\$2,100	\$2,275	\$5,688	\$17,063	\$16,419
	<b>Facility Total</b>	<b>\$37,000</b>	<b>\$11,100</b>	<b>\$12,025</b>	<b>\$30,063</b>	<b>\$90,188</b>	<b>\$88,152</b>
<b>Site Total</b>		<b>\$257,500</b>	<b>\$77,250</b>	<b>\$83,688</b>	<b>\$209,219</b>	<b>\$627,656</b>	<b>\$598,857</b>


## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Accountability and Restitution

Total Observed Deficiency Repair Direct Cost : \$257,500

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$598,856

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Accountability and Restitution Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$70,000
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$170,625
Sanitary Waste									
Waste Piping/Vent	4	2	2016		1	\$60,000.00	LS	\$60,000	\$146,250
System at roof penetration is not code compliant.				Modify existing system to correct.					



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Accountability and Restitution

Total Observed Deficiency Repair Direct Cost : \$257,500

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$598,856

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Accountability and Restitution Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$70,000
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$170,625
Rain Water Drainage									
Downspouts	4	1	2016		1	\$10,000.00	LS	\$10,000	\$24,375

Downspout system does not allow for positive drainage from flashings and exterior walls.

Add downspouts





## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Accountability and Restitution

Total Observed Deficiency Repair Direct Cost : \$257,500

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$598,856

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Accountability and Restitution Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$50,000
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$121,875
HVAC Distribution Systems									
Equipment	5	0	2016		1	\$50,000.00	LS	\$50,000	\$121,875

Maintenance safety. Undersized outside air intakes, missing electrical disconnects, inadequate clearances for intake/exhaust.

Perform corrective measures.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Accountability and Restitution

Total Observed Deficiency Repair Direct Cost : \$257,500

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$598,856

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Accountability and Restitution Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$93,000
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$226,688
Low Voltage Data									
Data System	4	5	2016		100,000	\$0.93	SF	\$93,000	\$226,688

Systems nearing end of useful life.

Replace or upgrade as necessary.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Accountability and Restitution

Total Observed Deficiency Repair Direct Cost : \$257,500

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$598,856

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Accountability and Restitution Infrastructure					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$7,500
System: Site Electrical utilities					Total System Deficiency Repair Cost (Marked Up):				\$18,281
Site Lighting									
Primary electrical gear	5	0	2016		1	\$7,500.00	LS	\$7,500	\$18,281
Sectionalizing gear is physically damaged.				Repair damage.					



## Facility Summary

**Thurston County**  
**Accountability and Restitution**  
**ARC Work Release Building**

**3491 Ferguson St SW**  
**Tumwater, WA 98512**

### Facility Code

**Facility Size - Gross S.F.** 10,700  
**Year Of Original Construction** 2002  
**Facility Use Type** Detention Center - Low rise  
**Construction Type** Medium  
**# of Floors** 1  
**Energy Source** Gas  
**Year Of Last Renovation** 2012  
**Historic Register** No



			Total Project Cost	Total Project Cost - Present Value
<b>Weighted Avg Condition Score</b>	2.2			
<b>Facility Condition Index (FCI)</b>	0.06			
<b>Current Replacement Value (CRV)</b>	\$6,206,000	<b>Predicted Renewal Budget (6 yrs)</b>	\$32,000	\$30,000
<b>Beginning Budget Year</b>	2016	<b>Predicted Renewal Budget (20 yrs)</b>	\$1,805,000	\$1,376,000
		<b>Observed Deficiencies (6 yrs)</b>	\$90,000	\$88,000
		<b>Observed Deficiencies (ALL)</b>	\$90,000	\$88,000
		<b>Opportunity Total Project Cost</b>		N/A

## Facility Condition Summary

Original structure in fair condition, major remodel of most interior building systems in good condition. Steel and wood framed storage area needs replacement of doors. The mechanical and electrical include generator, UPS systems, visitor phone system for jail and access control and operations area. Major building upgrade in 2012 replaced most of the building systems. All mechanical and electrical systems are in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>A Substructure</b>			3.0			
<b>Foundations</b>						
<b>A1010 Standard Foundations</b>	2002	2002	3	JWB	04/27/16	Concrete foundation in fair condition
<b>A1030 Slab On Grade</b>	2002	2002	3	JWB	04/27/16	Concrete slab on grade in fair condition

## Facility Summary

Thurston County  
Accountability and Restitution  
ARC Work Release Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Facility Components								
Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
B Shell					2.4			
Superstructure								
B1010	Floor Construction		2012	2012	2		JWB 04/27/16	Wood framed with concrete deck at mezzanine, steel framed with concrete deck at dormitory, all in good condition.
B1020	Roof Construction		2002	2002	3		JWB 04/27/16	Wood joists on load bearing tilt up panels in fair condition.
Exterior Closure								
B2010	Exterior Walls		2002	2012	3		JWB 04/27/16	Concrete tilt up panels in fair condition. Some areas with EFIS showing some cracking. Storage area with metal siding panels in fair condition.
B2020	Exterior Windows		2012	2012	2		JWB 04/27/16	Aluminum, dual glazed units in good condition.
B2030	Exterior Doors		2002	2012	3		JWB 04/27/16	Aluminum storefront at entry, HM doors in HM frames at service doors, both in good condition. Large sliding doors at storage canopy in poor condition, sectional overhead door at east side of storage in fair condition.
Roofing								
B3010	Roof Coverings		2012	2012	2		JWB 04/27/16	TPO at main building area in good condition, standing seam metal roofing at storage area in fair condition.
B3030	Projections		2002	2012	4		JWB 04/27/16	Wood framed entry canopy in fair condition, steel and wood framed storage roof in poor to fair condition.
C Interiors					2.0			
Interior Construction								
C1010	Partitions							

## Facility Summary

Thurston County  
Accountability and Restitution  
ARC Work Release Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
C Interiors				2.0			
Interior Construction							
C1010	Partitions	2002	2012	2	JWB	04/27/16	Framed walls in good condition.
C1020	Interior Doors	2012	2012	2	JWB	04/27/16	HM doors in HM frames in good condition.
C1030	Fittings	2012	2012	3	JWB	04/27/16	Newer solid plastic restroom partitions in good condition. Plastic laminate counter at men's sink area delaminating in poor condition, <\$5,000 to replace.
Staircases							
C2010	Stair Construction	2012	2012	2	JWB	04/27/16	Steel stairs with concrete pan in fill in good condition.
Interior Finishes							
C3010	Wall Finishes	2012	2012	2	JWB	04/27/16	Wall paint in good condition.
C3020	Floor Finishes	2012	2012	2	JWB	04/27/16	Mostly sealed concrete in good condition.
C3030	Ceiling Finishes	2012	2012	2	JWB	04/27/16	Mostly gypsum, some office areas 2x4 ACT all in good condition.
D Services				2.0			
Plumbing							
D2010	Plumbing Fixtures	2012	2012	2	JDH	04/27/16	The plumbing fixtures are operational and in good condition.
D2020	Domestic Water Distribution	2012	2012	2	JDH	04/27/16	The gas, tank type water heaters, are in good condition.

## Facility Summary

Thurston County  
Accountability and Restitution  
ARC Work Release Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.0			
Plumbing							
D2030 Sanitary Waste		2012	2012	2		JDH 04/27/16	The waste system is operational and in good condition.
D2040 Rain Water Drainage		2012	2012	2		JDH 04/27/16	The roof drain system is operational and in good condition.
HVAC							
D3010 Energy Supply		2012	2012	2		JDH 04/27/16	Natural gas and electric supply the facility and are in good condition.
D3020 Heat Generating Systems		2012	2012	2		JDH 04/27/16	Rooftop unit with gas heating serve the building and is in good condition.
D3030 Cooling Generating Systems		2012	2012	2		JDH 04/27/16	Rooftop unit with Dx cooling (R-410A) serve the building and is in good condition.
D3040 HVAC Distribution Systems		2012	2012	2		JDH 04/27/16	Single zone, constant volume rooftop unit. Large toilet/shower room is exhausted by a single vent in the main room, individual shower stalls are not vented, this creates high level of dampness in shower stalls. Overall the systems are in good condition.
D3050 Terminal and Package Units		2012	2012	2		JDH 04/27/16	Mini split in mech/comm room is in good condition.
D3060 Controls and Instrumentation		2012	2012	2		JDH 04/27/16	The controls system is operational and in good condition.
Fire Protection							
D4010 Fire Protection Sprinkler Systems		2012	2012	2		JDH 04/27/16	NFPA 13 fire protection sprinkler system is in good condition.

## Facility Summary

Thurston County  
Accountability and Restitution  
ARC Work Release Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
D Services				2.0			
Fire Protection							
D4030	Fire Protection Specialties	2012	2012	2		JDH 04/27/16	Riser equipment and PIV are in good condition.
Electrical							
D5010	Electrical Service and Distribution	2012	2012	2		JDH 04/27/16	800 A MCB 120/208V. three-phase four-wire with meter and surge suppression. Two Ups systems are installed, one for each ATS) to provide ride through between power failure and generator operation. The system is in good condition.
D5020	Lighting and Branch Wiring	2012	2012	2		JDH 04/27/16	Majority of interior lighting is T-8 and in good condition.
D5032	Low Voltage Communication	2012	2012	2		JDH 04/27/16	The phone and communications systems are operational and in good condition.
D5037	Low Voltage Fire Alarm	2012	2012	2		JDH 04/27/16	The low voltage, addressable fire alarm system is in good condition.
D5038	Low Voltage Security	2012	2012	2		JDH 04/27/16	Video surveillance, access control and security systems are operational and in good condition.
D5039	Low Voltage Data	2012	2012	2		JDH 04/27/16	The structured data cable system including station cables, outlets and modular patch panels in 19" equipment racks are in good condition.
E Equipment and Furnishings				2.0			
Equipment							
E1010	Commercial Equipment	2012	2012	2		JWB 04/27/16	Light commercial washers and dryers in dormitory areas in fair condition.
Furnishings							
E2010	Fixed Furnishings						



## Facility Summary

Thurston County  
Accountability and Restitution  
ARC Work Release Building

3491 Ferguson St SW  
Tumwater, WA 98512

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
E Equipment and Furnishings				2.0			
Furnishings							
		2012	2012	2	JWB	04/27/16	Casework in good condition, reception counter on good condition.
F Special Construction				2.0			
Special Construction							
F1020	Integrated Construction						
		2012	2012	2	JWB	04/27/16	Detention quality beds and tables in good condition.
F1050	Special Controls and Instrumentation						
		2012	2012	2	JWB	04/27/16	Detention controls system in good condition.

## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Accountability and Restitution

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Accountability and Restitution Building	Plumbing	\$70,000	\$21,000	\$22,750	\$56,875	\$170,625	\$164,643
	HVAC	\$50,000	\$15,000	\$16,250	\$40,625	\$121,875	\$121,875
	Electrical	\$93,000	\$27,900	\$30,225	\$75,563	\$226,688	\$205,905
	<b>Facility Total</b>	<b>\$213,000</b>	<b>\$63,900</b>	<b>\$69,225</b>	<b>\$173,063</b>	<b>\$519,188</b>	<b>\$492,424</b>
Accountability and Restitution Infrastructure	Site Electrical utilities	\$7,500	\$2,250	\$2,438	\$6,094	\$18,281	\$18,281
	<b>Facility Total</b>	<b>\$7,500</b>	<b>\$2,250</b>	<b>\$2,438</b>	<b>\$6,094</b>	<b>\$18,281</b>	<b>\$18,281</b>
ARC Work Release Building	Exterior Closure	\$30,000	\$9,000	\$9,750	\$24,375	\$73,125	\$71,733
	Roofing	\$7,000	\$2,100	\$2,275	\$5,688	\$17,063	\$16,419
	<b>Facility Total</b>	<b>\$37,000</b>	<b>\$11,100</b>	<b>\$12,025</b>	<b>\$30,063</b>	<b>\$90,188</b>	<b>\$88,152</b>
<b>Site Total</b>		<b>\$257,500</b>	<b>\$77,250</b>	<b>\$83,688</b>	<b>\$209,219</b>	<b>\$627,656</b>	<b>\$598,857</b>

## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Accountability and Restitution

Total Observed Deficiency Repair Direct Cost : \$257,500

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$598,856

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: ARC Work Release Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$30,000
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$73,125
Exterior Doors									
Sliding Metal Doors	4	1	2016		3	\$10,000.00	EA	\$30,000	\$73,125

Metal sliding doors not functioning, rusted in poor condition.

Remove and replace doors with new sliding doors.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Accountability and Restitution

Total Observed Deficiency Repair Direct Cost : \$257,500

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$598,856

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: ARC Work Release Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$7,000
System: Roofing					Total System Deficiency Repair Cost (Marked Up):				\$17,063
Projections									
Storage Canopy	4	2	2016		1	\$7,000.00	LS	\$7,000	\$17,063
Steel columns and frame are rusted.				Prep and re-paint steel structure.					



## Facility Summary

### Thurston County

### Evaluation and Treatment Facility Evaluation and Treatment Building

3436 Mary Elder Rd NE  
Olympia, WA 98506

#### Facility Code

Facility Size - Gross S.F. 20,050  
Year Of Original Construction 2004  
Facility Use Type Health Clinic  
Construction Type Medium  
# of Floors 1  
Energy Source Gas  
Year Of Last Renovation 2004  
Historic Register No



Weighted Avg Condition Score	2.5	Total Project Cost	Total Project Cost - Present Value
Facility Condition Index (FCI)	0.10		
Current Replacement Value (CRV)	\$8,337,000	Predicted Renewal Budget (6 yrs)	\$226,000 \$208,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$3,849,000 \$3,200,000
		Observed Deficiencies (6 yrs)	\$82,000 \$76,000
		Observed Deficiencies (ALL)	\$82,000 \$76,000
		Opportunity Total Project Cost	N/A

## Facility Condition Summary

Structure in good condition, exteriors and interiors in good condition. Reported slab has ongoing moisture issue. Three rooftop HVAC units with hydronic heat supply the building via squeeze boxes. Natural gas boilers supply hydronic heat and gas water heaters supply domestic hot water. Plumbing fixtures are all original manual operation, standard flow. Building lighting is fluorescent with LED down lights in CSTU and ETU. Overall the building MEP systems are in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.6			
Foundations						
A1010 Standard Foundations	2004	2004	3		JWB 04/20/16	Concrete in fair condition, reported moisture issue.
A1030 Slab On Grade						

## Facility Summary

Thurston County  
Evaluation and Treatment Facility  
Evaluation and Treatment Building

3436 Mary Elder Rd NE  
Olympia, WA 98506

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>A Substructure</b>			<b>2.6</b>			
<b>Foundations</b>						
<b>A1030 Slab On Grade</b>	2004	2004	2	JWB	04/20/16	Concrete in good condition.
<b>B Shell</b>			<b>2.0</b>			
<b>Superstructure</b>						
<b>B1010 Floor Construction</b>	2004	2004	2	JWB	04/20/16	Mezzanine concrete on metal deck in good condition.
<b>B1020 Roof Construction</b>	2004	2004	2	JWB	04/20/16	Steel deck on steel beams on framed walls in good condition.
<b>Exterior Closure</b>						
<b>B2010 Exterior Walls</b>	2004	2004	2	JWB	04/20/16	Some brick veneer, mostly metal siding in good condition.
<b>B2020 Exterior Windows</b>	2004	2004	2	JWB	04/20/16	Dual glazed aluminum framed units in good condition.
<b>B2030 Exterior Doors</b>	2004	2004	2	JWB	04/20/16	Aluminum storefront, some HM doors in HM frames at service and utility areas in good condition with ADA compliant hardware.
<b>Roofing</b>						
<b>B3010 Roof Coverings</b>	2004	2004	2	JWB	04/20/16	Thermoplastic membrane roofing in good condition.
<b>B3020 Roof Openings</b>	2004	2004	2	JWB	04/20/16	Dual glazed, glass panel skylights in good condition.
<b>B3030 Projections</b>	2004	2004	2	JWB	04/20/16	Steel window canopies in good condition.

## Facility Summary

Thurston County  
Evaluation and Treatment Facility  
Evaluation and Treatment Building

3436 Mary Elder Rd NE  
Olympia, WA 98506

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>C Interiors</b>			<b>2.4</b>			
<b>Interior Construction</b>						
<b>C1010 Partitions</b>	2004	2004	2	JWB	04/20/16	Framed walls in good condition.
<b>C1020 Interior Doors</b>	2004	2004	2	JWB	04/20/16	Most wood doors in HM frames, some HM doors in HM frames all with ADA hardware in good condition, some resident doors have damage from hold opens, <\$5,000 to repair.
<b>C1030 Fittings</b>	2004	2004	3	JWB	04/20/16	Restroom counters in fair condition.
<b>Staircases</b>						
<b>C2010 Stair Construction</b>	2004	2004	2	JWB	04/20/16	Concrete stairs to mezzanine in good condition.
<b>Interior Finishes</b>						
<b>C3010 Wall Finishes</b>	2004	2004	3	JWB	04/20/16	Wall paint in good condition, fair condition in residential areas.
<b>C3020 Floor Finishes</b>	2004	2004	3	JWB	04/20/16	Sheet vinyl in corridors in good condition, ceramic tile in shower areas and some restrooms in fair condition, carpet in office areas in poor condition.
<b>C3030 Ceiling Finishes</b>	2004	2004	2	JWB	04/20/16	2x4 ACT in good condition.
<b>D Services</b>			<b>2.8</b>			
<b>Plumbing</b>						
<b>D2010 Plumbing Fixtures</b>	2004	2004	3	JDH	04/20/16	Standard flow, manual operation, floor mounted toilets w/ flush valves. Plumbing fixtures are in fair condition.
<b>D2020 Domestic Water Distribution</b>	2004	2004	3	JDH	04/20/16	The domestic water distribution is operational

## Facility Summary

Thurston County  
Evaluation and Treatment Facility  
Evaluation and Treatment Building

3436 Mary Elder Rd NE  
Olympia, WA 98506

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.8			
<b>Plumbing</b>							
D2020	Domestic Water Distribution						and in fair condition.
D2030	Sanitary Waste	2004	2004	3	JDH	04/20/16	The sanitary waste system is operational and in fair condition.
D2040	Rain Water Drainage	2004	2004	3	JDH	04/20/16	Roof drain system. Overflow is in-wall with scupper two feet above grade. System is in fair condition.
<b>HVAC</b>							
D3010	Energy Supply	2004	2004	3	JDH	04/20/16	Natural gas boiler and electric (Dx) cooling are the energy sources and they are in fair condition.
D3020	Heat Generating Systems	2004	2004	3	JDH	04/20/16	A dual boiler system supplies hydronic heat to three rooftop units. The hydronic heat also supplies unit heaters and ceiling heaters. The system condition is fair.
D3030	Cooling Generating Systems	2004	2004	3	JDH	04/20/16	Three Dx rooftop units supply cooling and are in fair condition.
D3040	HVAC Distribution Systems	2004	2004	3	JDH	04/20/16	HVAC distribution is via variable volume terminal boxes. All heating and cooling done at rooftop units. System condition is fair.
D3050	Terminal and Package Units	2004	2004	2	JDH	04/20/16	Unit heaters and ceiling heaters have hydronic coils. Mini split for electrical room and second unit for data/communications room. Compressor for mini split in electrical room not operational < \$5,000 if replacement required. System condition is good.
D3060	Controls and Instrumentation	2004	2004	3	JDH	04/20/16	DDC system remote access is via 56K baud modem. System condition is fair.



## Facility Summary

Thurston County

Evaluation and Treatment Facility

Evaluation and Treatment Building

3436 Mary Elder Rd NE  
Olympia, WA 98506

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.8			
HVAC						
D3060 Controls and Instrumentation						
Fire Protection						
D4010 Fire Protection Sprinkler Systems	2004	2004	3	JDH	04/20/16	NFPA 13 fire protection sprinkler system is in fair condition.
D4030 Fire Protection Specialties	2004	2004	3	JDH	04/20/16	Riser equipment and PIV are in fair condition.
Electrical						
D5010 Electrical Service and Distribution	2004	2004	3	JDH	04/20/16	600 amp dist. panel with MCB. 277/480 volt, three-phase, four-wire. 112.5 kVA step down transformer. Emergency Generator system and transfer switch are connected into system. 30 kVA UPS system located in data communications room. System is in fair condition.
D5020 Lighting and Branch Wiring	2004	2004	3	JDH	04/20/16	Fluorescent lighting in most areas, recessed down lights in CSTU and ETU have been upgraded to LED. Emergency egress system battery packs on both exit signs and egress lighting need to be replaced. Cost \$200 per location. Lighting and branch wiring are in fair condition.
D5032 Low Voltage Communication	2004	2004	3	JDH	04/20/16	Telephone and communications systems are operational and in fair condition.
D5037 Low Voltage Fire Alarm	2004	2004	3	JDH	04/20/16	Low voltage, addressable type fire alarm panel and system is in fair condition.
D5038 Low Voltage Security	2004	2004	3	JDH	04/20/16	Large number of doors are controlled by door control system, the system is in fair condition.
D5039 Low Voltage Data	2004	2004	3	JDH	04/20/16	The structured data cable system including

## Facility Summary

Thurston County

Evaluation and Treatment Facility

Evaluation and Treatment Building

3436 Mary Elder Rd NE  
Olympia, WA 98506

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.8			
Electrical						
D5039 Low Voltage Data						station cables, outlets and modular patch panels in 19" equipment racks are in fair condition.
E Equipment and Furnishings			3.0			
Equipment						
E1010 Commercial Equipment	2004	2004	3	JWB	04/20/16	Residential type appliances and some commercial kitchen equipment in fair condition.
E1020 Institutional Equipment	2004	2004	3	JWB	04/20/16	Examination tables in fair condition.
Furnishings						
E2010 Fixed Furnishings	2004	2004	3	JWB	04/20/16	Casework in fair condition, starting to show wear and tear, some window blinds at office areas in good condition.

## Facility Summary

Thurston County

Evaluation and Treatment Facility

Evaluation and Treatment Facility Infrastructure

3436 Mary Elder Rd NE  
Olympia, WA 98506

## Facility Condition Summary

Site parking, paving and landscape in good condition. Storm drainage includes run off from adjacent industrial property, may need additional remediation. City utilities are provided for domestic water, fire protection, sewer, storm, natural gas, power, phone/data. Systems are in good condition. Earthquake valve is installed at gas meter.

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2020 Parking Lots</b>	2004	2004	2	JWB	04/20/16	AC paved parking with concrete curbs in good condition.
<b>G2030 Pedestrian Paving</b>	2004	2004	2	JWB	04/20/16	Concrete walks in good condition.
<b>G2040 Site Development</b>	2004	2004	2	JWB	04/20/16	Steel fencing and some chain link fencing in good condition.
<b>G2050 Landscaping</b>	2004	2004	2	JWB	04/20/16	Irrigated trees, shrubs and lawn in good condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	2004	2004	3	JDH	04/20/16	System is operational and in fair condition.
<b>G3020 Sanitary Sewer</b>	2004	2004	3	JDH	04/20/16	Site sewer system is operational and in fair condition.
<b>G3030 Storm Sewer</b>	2004	2004	4	JDH	04/20/16	Lumber yard adjacent to site spills large amount of surface drainage to this site. This water has leached chemicals from the construction materials. The installed filtered catch basin should be added to maintenance list and is only designed for on-site contaminations from typical parking lot. Sustainable solution from off site

## Facility Summary

Thurston County

Evaluation and Treatment Facility

Evaluation and Treatment Facility Infrastructure

3436 Mary Elder Rd NE  
Olympia, WA 98506

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3030 Storm Sewer</b>						surface water from lumber yare should be implemented. The existing system performance with the added load of the adjacent property is poor.
<b>G3060 Fuel Distribution</b>	2004	2004	3	JDH	04/20/16	Natural gas with earthquake valve with AL 1400 meter, the system condition is fair.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	2004	2004	3	JDH	04/20/16	Underground electrical service via 300 kVA PSE pad mount transformer located near street is operational and in fair condition.
<b>G4020 Site Lighting</b>	2004	2004	3	JDH	04/20/16	Site lighting is low glare from tall cutoff fixtures. Trees prevent full light distribution from the pole mounted site lighting fixtures. System condition is fair.
<b>G4030 Site Communications and Security</b>	2004	2004	3	JDH	04/20/16	Video surveillance exists for some areas of exterior. Underground telephone and communication lines are operational and in fair condition.

Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County  
Site: Evaluation and Treatment Facility

Facility	System		Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Evaluation and Treatment Building	Interior Finishes		\$33,500	\$10,050	\$10,888	\$27,219	\$81,656	\$75,611
		Facility Total	\$33,500	\$10,050	\$10,888	\$27,219	\$81,656	\$75,611
		Site Total	\$33,500	\$10,050	\$10,888	\$27,219	\$81,656	\$75,611


## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Evaluation and Treatment Facility

Total Observed Deficiency Repair Direct Cost : \$33,500

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$75,610

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Evaluation and Treatment Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$33,500
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$81,656
Floor Finishes									
Carpet	4	4	2016		5,000	\$6.70	SF	\$33,500	\$81,656
Carpet is worn.				Remove and replace with new carpet.					
									



## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Expo Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Code

Facility Size - Gross S.F. 7,000  
Year Of Original Construction 2002  
Facility Use Type Conference Center  
Construction Type Light  
# of Floors 1  
Energy Source Gas  
Year Of Last Renovation 2002  
Historic Register No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	2.3			
Facility Condition Index (FCI)	0.08			
Current Replacement Value (CRV)	\$2,644,000	Predicted Renewal Budget (6 yrs)	\$103,000	\$98,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$734,000	\$615,000
		Observed Deficiencies (6 yrs)	\$0	\$0
		Observed Deficiencies (ALL)	\$0	\$0
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Newer structure, exteriors and interiors in good condition. The mechanical and electrical systems are in good condition. Kitchen has a hand wash and single three-compartment sink, commercial dishwasher the usage is limited. Configuration should be reviewed in consideration that if grease interceptor is required.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	2002	2002	2	JWB	05/06/16	Standard concrete foundations in good condition.
A1030 Slab On Grade	2002	2002	2	JWB	05/06/16	Slab on grade in good condition.

## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Expo Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>B Shell</b>			<b>2.0</b>			
<b>Superstructure</b>						
<b>B1010 Floor Construction</b>	2002	2002	2	JWB	05/06/16	Plywood on wood joists at mechanical mezzanine in good condition.
<b>B1020 Roof Construction</b>	2002	2002	2	JWB	05/06/16	Wood framed system on steel beam and post in good condition.
<b>Exterior Closure</b>						
<b>B2010 Exterior Walls</b>	2002	2002	2	JWB	05/06/16	Wood siding and wood soffit in good condition.
<b>B2020 Exterior Windows</b>	2002	2002	2	JWB	05/06/16	Dual glazed units in aluminum frames in good condition.
<b>B2030 Exterior Doors</b>	2002	2002	2	JWB	05/06/16	Aluminum storefront at entrances and west side of building, HM doors in HM frames with ADA hardware, all in good condition.
<b>Roofing</b>						
<b>B3010 Roof Coverings</b>	2002	2002	2	JWB	05/06/16	3-Tab asphalt shingle in good condition.
<b>B3030 Projections</b>	2002	2002	2	JWB	05/06/16	Wood framed canopy at entrance in good condition.
<b>C Interiors</b>			<b>2.2</b>			
<b>Interior Construction</b>						
<b>C1010 Partitions</b>	2002	2002	2	JWB	05/06/16	Framed walls in good condition, operable partitions in meeting room in good condition.
<b>C1020 Interior Doors</b>	2002	2002	2	JWB	05/06/16	Wood doors in HM frames with ADA compliant hardware in good condition.



## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Expo Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments	
Systems									
C Interiors			2.2						
Interior Construction									
C1030	Fittings		2002	2002	2		JWB	05/06/16	Metal restroom partitions in good condition.
Interior Finishes									
C3010	Wall Finishes		2002	2002	3		JWB	05/06/16	Wall paint, mix of plastic laminate and ceramic tile at restrooms, all in fair condition.
C3020	Floor Finishes		2002	2002	3		JWB	05/06/16	Carpet at entry, stained concrete at restroom and kitchen, wood at meeting room, in fair condition. Carpet showing signs of wear.
C3030	Ceiling Finishes		2002	2002	2		JWB	05/06/16	Gypsum in most areas except 12x12 tiles in meeting room, good condition.
D Services			2.6						
Plumbing									
D2010	Plumbing Fixtures		2002	2002	3		JDH	05/06/16	Small kitchen with commercial dishwasher, no grease trap. Flush valve urinals, flush tank toilets; fair condition.
D2020	Domestic Water Distribution		2002	2002	3		JDH	05/06/16	Two gas-fired hot water tanks. One serves the kitchen and the other the restrooms. Piping is in good condition.
D2030	Sanitary Waste		2002	2002	3		JDH	05/06/16	Kitchen drainage and no grease interceptor are marginal and depending on the use a grease trap may be needed. Condition is fair.
D2040	Rain Water Drainage		2002	2002	3		JDH	05/06/16	Building has a gutter and downspout system that is tightligned to storm drain system. Condition is fair.
HVAC									

## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Expo Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.6			
HVAC							
D3010	Energy Supply	2002	2002	2		JDH 05/06/16	The building is served by natural gas and electricity. The condition is good.
D3020	Heat Generating Systems	2002	2002	3		JDH 05/06/16	Horizontal gas furnaces providing heating, the system is in fair condition.
D3030	Cooling Generating Systems	2002	2002	3		JDH 05/06/16	Split system AC units providing cooling to Dx coils in the horizontal gas furnaces. The system is in fair condition.
D3040	HVAC Distribution Systems	2002	2002	2		JDH 05/06/16	Horizontal gas furnaces provide constant volume duct supply, and have ducted return air. The system is in good condition.
D3060	Controls and Instrumentation	2002	2002	3		JDH 05/06/16	Local electronic controls are used for controls of the split system AC system with gas heat. The individual systems are in fair condition.
Fire Protection							
D4010	Fire Protection Sprinkler Systems	2002	2002	5		JDH 05/06/16	No fire protection sprinkler system is installed.
Electrical							
D5010	Electrical Service and Distribution	2002	2002	2		JDH 05/06/16	600 amp 120/208 volt, three phase 4 wire. Multiple panels tapped from meter CT can. System in good condition.
D5020	Lighting and Branch Wiring	2002	2002	3		JDH 05/06/16	Lighting system consists of a combination of HID, fluorescent and incandescent fixtures. Some of fixtures could be replaced with more energy efficient fixtures. System is in fair condition.
D5032	Low Voltage Communication	2013	2013	2		JDH 05/06/16	Installed phone jacks wired to patch panels. No

## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Expo Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Facility Components										
Systems		Original System Date		Last Major System Renew.		Cond. Scores	Subsystem Remain. Useful Life - Yrs		Surveyor/ Survey Date	Comments
D Services						2.6				
Electrical										
D5032	Low Voltage Communication									phones installed. System is in good condition.
D5037	Low Voltage Fire Alarm		2002	2002	3		JDH	05/06/16	Low voltage addressable fire alarm system with smoke detectors and pull stations is in fair condition.	
D5038	Low Voltage Security		2015	2015	1		JDH	05/06/16	Video surveillance system is installed and shared with Heritage Hall building. Analog cameras are used and system is not a full coverage system. System is in new condition.	
D5039	Low Voltage Data		2013	2013	2		JDH	05/06/16	Small CAT 6 structured cable system installed. System terminates on wall mount modular patch panel. System is in good condition.	
E Equipment and Furnishings						2.0				
Equipment										
E1010	Commercial Equipment		2002	2002	2		JWB	05/06/16	Some residential style appliances, commercial kitchen equipment, few pieces, reach in, dishwashing machine, stainless steel prep tables and deep sink, all in good condition.	
Furnishings										
E2010	Fixed Furnishings		2002	2002	2		JWB	05/06/16	Modern casework, window blinds in good condition.	

## Facility Summary

### Thurston County

### Fairgrounds and Event Center Site

### Fairgrounds and Event Center Infrastructure

3054 Carpenter Rd  
Lacey, WA 98503

## Facility Condition Summary

Portion of overall site surveyed, directly related to Heritage Hall and Expo Hall. Paved parking at front in good condition, north areas in fair to poor condition, walks around Expo Hall in good condition, Heritage Hall walks in poor condition. Overall landscaping in good condition. The domestic water supply and sanitary sewer have been connected into utility districts which provided improvement in operations during the high use period during the fair. Systems are generally in good condition with the exception of some pole mounted cobra head light fixtures that are high glare and have no light cutoff.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2010 Roadways</b>	1941	2002	3	JWB	05/06/16	AC paved roadway in fair condition.
<b>G2020 Parking Lots</b>	1941	2002	3	JWB	05/06/16	AC paved parking north concrete curb at south side of buildings in good condition, parking at north of Heritage Hall mix of AC paved and concrete in poor condition.
<b>G2030 Pedestrian Paving</b>	1941	2002	4	JWB	05/06/16	Concrete walks, some AC paved walks, older walks at Heritage Hall in poor condition, others in good condition.
<b>G2040 Site Development</b>	1941	2002	3	JWB	05/06/16	Some chain-link fencing in fair condition, stacked block retaining walls in fair condition.
<b>G2050 Landscaping</b>	1941	2002	2	JWB	05/06/16	Trees, irrigated lawns and shrubs in good condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	1941	2002	2	JDH	05/06/16	Domestic water is on utility system and there is a fire loop installed. System is operational and in good condition.
<b>G3020 Sanitary Sewer</b>						

## Facility Summary

Thurston County

Fairgrounds and Event Center Site

Fairgrounds and Event Center Infrastructure

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3020 Sanitary Sewer</b>	1941	2002	2		JDH 05/06/16	Sewer system is connected to city sewer system. Previously the system was a septic system. The system is operational and in good condition.
<b>G3030 Storm Sewer</b>	1941	2002	2		JDH 05/06/16	Storm system provides adequate drainage of parking and site area and is in good condition.
<b>G3060 Fuel Distribution</b>	1941	2002	3		JDH 05/06/16	Natural gas is piped through site to the buildings. No earthquake valves are installed at the meters. The system is in fair condition.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	1941	2002	2		JDH 05/06/16	Power is routed underground through the site to 112.5 kVA pad mount transformer. They system is in good condition.
<b>G4020 Site Lighting</b>	1941	2002	3		JDH 05/06/16	Parking lot lighting is shoe box type high cut off fixtures with HID lamps. Along the street there are several cobra head type fixtures on wood poles. Condition of site lighting is fair.
<b>G4030 Site Communications and Security</b>	1941	2002	2		JDH 05/06/16	Camera system serves exterior in area of site survey. Communications systems are underground and functional. Condition is good.

## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Fairgrounds and Event Center Site

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Fairgrounds and Event Center Infrastructure	Site Improvements	\$14,000	\$4,200	\$4,550	\$11,375	\$34,125	\$32,482
	<b>Facility Total</b>	<b>\$14,000</b>	<b>\$4,200</b>	<b>\$4,550</b>	<b>\$11,375</b>	<b>\$34,125</b>	<b>\$32,482</b>
Heritage Hall	Superstructure	\$45,600	\$13,680	\$14,820	\$37,050	\$111,150	\$102,921
	Exterior Closure	\$90,150	\$27,045	\$29,299	\$73,247	\$219,741	\$211,448
	Fire Protection	\$60,450	\$18,135	\$19,646	\$49,116	\$147,347	\$147,347
	<b>Facility Total</b>	<b>\$196,200</b>	<b>\$58,860</b>	<b>\$63,765</b>	<b>\$159,413</b>	<b>\$478,238</b>	<b>\$461,716</b>
<b>Site Total</b>		<b>\$210,200</b>	<b>\$63,060</b>	<b>\$68,315</b>	<b>\$170,788</b>	<b>\$512,363</b>	<b>\$494,198</b>

## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Fairgrounds and Event Center Site

Total Observed Deficiency Repair Direct Cost : \$210,200

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$494,196

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Fairgrounds and Event Center Infrastructure					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$14,000
System: Site Improvements					Total System Deficiency Repair Cost (Marked Up):				\$34,125
Parking Lots									
Paving	4	3	2016		1	\$8,000.00	LS	\$8,000	\$19,500

Concrete parking area north of Heritage Hall in poor condition, broken, cracked. AC paving in same area worn and aged.

Remove and replace with AC paving.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Fairgrounds and Event Center Site

Total Observed Deficiency Repair Direct Cost : \$210,200

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$494,196

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Fairgrounds and Event Center Infrastructure					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$14,000
System: Site Improvements					Total System Deficiency Repair Cost (Marked Up):				\$34,125
Pedestrian Paving									
Walks	4	2	2016		1	\$6,000.00	LS	\$6,000	\$14,625

Concrete walks around Heritage Hall in poor condition, cracked, worn.

Remove and replace with new concrete.





## Facility Summary

**Thurston County**  
**Fairgrounds and Event Center Site**  
**Heritage Hall**

**3054 Carpenter Rd**  
**Lacey, WA 98503**

### Facility Code

**Facility Size - Gross S.F.** 9,120  
**Year Of Original Construction** 1941  
**Facility Use Type** Meeting Hall - Historical  
**Construction Type** Medium  
**# of Floors** 1  
**Energy Source** Gas  
**Year Of Last Renovation** 2006  
**Historic Register** No



		Total Project Cost		Total Project Cost - Present Value
<b>Weighted Avg Condition Score</b>	2.8			
<b>Facility Condition Index (FCI)</b>	0.16			
<b>Current Replacement Value (CRV)</b>	\$4,294,000	<b>Predicted Renewal Budget (6 yrs)</b>	\$449,000	\$432,000
<b>Beginning Budget Year</b>	2016	<b>Predicted Renewal Budget (20 yrs)</b>	\$1,594,000	\$1,405,000
		<b>Observed Deficiencies (6 yrs)</b>	\$478,000	\$462,000
		<b>Observed Deficiencies (ALL)</b>	\$478,000	\$462,000
		<b>Opportunity Total Project Cost</b>	N/A	

## Facility Condition Summary

Original 1941 building, historical register, heavy timber building structure in fair condition, interiors well maintained. Building addition to north in fair to poor condition. MEP systems were mostly replaced in 2005 renovation. Building is heated with hydronic heat and terminal units and ventilated with louvers and fans typical of a building of this type in the 1940s. Lighting is a mix of "period" type fixtures and more contemporary fixtures as light levels are balance with a historical look. Different areas of the building have been renovated to varying levels providing contrast in condition the spaces, overall the MEP systems are in good to fair condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>A Substructure</b>			3.0			
<b>Foundations</b>						
<b>A1010 Standard Foundations</b>	1941	1941	3	JWB	05/06/16	Standard concrete foundation, concrete stem walls, in fair condition due to age.
<b>A1030 Slab On Grade</b>						

## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Heritage Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Facility Components			Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments		
Systems	Original System Date	Last Major System Renew.						
A Substructure			3.0					
Foundations			1941	1941	3	JWB	05/06/16	Some portions of the building with concrete slab on grade in fair condition.
Basements								
A2020	Basement Walls		1941	1941	3	JWB	05/06/16	Concrete cast in place at basement.
B Shell			2.5					
Superstructure								
B1010	Floor Construction		1941	2006	3	JWB	05/06/16	Wood joists on cast in place concrete in fair condition.
B1020	Roof Construction		1941	1941	3	JWB	05/06/16	Original building wood framed system in fair condition. Shed roof addition framing from reported recycled buildings, shows deterioration, poor condition.
Exterior Closure								
B2010	Exterior Walls		1941	2006	2	JWB	05/06/16	Horizontally laid logs, good condition. Some siding in fair condition at addition, original wood siding in poor condition shows signs of deterioration, <\$5,00 to re-stain/paint.
B2020	Exterior Windows		1941	2006	5	JWB	05/06/16	Mix of mostly single glazed in wood frames and some dual glazed units set in original wood frames, poor condition.
B2030	Exterior Doors		1941	2006	4	JWB	05/06/16	Some HM doors in HM frames, mostly wood doors in original wood frames, some doors with ADA hardware. Doors in poor condition due to age and accessibility.
Roofing								
B3010	Roof Coverings							

## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Heritage Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
B Shell				2.5			
Roofing							
B3010	Roof Coverings	1941	2006	3	JWB	05/06/16	3-Tab composition tile roofing in fair condition.
B3020	Roof Openings	1941	1995	4	JWB	05/06/16	Older skylights at shed roof area in poor condition, <\$5,000 to replace.
B3030	Projections	1941	1941	4	JWB	05/06/16	Wood framed canopy at NE corner of building, wood rotted, needs replacement, <\$5,000 to replace.
C Interiors				3.2			
Interior Construction							
C1010	Partitions	1941	1941	3	JWB	05/06/16	Original wood framed partitions in fair condition.
C1020	Interior Doors	1941	1941	4	JWB	05/06/16	Wood doors in wood frames, most with ADA hardware, poor condition due to hardware, <\$5,000 to complete remaining hardware upgrades.
C1030	Fittings	1941	2006	3	JWB	05/06/16	Plastic laminate restroom partitions in fair condition.
Staircases							
C2010	Stair Construction	1941	1941	3	JWB	05/06/16	Wood framed stairs to platform and to basement, fair condition.
C2020	Stair Finishes	1941	2006	3	JWB	05/06/16	Carpet at interior stairs, fair condition.
Interior Finishes							
C3010	Wall Finishes	1941	2006	3	JWB	05/06/16	Wall paint, wood panels, plastic laminate in restrooms, exposed logs, fair condition.

## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Heritage Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Facility Components								
Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
C Interiors					3.2			
Interior Finishes								
C3010	Wall Finishes							
C3020	Floor Finishes							
			1941	1995	3		JWB 05/06/16	Carpet in office areas, wood flooring in Hall, some linoleum, some sheet vinyl in restrooms and wet areas, fair condition.
C3030	Ceiling Finishes							
			1941	1995	3		JWB 05/06/16	2x4 ACT in office, 12x12 tiles in Hall, fair condition.
D Services					3.0			
Plumbing								
D2010	Plumbing Fixtures							
			1941	2006	3		JDH 05/06/16	Plumbing fixtures are operational and in fair condition.
D2020	Domestic Water Distribution							
			1941	2006	2		JDH 05/06/16	Domestic water piping was replaced in 2005.
D2030	Sanitary Waste							
			1941	2006	2		JDH 05/06/16	The waste piping system was replaced in 2005, the system is in good condition.
D2040	Rain Water Drainage							
			1941	2006	3		JDH 05/06/16	Gutter and downspout system is in fair condition.
HVAC								
D3010	Energy Supply							
			1941	2006	2		JDH 05/06/16	Natural gas and electricity supply the building. These systems are in good condition.
D3020	Heat Generating Systems							
			1941	2006	3		JDH 05/06/16	A small modular gas boiler supplies heat to the buildings hydronic loop. The boiler is in fair condition.
D3030	Cooling Generating Systems							
			1941	2006	3		JDH 05/06/16	The majority of the building is only ventilated. There are packaged air conditioners (through-

## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Heritage Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			3.0			
<b>HVAC</b>						
D3030 Cooling Generating Systems						wall units) installed in the office area. Overall fair condition.
D3040 HVAC Distribution Systems	1941	2006	3	JDH	05/06/16	Hydronic heating system with a combination of base board, cabinet heaters and unit heaters. Natural ventilation (infiltration and windows). Hydronic piping is the primary distribution system. The system is in fair condition.
D3050 Terminal and Package Units	1941	2006	3	JDH	05/06/16	All the heating and cooling units are terminal units and in fair condition.
D3060 Controls and Instrumentation	1941	2006	3	JDH	05/06/16	A combination of unit mounted controls and a boiler control system. All controls are local electronic controls. The controls are in fair condition.
<b>Fire Protection</b>						
D4010 Fire Protection Sprinkler Systems	1941	1941	5	JDH	05/06/16	There is no fire sprinkler system installed.
<b>Electrical</b>						
D5010 Electrical Service and Distribution	1941	2006	2	JDH	05/06/16	800 amp MCB panel with 120/208 volt, three-phase four-wire system in good condition.
D5020 Lighting and Branch Wiring	1941	2006	3	JDH	05/06/16	Majority of wiring; receptacles and devices replaced in 2005 renovation. Overall condition of system is fair. Fluorescent lighting in fair condition.
D5032 Low Voltage Communication	1941	2006	3	JDH	05/06/16	Phone system is operational and in fair condition.
D5037 Low Voltage Fire Alarm	1941	2006	3	JDH	05/06/16	Low voltage addressable system with smoke detection and pull stations. System is in fair

## Facility Summary

Thurston County  
Fairgrounds and Event Center Site  
Heritage Hall

3054 Carpenter Rd  
Lacey, WA 98503

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>D Services</b>			<b>3.0</b>			
<b>Electrical</b>						
<b>D5037 Low Voltage Fire Alarm</b>						condition.
<b>D5038 Low Voltage Security</b>	1941	2013	2		JDH 05/06/16	Small video surveillance system is shared with Expo Hall and in good condition.
<b>D5039 Low Voltage Data</b>	1941	2005	3		JDH 05/06/16	CAT 5 structured cable system is operational and in fair condition.
<b>E Equipment and Furnishings</b>			<b>4.0</b>			
<b>Furnishings</b>						
<b>E2010 Fixed Furnishings</b>	1941	1941	4		JWB 05/06/16	Original casework in kitchen, poor condition due to age, <\$5,000 to replace.

Deficiency Repair Cost Markups By System


2016 - 2021

Thurston County  
Site: Fairgrounds and Event Center Site

Facility	System		Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Fairgrounds and Event Center Infrastructure	Site Improvements		\$14,000	\$4,200	\$4,550	\$11,375	\$34,125	\$32,482
		Facility Total	\$14,000	\$4,200	\$4,550	\$11,375	\$34,125	\$32,482
Heritage Hall	Superstructure		\$45,600	\$13,680	\$14,820	\$37,050	\$111,150	\$102,921
	Exterior Closure		\$90,150	\$27,045	\$29,299	\$73,247	\$219,741	\$211,448
	Fire Protection		\$60,450	\$18,135	\$19,646	\$49,116	\$147,347	\$147,347
		Facility Total	\$196,200	\$58,860	\$63,765	\$159,413	\$478,238	\$461,716
		Site Total	\$210,200	\$63,060	\$68,315	\$170,788	\$512,363	\$494,198

Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$210,200
Site: Fairgrounds and Event Center Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$494,196

Material		Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency					Action					
Facility:	Heritage Hall				Total System Deficiency Repair Cost (Undiscounted/Unescalated):					\$45,600
System:	Superstructure				Total System Deficiency Repair Cost (Marked Up):					\$111,150
Roof Construction										
Addition Roof Framing		4	4	2016		2,850	\$16.00	SF	\$45,600	\$111,150
Wood framing at addition, reported from recycled buildings, shows deterioration, poor condition.					Remove roofing and framing, reframe with new and install new roof insulation and roofing material.					






## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Fairgrounds and Event Center Site

Total Observed Deficiency Repair Direct Cost : \$210,200

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$494,196

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Heritage Hall					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$90,150
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$219,740
Exterior Windows									
Windows	5	2	2016		230	\$255.00	SF	\$58,650	\$142,959
Single glazed windows in original wood frames, some newer windows set in original wood frames.				Remove and replace with historical register quality windows and frames.					



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Fairgrounds and Event Center Site

Total Observed Deficiency Repair Direct Cost : \$210,200

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$494,196

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Heritage Hall					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$90,150
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$219,740
Exterior Doors									
Exterior Doors	4	2	2016		9	\$3,500.00	EA	\$31,500	\$76,781

Wood doors in original wood frames, some doors with ADA hardware. Doors in poor condition due to age and accessibility.

Remove and replace doors with new historical register quality doors with ADA accessible hardware.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Fairgrounds and Event Center Site

Total Observed Deficiency Repair Direct Cost : \$210,200

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$494,196

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Heritage Hall					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$60,450
System: Fire Protection					Total System Deficiency Repair Cost (Marked Up):				\$147,347
Fire Protection Sprinkler Systems									
Fire sprinkler system	5	0	2016		9,300	\$6.50	S.F.	\$60,450	\$147,347
No fire sprinkler system.				Install fire sprinkler system.					



## Facility Summary

Thurston County  
McLane Building Site  
McLane Annex

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Code

Facility Size - Gross S.F. 3,200  
Year Of Original Construction 1995  
Facility Use Type Classroom Building  
Construction Type Light  
# of Floors 1  
Energy Source Gas  
Year Of Last Renovation 1995  
Historic Register No



Weighted Avg Condition Score	2.8	Total Project Cost	Total Project Cost - Present Value
Facility Condition Index (FCI)	0.10		
Current Replacement Value (CRV)	\$1,610,000	Predicted Renewal Budget (6 yrs)	\$98,000 \$93,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$700,000 \$579,000
		Observed Deficiencies (6 yrs)	\$205,000 \$192,000
		Observed Deficiencies (ALL)	\$205,000 \$192,000
		Opportunity Total Project Cost	N/A

## Facility Condition Summary

Classroom and office type building with structure, exteriors and interiors in good condition. The systems for this building are typical of a light commercial office facility. These systems provide for an adequate use of the building. Both fire protection and fire detection systems should be added. The overall condition of the building is fair.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	1995	1995	2	JWB	05/04/16	Standard concrete foundation in good condition.
A1030 Slab On Grade	1995	1995	2	JWB	05/04/16	Standard slab on grade in good condition.

## Facility Summary

Thurston County  
McLane Building Site  
McLane Annex

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
B Shell			2.7					
Superstructure								
B1020	Roof Construction		1995	1995	2	JWB	05/04/16	Wood truss system in good condition.
Exterior Closure								
B2010	Exterior Walls		1995	1995	3	JWB	05/04/16	Wood siding in fair condition.
B2020	Exterior Windows		1995	1995	3	JWB	05/04/16	Dual glazed in aluminum frames in fair condition.
B2030	Exterior Doors		1995	1995	3	JWB	05/04/16	HM doors in HM frames with ADA hardware in fair condition, all need paint, <\$5,000 to paint.
Roofing								
B3010	Roof Coverings		1995	1995	2	JWB	05/04/16	3-Tab composition shingle in good condition.
B3020	Roof Openings		1995	1995	3	JWB	05/04/16	Skylight in fair condition.
C Interiors			2.2					
Interior Construction								
C1010	Partitions		1995	1995	2	JWB	05/04/16	Wood framed walls in good condition.
C1020	Interior Doors		1995	1995	2	JWB	05/04/16	Wood doors in HM frames with ADA compliant hardware in good condition.
C1030	Fittings		1995	1995	2	JWB	05/04/16	Plastic laminate restroom partitions in good condition.
Interior Finishes								
C3010	Wall Finishes		1995	1995	3	JWB	05/04/16	Wall paint in fair condition, plastic laminate wall

## Facility Summary

Thurston County  
McLane Building Site  
McLane Annex

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
C Interiors					2.2			
Interior Finishes								
C3010	Wall Finishes							covering in restroom in fair condition.
C3020	Floor Finishes		1995	1995	3	JWB	05/04/16	Carpet in most areas in fair condition, sheet vinyl in restrooms in fair condition.
C3030	Ceiling Finishes		1995	1995	2	JWB	05/04/16	All gypsum ceilings in good condition.
D Services					3.1			
Plumbing								
D2010	Plumbing Fixtures		1995	1995	3	JDH	05/04/16	Manual operation, flush tank toilets. Fair condition.
D2020	Domestic Water Distribution		1995	2004	3	JDH	05/04/16	Copper domestic water piping with 50 gallon gas water heater. Fair condition.
D2030	Sanitary Waste		1995	1995	3	JDH	05/04/16	Waste system is operational and in fair condition.
D2040	Rain Water Drainage		1995	1995	3	JDH	05/04/16	Gutter and downspout system to grade, no splash blocks. System is in fair condition.
HVAC								
D3010	Energy Supply		1995	1995	3	JDH	05/04/16	Electricity and natural gas supply energy to the building. The systems are in fair condition.
D3020	Heat Generating Systems		1995	1995	3	JDH	05/04/16	Horizontal gas furnace. Unit in fair condition.
D3030	Cooling Generating Systems		1995	1995	3	JDH	05/04/16	Split system, Dx coils downstream of horizontal gas furnaces; R-22 system. System in fair condition.

## Facility Summary

Thurston County  
McLane Building Site  
McLane Annex

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			3.1			
<b>HVAC</b>						
D3030 Cooling Generating Systems						
D3040 HVAC Distribution Systems	1995	1995	3		JDH 05/04/16	Constant volume system with bypass duct and VVT squeeze boxes. System in fair condition.
D3060 Controls and Instrumentation	1995	1995	3		JDH 05/04/16	Local electronic controls in fair condition.
<b>Fire Protection</b>						
D4010 Fire Protection Sprinkler Systems	1995	1995	5		JDH 05/04/16	No sprinkler system installed.
<b>Electrical</b>						
D5010 Electrical Service and Distribution	1995	1995	3		JDH 05/04/16	120/240 volt, one-phase, 200 amp service panel with main breaker. System is in fair condition. No surge suppression.
D5020 Lighting and Branch Wiring	1995	1995	3		JDH 05/04/16	T-12 Fluorescent lighting obsolete and inefficient; old branch wiring and devices (receptacles and switches) at end of life and insufficient.
D5032 Low Voltage Communication	1995	2015	2		JDH 05/04/16	New telephone service backboard. System in good condition.
D5037 Low Voltage Fire Alarm	1995	1995	5		JDH 05/04/16	No fire alarm system installed.
D5038 Low Voltage Security	1995	1995	3		JDH 05/04/16	Residential type security system. Fair condition.
D5039 Low Voltage Data	2015	2015	2		JDH 05/04/16	Cat 6 structured cable system with modular patch panel on 19" rack. System in good condition.
D5090 Other Electrical Systems						

## Facility Summary

Thurston County  
McLane Building Site  
McLane Annex

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>D Services</b>			<b>3.1</b>			
Electrical						
D5090 Other Electrical Systems	1995	1995	3	JDH	05/04/16	Door bell system operation and if fair condition.
<b>E Equipment and Furnishings</b>			<b>2.0</b>			
Furnishings						
E2010 Fixed Furnishings	1995	1995	2	JWB	05/04/16	Modern casework in good condition.



## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County


Site: McLane Building Site

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
McLane Annex	Fire Protection	\$19,200	\$5,760	\$6,240	\$15,600	\$46,800	\$46,800
	Electrical	\$64,796	\$19,439	\$21,059	\$52,647	\$157,940	\$145,070
	<b>Facility Total</b>	<b>\$83,996</b>	<b>\$25,199</b>	<b>\$27,299</b>	<b>\$68,247</b>	<b>\$204,740</b>	<b>\$191,870</b>
McLane Building	Exterior Closure	\$24,125	\$7,238	\$7,841	\$19,602	\$58,805	\$55,924
	Roofing	\$45,254	\$13,576	\$14,708	\$36,769	\$110,307	\$104,123
	Interior Construction	\$67,200	\$20,160	\$21,840	\$54,600	\$163,800	\$154,618
	Interior Finishes	\$80,510	\$24,153	\$26,166	\$65,414	\$196,243	\$190,457
	Fire Protection	\$49,368	\$14,810	\$16,045	\$40,112	\$120,335	\$120,335
	Electrical	\$37,026	\$11,108	\$12,033	\$30,084	\$90,251	\$81,978
	<b>Facility Total</b>	<b>\$303,483</b>	<b>\$91,045</b>	<b>\$98,632</b>	<b>\$246,580</b>	<b>\$739,740</b>	<b>\$707,433</b>
McLane Building Site Infrastructure	Site Improvements	\$19,200	\$5,760	\$6,240	\$15,600	\$46,800	\$45,035
	<b>Facility Total</b>	<b>\$19,200</b>	<b>\$5,760</b>	<b>\$6,240</b>	<b>\$15,600</b>	<b>\$46,800</b>	<b>\$45,035</b>
	<b>Site Total</b>	<b>\$406,679</b>	<b>\$122,004</b>	<b>\$132,171</b>	<b>\$330,427</b>	<b>\$991,280</b>	<b>\$944,339</b>

## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: McLane Annex				Total System Deficiency Repair Cost (Undiscounted/Unescalated):					\$19,200
System: Fire Protection				Total System Deficiency Repair Cost (Marked Up):					\$46,800
Fire Protection Sprinkler Systems									
Fire sprinkler system	5	0	2016		3,200	\$6.00	SF	\$19,200	\$46,800
No fire sprinkler system.				Install sprinkler system.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					

Facility:	McLane Annex	Total System Deficiency Repair Cost (Undiscounted/Unescalated):							\$64,796
System:	Electrical	Total System Deficiency Repair Cost (Marked Up):							\$157,940

Lighting and Branch Wiring

Lighting and branch wiring	4	5	2016		8,228	\$7.00	SF	\$57,596	\$140,390
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Obsolete inefficient T-12 lighting and aging electrical wiring and devices (receptacles & switches).

Replace with new lighting per County standard and new wiring & devices per code.


Assumed most existing pathways (conduit) and spaces can be re-used.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: McLane Annex				Total System Deficiency Repair Cost (Undiscounted/Unescalated):					\$64,796
System: Electrical				Total System Deficiency Repair Cost (Marked Up):					\$157,940
Low Voltage Fire Alarm									
Fire alarm system	5	0	2016		3,200	\$2.25	SF	\$7,200	\$17,550
No fire alarm system				Install fire alarm system					



## Facility Summary

Thurston County  
McLane Building Site  
McLane Building

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Code

Facility Size - Gross S.F. 8,228  
Year Of Original Construction 1960  
Facility Use Type Utility Support  
Construction Type Medium  
# of Floors 1  
Energy Source Gas  
Year Of Last Renovation 1994  
Historic Register No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	3.3			
Facility Condition Index (FCI)	0.24			
Current Replacement Value (CRV)	\$3,318,000	Predicted Renewal Budget (6 yrs)	\$1,021,000	\$969,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$1,730,000	\$1,548,000
		Observed Deficiencies (6 yrs)	\$740,000	\$707,000
		Observed Deficiencies (ALL)	\$740,000	\$707,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

1960's wood and CMU building originally a fire station, structure in fair condition, exteriors wood siding, doors and windows need attention. Interiors in poor condition with most systems needed renewal or replacement. Upgrades to the 1960s building have been made a piece at a time and the result is a functional but deficient building infrastructure. The MEP systems have abandon equipment that should be removed from the site. Areas of the building may not be adequately served, but don't appear to be used much. While still operational, portions of the electrical system are well past their designed end of life. In general the systems are functional and fair but in need of comprehensive upgrade and renovation.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			3.0			
Foundations						
A1010 Standard Foundations	1960	1960	3		JWB 05/04/16	Standard concrete foundation in fair condition.
A1030 Slab On Grade						

## Facility Summary

Thurston County  
McLane Building Site  
McLane Building

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>A Substructure</b>			<b>3.0</b>			
<b>Foundations</b>						
<b>A1030 Slab On Grade</b>	1960	1960	3	JWB	05/04/16	Standard slab on grade in fair condition.
<b>B Shell</b>			<b>3.1</b>			
<b>Superstructure</b>						
<b>B1020 Roof Construction</b>	1960	1994	3	JWB	05/04/16	Wood truss on wood beam on masonry with sloped overbuild above original low slope roof in fair condition. Some roof insulation missing or fallen, <\$5,000 to replace.
<b>Exterior Closure</b>						
<b>B2010 Exterior Walls</b>	1960	1994	3	JWB	05/04/16	CMU in fair condition, areas with wood siding in poor condition. Brick veneer and wood framed soffits in fair condition.
<b>B2020 Exterior Windows</b>	1960	1994	3	JWB	05/04/16	Mix of dual glazed and single glazed windows in overall fair condition. Replacement of older single glazed recommended.
<b>B2030 Exterior Doors</b>	1960	1994	3	JWB	05/04/16	Aluminum storefront at main entry, aluminum sectional apparatus bay doors in good condition, HM doors in HM frames in other areas need paint, <\$5,000 to prep and repaint.
<b>Roofing</b>						
<b>B3010 Roof Coverings</b>	1960	1994	4	JWB	05/04/16	3-Tab roofing tiles in poor condition.
<b>B3020 Roof Openings</b>	1960	1994	4	JWB	05/04/16	One skylight in poor condition, <\$5,000 to replace.
<b>B3030 Projections</b>	1960	1994	4	JWB	05/04/16	Wood framed, abandoned hose tower in poor condition, <\$5,00 to remove and patch roofing.

## Facility Summary

Thurston County  
McLane Building Site  
McLane Building

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Facility Components								
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments	
C Interiors				3.7				
Interior Construction								
C1010	Partitions	1960	1994	3	JWB	05/04/16	Wood framed, CMU walls in fair condition.	
C1020	Interior Doors	1960	1994	4	JWB	05/04/16	Wood doors in wood frames, most without ADA compliant hardware in poor condition due to wear and tear and age.	
C1030	Fittings	1960	1960	4	JWB	05/04/16	Restroom counters in poor condition, metal restroom partitions in fair condition, <\$5,000 to replace counters.	
Staircases								
C2010	Stair Construction	1994	1994	4	JWB	05/04/16	Wood framed stairs to mezzanine in poor condition, <\$5,00 to replace	
Interior Finishes								
C3010	Wall Finishes	1960	1994	4	JWB	05/04/16	Wall paint in poor condition.	
C3020	Floor Finishes	1960	1994	4	JWB	05/04/16	Carpet in offices and sheet vinyl areas in poor condition. Ceramic tile at lobby and training room in fair condition. Other areas with sealed concrete in fair condition.	
C3030	Ceiling Finishes	1960	1994	4	JWB	05/04/16	Mix of 2x4 ACT and 12x12 tiles in poor condition due to wear and tear. Some areas with gypsum ceiling in fair condition with some areas in need of repair, <\$5,000 to repair.	
D Services				3.3				
Plumbing								
D2010	Plumbing Fixtures	1960	1994	3	JDH	05/04/16	Plumbing fixtures have been upgraded from original. System is in fair condition.	

## Facility Summary

Thurston County  
McLane Building Site  
McLane Building

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				3.3			
<b>Plumbing</b>							
D2020	Domestic Water Distribution	1960	1994	3		JDH 05/04/16	Domestic water system is operational and in fair condition. Water heater replaced in 2011.
D2030	Sanitary Waste	1960	1994	3		JDH 05/04/16	Sanitary waste system is operational and in fair condition.
D2040	Rain Water Drainage	1960	1994	3		JDH 05/04/16	Gutter and downspout system to splash blocks is in fair condition.
D2090	Other Plumbing Systems	1960	1994	3		JDH 05/04/16	Natural gas piped through building. System in fair condition.
<b>HVAC</b>							
D3010	Energy Supply	1960	1994	3		JDH 05/04/16	Electricity and natural gas supply energy to the building. The systems are in fair condition.
D3020	Heat Generating Systems	1960	2005	3		JDH 05/04/16	Horizontal gas furnace with Dx coils. Units in fair condition.
D3030	Cooling Generating Systems	1960	2005	3		JDH 05/04/16	Dx cooling from R-22, split systems. Units in fair condition.
D3040	HVAC Distribution Systems	1960	2005	3		JDH 05/04/16	Ducted constant volume system. Units in fair condition.
D3050	Terminal and Package Units	1960	2000	3		JDH 05/04/16	Multiple terminal heating units. Based on age, some of the units are likely de-commissioned (like gas ceiling heater in kitchen) but unable to verify. Newer (guess 2000) IR heater in apparatus bay appears functional but reflectors need alignment. Overa
D3060	Controls and Instrumentation						



## Facility Summary

Thurston County  
McLane Building Site  
McLane Building

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			3.3			
HVAC						
D3060 Controls and Instrumentation	1960	1994	3		JDH 05/04/16	Unit specific electronic controls in fair condition.
Fire Protection						
D4010 Fire Protection Sprinkler Systems	1960	1960	5		JDH 05/04/16	No sprinkler system installed.
Electrical						
D5010 Electrical Service and Distribution	1960	1994	4		JDH 05/04/16	Old 400 amp 120/240 volt single phase service panel in poor condition, at end of life with no remaining capacity.
D5020 Lighting and Branch Wiring	1960	1994	3		JDH 05/04/16	T-12 Fluorescent lighting. Egress lighting needs repair and upgrade cost <\$5,000.
D5032 Low Voltage Communication	1960	1994	3		JDH 05/04/16	Basic tel/comm system. Fair condition.
D5037 Low Voltage Fire Alarm	1960	2001	3		JDH 05/04/16	Low voltage addressable fire alarm panel. Fair condition.
D5038 Low Voltage Security	1960	2000	3		JDH 05/04/16	Residential type security system. Fair condition.
D5039 Low Voltage Data	1960	2015	2		JDH 05/04/16	Cat 6 structured cable system with limited station cables routed to a modular patch panel in one 19" rack. System in good condition.
D5090 Other Electrical Systems	1960	1994	4		JDH 05/04/16	Radio antenna mounted on the exterior of the building tower is in disrepair and should be removed or replaced. Cost is < \$5,000.
E Equipment and Furnishings			4.0			
Furnishings						

## Facility Summary

Thurston County  
McLane Building Site  
McLane Building

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
E Equipment and Furnishings				4.0			
Furnishings							
E2010	Fixed Furnishings						
		1960	1960	4		JWB 05/04/16	Worn, aged casework in kitchen, <\$5,000 to replace. Reception counter at lobby worn, <\$5,000 to replace. Window blinds in poor condition, <\$5,000 to replace.

## Facility Summary

Thurston County

McLane Building Site

McLane Building Site Infrastructure

5033 Harrison Ave NW  
Olympia, WA 98502

## Facility Condition Summary

Smaller site with some parking at north where curbing is damaged, roadway to east in poor condition but other site systems in fair to good condition. The site has on-site septic tanks and drain field and is connected to city water. There is no storm water system. The drive and parking drain to street. Original building on site constructed in 1960's. Some upgrades to the site took place when annex building was built in 1998.

## Facility Components

Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>								
<b>Site Improvements</b>								
<b>G2010</b>	<b>Roadways</b>		1960	1960	4		JWB 05/04/16	AC paved in poor condition, gravel drive at east side of building.
<b>G2020</b>	<b>Parking Lots</b>		1960	1998	3		JWB 05/04/16	AC paved with concrete curb, paving in fair condition, concrete curbing broken in several places, <\$5,000 to replace concrete curbing where needed.
<b>G2030</b>	<b>Pedestrian Paving</b>		1960	1960	3		JWB 05/04/16	Some concrete walks in fair condition.
<b>G2040</b>	<b>Site Development</b>		1960	1960	4		JWB 05/04/16	Wood fencing in poor condition due to age, wood framed covered walk between buildings showing signs of deterioration. Recommend review of covered walk for clearance between buildings for movement. Less than \$5,000 to replace fencing and covered walk.
<b>G2050</b>	<b>Landscaping</b>		1960	1998	3		JWB 05/04/16	Irrigated shrub planters, some trees and a lawn area at south in fair condition.
<b>Site Civil / Mechanical Utilities</b>								
<b>G3010</b>	<b>Water Supply</b>		1960	1960	3		JDH 05/04/16	Connected to city water system. Operational and in fair condition.
<b>G3020</b>	<b>Sanitary Sewer</b>							

## Facility Summary

Thurston County

McLane Building Site

McLane Building Site Infrastructure

5033 Harrison Ave NW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3020 Sanitary Sewer</b>	1960	1960	3		JDH 05/04/16	On site septic system with three tanks and drain field. System is operational and in fair condition.
<b>G3060 Fuel Distribution</b>	1960	1960	3		JDH 05/04/16	Natural gas system with single AL 1000 meter serving both buildings. No earthquake valve is installed. System is in fair condition.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	1960	1998	3		JDH 05/04/16	Underground power serves buildings, system in fair condition.
<b>G4020 Site Lighting</b>	1960	1998	3		JDH 05/04/16	There is a single site lighting standard with HID shoe box type fixture. There are a wide variety of building mounted site lights with of mix of HID and Incandescent. Many of the incandescent fixtures have LED lamps installed. System condition is fair.
<b>G4030 Site Communications and Security</b>	1960	1998	2		JDH 05/04/16	Underground communications systems are operational and in good condition.

## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: McLane Building Site

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
McLane Annex	Fire Protection	\$19,200	\$5,760	\$6,240	\$15,600	\$46,800	\$46,800
	Electrical	\$64,796	\$19,439	\$21,059	\$52,647	\$157,940	\$145,070
	<b>Facility Total</b>	<b>\$83,996</b>	<b>\$25,199</b>	<b>\$27,299</b>	<b>\$68,247</b>	<b>\$204,740</b>	<b>\$191,870</b>
McLane Building	Exterior Closure	\$24,125	\$7,238	\$7,841	\$19,602	\$58,805	\$55,924
	Roofing	\$45,254	\$13,576	\$14,708	\$36,769	\$110,307	\$104,123
	Interior Construction	\$67,200	\$20,160	\$21,840	\$54,600	\$163,800	\$154,618
	Interior Finishes	\$80,510	\$24,153	\$26,166	\$65,414	\$196,243	\$190,457
	Fire Protection	\$49,368	\$14,810	\$16,045	\$40,112	\$120,335	\$120,335
	Electrical	\$37,026	\$11,108	\$12,033	\$30,084	\$90,251	\$81,978
	<b>Facility Total</b>	<b>\$303,483</b>	<b>\$91,045</b>	<b>\$98,632</b>	<b>\$246,580</b>	<b>\$739,740</b>	<b>\$707,433</b>
McLane Building Site Infrastructure	Site Improvements	\$19,200	\$5,760	\$6,240	\$15,600	\$46,800	\$45,035
	<b>Facility Total</b>	<b>\$19,200</b>	<b>\$5,760</b>	<b>\$6,240</b>	<b>\$15,600</b>	<b>\$46,800</b>	<b>\$45,035</b>
	<b>Site Total</b>	<b>\$406,679</b>	<b>\$122,004</b>	<b>\$132,171</b>	<b>\$330,427</b>	<b>\$991,280</b>	<b>\$944,339</b>


## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332


Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: McLane Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$24,125
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$58,804
Exterior Walls									
Wood Siding	4	4	2016		1	\$7,500.00	LS	\$7,500	\$18,281
Wood siding shows signs of deterioration and age.				Remove damaged siding and replace with new siding, prep and re-paint remaining wood siding.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	McLane Building				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$24,125
System:	Exterior Closure				Total System Deficiency Repair Cost (Marked Up):				\$58,804
Exterior Windows									
Windows	5	2	2016		175	\$95.00	SF	\$16,625	\$40,523
Original single glazed windows.				Remove and replace windows with new.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$406,679
Site: McLane Building Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Roof Coverings									
Roofing	4	3	2016		8,228	\$5.50	SF	\$45,254	\$110,307

Deficiency	Action
Facility: McLane Building	Total System Deficiency Repair Cost (Undiscounted/Unescalated): \$45,254
System: Roofing	Total System Deficiency Repair Cost (Marked Up): \$110,307

Roofing composition shingles aged and deteriorated. Remove and replace with new roofing.





## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: McLane Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$67,200
System: Interior Construction					Total System Deficiency Repair Cost (Marked Up):				\$163,800
Interior Doors									
Interior Doors	4	3	2016		28	\$2,400.00	EA	\$67,200	\$163,800

Doors in poor condition due to age and wear and tear.

Remove doors and frames, replace with new wood doors in HM frames with ADA compliant hardware.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: McLane Building				Total System Deficiency Repair Cost (Undiscounted/Unescalated):					\$80,510
System: Interior Finishes				Total System Deficiency Repair Cost (Marked Up):					\$196,244
Floor Finishes									
Flooring	4	1	2016		5,300	\$6.70	SF	\$35,510	\$86,556
Carpet and sheet vinyl in poor condition.				Remove carpet and sheet vinyl and replace with new flooring.					




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332


Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: McLane Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$80,510
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$196,244
Ceiling Finishes									
Ceiling Tile	4	2	2016		5,000	\$9.00	SF	\$45,000	\$109,688
2x4 ACT and 12x12 tiles in poor condition.				Remove tiles, abate as necessary, remove ACT system and replace both with new.					



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: McLane Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$49,368
System: Fire Protection					Total System Deficiency Repair Cost (Marked Up):				\$120,335
Fire Protection Sprinkler Systems									
Sprinkler System	5	0	2016		8,228	\$6.00	sf	\$49,368	\$120,335
No fire sprinkler system.				Install fire sprinkler system.					



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: McLane Building Site

Total Observed Deficiency Repair Direct Cost : \$406,679

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: McLane Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$37,026
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$90,251
Electrical Service and Distribution									
Electrical service	4	5	2016		8,228	\$4.50	SF	\$37,026	\$90,251
Electrical service at end of useful life with little or no capacity for additional loads.				Replace electric service with modern 208V, 3-phase system, nominally 400A.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$406,679
Site: McLane Building Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$944,332

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	McLane Building Site Infrastructure				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$19,200
System:	Site Improvements				Total System Deficiency Repair Cost (Marked Up):				\$46,800
Roadways									
Paved Roadway	4	2	2016		3,200	\$6.00	SF	\$19,200	\$46,800

AC paved roadway at east side of building in poor condition, deteriorated, holes.

Remove and replace with new traffic rated paving.



## Facility Summary

Thurston County  
Thurston County Coroner  
Thurston County Coroners Building

2925 37th Ave SW  
Tumwater, WA 98512

### Facility Code

Facility Size - Gross S.F. 6,950  
Year Of Original Construction 2002  
Facility Use Type Medical Examiner  
Construction Type Medium  
# of Floors 1  
Energy Source Gas  
Year Of Last Renovation 2002  
Historic Register No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	2.3			
Facility Condition Index (FCI)	0.07			
Current Replacement Value (CRV)	\$4,568,000	Predicted Renewal Budget (6 yrs)	\$127,000	\$116,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$1,354,000	\$1,137,000
		Observed Deficiencies (6 yrs)	\$85,000	\$83,000
		Observed Deficiencies (ALL)	\$85,000	\$83,000
		Opportunity Total Project Cost	N/A	

## Facility Condition Summary

Newer facility in very good condition. Structure is good with the roofing needed some review of attachment of metal panels. Interiors and equipment in good condition. The building HVAC system consisting of split system AC units with downstream gas duct heaters appears to have controls issues causing premature failure in duct heaters. The autopsy room is served by a 100% outside air unit. The heat recovery system removed from autopsy room HVAC unit.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	2002	2002	2	JWB	04/27/16	Standard concrete foundations in good condition.
A1030 Slab On Grade	2002	2002	2	JWB	04/27/16	Concrete slab on grade in good condition.

## Facility Summary

Thurston County  
Thurston County Coroner  
Thurston County Coroners Building

2925 37th Ave SW  
Tumwater, WA 98512

### Facility Components

Facility Components							Surveyor/ Survey Date	Comments	
Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs			
A Substructure					2.0				
Foundations									
A1030	Slab On Grade								
B Shell					2.2				
Superstructure									
B1020	Roof Construction								
			2002	2002	2		JWB	04/27/16	Wood truss and joists in good condition.
Exterior Closure									
B2010	Exterior Walls								
			2002	2002	2		JWB	04/27/16	Brick veneer in good condition.
B2020	Exterior Windows								
			2002	2002	2		JWB	04/27/16	Dual glazed units in HM frames in good condition.
B2030	Exterior Doors								
			2002	2002	2		JWB	04/27/16	HM doors in HM frames with ADA hardware. Two sectional, motorized overhead doors in good condition.
Roofing									
B3010	Roof Coverings								
			2002	2002	3		JWB	04/27/16	Metal roof, concern of lose panels. Recommend review of manufacture's installation and attach per instructed, <\$5,000 to repair.
C Interiors					2.2				
Interior Construction									
C1010	Partitions								
			2002	2002	2		JWB	04/27/16	Framed walls in good condition.
C1020	Interior Doors								
			2002	2002	2		JWB	04/27/16	Mostly wood doors in HM frames, service doors HM doors in HM frames, all with ADA hardware and in good condition.
C1030	Fittings								



## Facility Summary

Thurston County  
Thurston County Coroner  
Thurston County Coroners Building

2925 37th Ave SW  
Tumwater, WA 98512

### Facility Components

Facility Components								
Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
C Interiors					2.2			
Interior Construction								
C1030	Fittings		2002	2002	2		JWB 04/27/16	Metal restroom partitions, metal lockers and some stainless steel lockers all in good condition.
Interior Finishes								
C3010	Wall Finishes		2002	2002	2		JWB 04/27/16	Wall paint, some wood panels, 1/2 height sheet vinyl in autopsy rooms, all in good condition.
C3020	Floor Finishes		2002	2002	3		JWB 04/27/16	Carpet in office areas in fair condition. Sheet vinyl in autopsy rooms, ceramic tile in restrooms in good condition.
C3030	Ceiling Finishes		2002	2002	2		JWB 04/27/16	Some 2x4 ACT in office areas.
D Services					2.8			
Plumbing								
D2010	Plumbing Fixtures		2002	2002	3		JDH 04/27/16	Typical commercial plumbing fixtures in public areas, specialized fixtures in autopsy area. Fair condition.
D2020	Domestic Water Distribution		2002	2002	3		JDH 04/27/16	Condensing tank type water heater 150 gallons. RPBP in garage. Fair condition.
D2030	Sanitary Waste		2002	2002	2		JDH 04/27/16	Sanitary waste and vent system appears to be fully operational and in good condition.
D2040	Rain Water Drainage		2002	2002	3		JDH 04/27/16	Gutter and downspout system. In back of building downspout is disconnected from building cost of correction <\$5,000. Overall system is in fair condition.
HVAC								
D3010	Energy Supply							

## Facility Summary

Thurston County  
Thurston County Coroner  
Thurston County Coroners Building

2925 37th Ave SW  
Tumwater, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.8			
HVAC						
	2002	2002	3		JDH 04/27/16	Natural gas and electric (Dx) cooling. Fair condition.
D3020 Heat Generating Systems	2002	2002	3		JDH 04/27/16	Five small split systems service the building with a larger unit dedicated to the autopsy room. Gas duct heaters with separate combustion and exhaust air connections are installed downstream of each fan coil unit. The gas heaters have experienced a high rate of maintenance from start-up of building. Based on discussion of failures, the controls sequence of operation should be verified. Greenheck "Heat Recovery Unit" has heat recovery wheel removed and blanked, coil may have also been upsized from original. Overall the systems are operational and in fair condition.
D3030 Cooling Generating Systems	2002	2002	3		JDH 04/27/16	Outdoor compressors operating with R-22 refrigerant supply evaporator coils in fan coil units for cooling. System is in fair condition.
D3040 HVAC Distribution Systems	2002	2002	3		JDH 04/27/16	Constant volume fan coil units distribute the conditioned air to the facility. System is in fair condition.
D3050 Terminal and Package Units	2002	2002	3		JDH 04/27/16	Renzor unit heater provides heat for the garage. System is in fair condition.
D3060 Controls and Instrumentation	2002	2002	3		JDH 04/27/16	HVAC controls are operational. Based on duct heater maintenance issues, associated sequences may not support equipment requirements (<\$5K to correct). Otherwise controls in fair condition.
D3090 Other HVAC Systems and Equipment	2002	2002	3		JDH 04/27/16	C02 sensor system in garage is in fair condition.
Fire Protection						
D4010 Fire Protection Sprinkler Systems						

## Facility Summary

Thurston County  
Thurston County Coroner  
Thurston County Coroners Building

2925 37th Ave SW  
Tumwater, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.8			
<b>Fire Protection</b>						
<b>D4010 Fire Protection Sprinkler Systems</b>						
	2002	2002	2	JDH	04/27/16	NFPA 13 wet sprinkler system is operational and in good condition.
<b>D4030 Fire Protection Specialties</b>						
	2002	2002	2	JDH	04/27/16	Sprinkler riser is back steel piping with required specialty fitting installed. PIV is located on the site. System is in good condition.
<b>Electrical</b>						
<b>D5010 Electrical Service and Distribution</b>						
	2002	2002	2	JDH	04/27/16	400 amp service panel operating at 120/208 volts, three phase with multiple service disconnects. System is in good condition.
<b>D5020 Lighting and Branch Wiring</b>						
	2002	2002	3	JDH	04/27/16	Fluorescent lighting installed throughout facility is in fair condition. Strip fixture in janitors room needs to be re-attached to ceiling. Indirect lights in files area have a substantial amount of their light blocked by the ceiling beams they are attached to.
<b>D5032 Low Voltage Communication</b>						
	2002	2002	3	JDH	04/27/16	Phone system is installed and in fair condition.
<b>D5037 Low Voltage Fire Alarm</b>						
	2002	2002	3	JDH	04/27/16	Low voltage addressable fire alarm system with FACP in the building and remote graphic and interface panel installed remote from building on the site. The fire alarm system is in fair condition.
<b>D5038 Low Voltage Security</b>						
	2002	2002	3	JDH	04/27/16	The security system including intrusion detection and video surveillance is in fair condition
<b>D5039 Low Voltage Data</b>						
	2002	2002	3	JDH	04/27/16	The structured cable system is installed with station cables and modular patch panels on standard 19" equipment racks. The system is in fair condition.
E Equipment and Furnishings			2.0			

## Facility Summary

Thurston County

Thurston County Coroner

Thurston County Coroners Building

2925 37th Ave SW  
Tumwater, WA 98512

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>Equipment</b>							
<b>E1010</b>	<b>Commercial Equipment</b>	2002	2002	2	JWB	04/27/16	Residential style washer and dryer, appliances in good condition.
<b>E1090</b>	<b>Other Equipment</b>	2002	2002	3	JWB	04/27/16	Ceiling mounted x-ray machine in autopsy room in fair condition.
<b>Furnishings</b>							
<b>E2010</b>	<b>Fixed Furnishings</b>	2002	2002	2	JWB	04/27/16	Plastic laminate modern casework and window blinds in good condition.

### F Special Construction

2.0

#### Special Construction

##### F1020 Integrated Construction

2002	2002	2	JWB	04/27/16	Floor scale in autopsy room, high density storage at offices, walk in cooler and freezer all in good condition.
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## Facility Summary

Thurston County  
Thurston County Coroner  
Thurston County Coroners Site Infrastructure

2925 37th Ave SW  
Tumwater, WA 98512

## Facility Condition Summary

Site is newer, parking areas recently resealed, landscaping in good condition. The infrastructure systems includes remote fire alarm graphic panel, generator and underground power. The above grade reduced pressure backflow preventor is adjacent to drive path and subject to vehicle damage. Overall the site systems are in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2010 Roadways</b>	2002	2002	1	JWB	04/27/16	AC paved in excellent condition.
<b>G2020 Parking Lots</b>	2002	2002	1	JWB	04/27/16	AC paved with concrete curbs in excellent condition.
<b>G2030 Pedestrian Paving</b>	2002	2002	3	JWB	04/27/16	Concrete walks, some cracks in fair condition.
<b>G2040 Site Development</b>	2002	2002	2	JWB	04/27/16	Some chain link fencing in good condition.
<b>G2050 Landscaping</b>	2002	2002	2	JWB	04/27/16	Irrigated lawn, trees and shrubs in good condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	2002	2002	2	JDH	04/27/16	System is operational. RPBP located in lock box near street and close to traffic with no physical protection. System condition is good.
<b>G3020 Sanitary Sewer</b>	2002	2002	2	JDH	04/27/16	Sanitary system is operational and in good condition.
<b>G3030 Storm Sewer</b>	2002	2002	3	JDH	04/27/16	Storm drainage grates with filter compartment is operational and in fair condition.

## Facility Summary

Thurston County

Thurston County Coroner

Thurston County Coroners Site Infrastructure

2925 37th Ave SW  
Tumwater, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3030 Storm Sewer</b>						
<b>G3060 Fuel Distribution</b>	2002	2002	2		JDH 04/27/16	Natural gas system, meter is AL 425 with earthquake valve installed. System condition is good.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	2002	2002	2		JDH 04/27/16	Underground power provided to the building via PSE pad mount transformer. System condition is good.
<b>G4020 Site Lighting</b>	2002	2002	3		JDH 04/27/16	Site lighting consists of low glare HID luminaries and is in fair condition.
<b>G4030 Site Communications and Security</b>	2002	2002	2		JDH 04/27/16	Remote FACP annunciator located in parking area and connected to the building FACP. Telephone lines are underground and operational. System condition is good.
<b>Other Site Construction</b>						
<b>G9090 Other Site Systems</b>	2002	2002	3		JDH 04/27/16	30 kW diesel generator with skid mount fuel tank extending beyond the weatherproof generator enclosure. Excessive corrosion taking place on top of tank from rain water pooling and evaporation by block heater. Cost of correction \$<5,000. System condition is fair.

Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County  
Site: Thurston County Coroner

Facility	System		Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Thurston County Coroners Building	HVAC		\$35,000	\$10,500	\$11,375	\$28,438	\$85,313	\$83,472
		Facility Total	\$35,000	\$10,500	\$11,375	\$28,438	\$85,313	\$83,472
		Site Total	\$35,000	\$10,500	\$11,375	\$28,438	\$85,313	\$83,472


## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Coroner

Total Observed Deficiency Repair Direct Cost : \$35,000

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$83,474

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Coroners Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$35,000
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$85,313
Heat Generating Systems									
Duct heater	4	2	2016		5	\$4,000.00	EA	\$20,000	\$48,750
Gas-fired duct heaters not operating correctly since original construction.				Repair or replace gas-fired duct heaters.					






## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Coroner

Total Observed Deficiency Repair Direct Cost : \$35,000

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$83,474

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Coroners Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$35,000
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$85,313
Heat Generating Systems									
Heat recovery wheel	5	0	2016		1	\$15,000.00	EA	\$15,000	\$36,563
Heat recovery wheel failed, with no heat recovery for 100% outside air system, wasting energy; reportedly system issues with cross-contamination.				Repair or replace heat recovery wheel in heat recovery unit, and modify system as necessary to eliminate cross-contamination.					



## Facility Summary

### Thurston County

### Thurston County Courthouse Campus

### Thurston County Courthouse Building #1

2000 Lakeridge Dr SW  
Olympia, WA 98502

#### Facility Code

Facility Size - Gross S.F.	43,588
Year Of Original Construction	1977
Facility Use Type	Admin - Low rise
Construction Type	Medium
# of Floors	3
Energy Source	Gas
Year Of Last Renovation	1977
Historic Register	No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	3.3			
Facility Condition Index (FCI)	0.24			
Current Replacement Value (CRV)	\$22,746,000	Predicted Renewal Budget (6 yrs)	\$6,357,000	\$6,120,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$11,740,000	\$10,574,000
		Observed Deficiencies (6 yrs)	\$6,104,000	\$5,705,000
		Observed Deficiencies (ALL)	\$6,104,000	\$5,705,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Structure in fair condition, flat roofing fair but pitched roofing poor condition, windows in poor condition and most doors in fair condition. Covered walks are in poor condition. Interior doors are in poor condition and finishes are mixed and matched with varying age and condition. Most MEP systems original with partial upgrades; many need renewal including elevator, water service, HVAC, electrical wiring, and security. Heating hot water and chilled water are from adjacent Bldg 3 central plant.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			3.0			
Foundations						
A1010 Standard Foundations	1977	1977	3		JWB 04/18/16	Concrete in fair condition.
A1030 Slab On Grade	1977	1977	3		JWB 04/18/16	Concrete in fair condition.

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #1

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
A Substructure					3.0			
Foundations								
A1030	Slab On Grade							
Basements								
A2020	Basement Walls							
			1977	1977	3		JWB 04/18/16	Concrete in fair condition.
B Shell					3.3			
Superstructure								
B1010	Floor Construction							
			1977	1977	3		JWB 04/18/16	Plywood on open web bar joists on wood and concrete walls, 2nd floor plywood in poor condition, 1st floor in fair condition.
B1020	Roof Construction							
			1977	1977	3		JWB 04/18/16	Wood truss in fair condition.
Exterior Closure								
B2010	Exterior Walls							
			1977	1977	3		JWB 04/18/16	Brick veneer showing efflorescence, cast in place concrete in good condition, metal soffit in fair condition.
B2020	Exterior Windows							
			1977	1977	4		JWB 04/18/16	Single pane, aluminum window units in poor condition.
B2030	Exterior Doors							
			1977	1977	4		JWB 04/18/16	Aluminum storefront in fair condition, HM doors in HM frames at service areas in poor condition. Hardware in poor condition.
Roofing								
B3010	Roof Coverings							
			1977	1977	4		JWB 04/18/16	Thermoplastic membrane roofing at flat areas in fair condition, metal roofing at pitched roof areas in poor condition.
B3030	Projections							
			1977	1977	4		JWB 04/18/16	Wood framed covered walks with metal roofing

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #1

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>B Shell</b>			<b>3.3</b>			
Roofing						
B3030 Projections						in poor condition.
<b>C Interiors</b>			<b>3.5</b>			
Interior Construction						
C1010 Partitions	1977	1977	3	JWB	04/18/16	Mix of wood and steel framed, fair condition.
C1020 Interior Doors	1977	1977	4	JWB	04/18/16	Wood doors in HM frames, some plastic laminate, hardware mix of compliant and non-compliant ADA hardware, doors in poor condition.. Service doors HM in HM frames, non-compliant hardware.
C1030 Fittings	1977	1977	3	JWB	04/18/16	Original plastic laminate restroom partitions in fair condition, steel lockers in good condition.
Staircases						
C2010 Stair Construction	1977	1977	3	JWB	04/18/16	Metal stairs with concrete pan infill in fair condition, main public stairs wood framed in fair condition.
C2020 Stair Finishes	1977	1977	4	JWB	04/18/16	Carpet at main stairs in poor condition, <\$5K to replace.
Interior Finishes						
C3010 Wall Finishes	1977	1977	3	JWB	04/18/16	Vinyl wall covering aged, wall paint in fair condition, ceramic tile in restrooms in fair condition, some wood panels in meeting rooms in fair condition.
C3020 Floor Finishes	1977	1977	4	JWB	04/18/16	Mix of mostly older carpet and some newer, VCT at Lab and break rooms in fair condition, ceramic tile in restrooms in fair condition.

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #1

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>C Interiors</b>			<b>3.5</b>			
Interior Finishes						
<b>C3020 Floor Finishes</b>						
<b>C3030 Ceiling Finishes</b>						
	1977	1977	4	JWB	04/18/16	Combination of older glue on acoustic tiles and some 2x4 ACT, mostly older, worn tiles, faded, marked.
<b>D Services</b>			<b>3.4</b>			
Vertical Transportation						
<b>D1010 Elevators and Lifts</b>						
	1977	1977	4	DCS	04/18/16	Original elevator is noisy and slow with obsolete relay control; operating under a non-compliance waiver from Labor & Industries.
Plumbing						
<b>D2010 Plumbing Fixtures</b>						
	1977	1977	4	DCS	04/18/16	Original faucets at many lavatories are failing; some actively leaking.
<b>D2020 Domestic Water Distribution</b>						
	1977	1977	3	DCS	04/18/16	Original water service entry line is galvanized steel pipe with failures patched in several locations; and bottled water in use. No apparent backflow prevention at service entry. Electric domestic hot water heater in fair condition.
<b>D2030 Sanitary Waste</b>						
	1977	1977	3	DCS	04/18/16	Reports of cast iron and/or galvanized drain, waste & vent piping failure (leaks) in some areas.
<b>D2040 Rain Water Drainage</b>						
	1977	1977	3	DCS	04/18/16	While roof drains & overflow roof drains are in fair to good condition; overhanging trees cause periodic back-ups; French gutters experience similar issues.
<b>D2090 Other Plumbing Systems</b>						
	1977	1977	3	DCS	04/18/16	Compressed air at shop with service from Building 3 central plant, also distributed throughout for control air; fair condition. Safety shower & eyewash at lab, in fair condition.

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D Services			3.4			
<b>HVAC</b>						
D3010 Energy Supply	1977	1977	4		DCS 04/18/16	Heating hot water and chilled water from campus central plant at Building 3 via poly-vinyl chloride piping; this piping is inappropriate for heating & cooling water application.
D3040 HVAC Distribution Systems	1977	1977	4		DCS 04/18/16	Heating hot water and chilled water distribution piping is poly-vinyl chloride, not appropriate for this service. Air handling units leak, squeak and need refurbishment or replacement. Distribution ductwork, especially grills, registers & diffusers are damaged, dirty and function poorly.
D3050 Terminal and Package Units	1977	1977	4		DCS 04/18/16	Variable air volume terminal units are obsolete pneumatic units with insufficient capacity in some areas, and poor zoning in others.
D3060 Controls and Instrumentation	1977	1996	4		DCS 04/18/16	Mix of newer direct digital control controls for air handling units and obsolete pneumatic controls for terminal units; with poor thermal comfort in many areas.
D3090 Other HVAC Systems and Equipment	1977	1993	3		DCS 04/18/16	Computer room air conditioning unit & dry cooler in fair condition serving County data center. Water quality lab fume hoods in fair to good condition.
<b>Fire Protection</b>						
D4010 Fire Protection Sprinkler Systems	1977	1977	3		DCS 04/18/16	Wet and dry piping fire sprinkler systems fully tested in 2015 in fair condition, excepting periodic false alarms (<\$5K to investigate).
D4090 Other Fire Protection Systems	1977	1993	2		DCS 04/18/16	Gaseous fire suppression at County data center in good condition; assuming HVAC system seals correctly (<\$5K to test).
<b>Electrical</b>						

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D Services			3.4			
<b>Electrical</b>						
<b>D5010 Electrical Service and Distribution</b>	1977	1977	3	DCS	04/18/16	Original main 480V, 1000A main switchboard, 500 kVA transformer and 208V, 1200A switchboard, feeders and sub-panels in fair condition, noting many 208V panels are near capacity.
<b>D5020 Lighting and Branch Wiring</b>	1977	1977	3	DCS	04/18/16	Mostly newer T-8 fluorescent fixtures and some older recessed can lights with all manual control. Minimal receptacles in office and work areas. Newer fixtures in good condition; original branch wiring in fair condition.
<b>D5032 Low Voltage Communication</b>	1977	2015	2	DCS	04/18/16	New voice-over-internet-protocol phone system in good to excellent condition. Limited cable television in fair condition. Older public address, and older call-box at loading dock; both in fair condition.
<b>D5037 Low Voltage Fire Alarm</b>	1977	2006	3	DCS	04/18/16	Modern addressable fire alarm with fire alarm control panel at lobby and detectors in corridors and common areas, but not in offices; meets code minimum requirements; overall fair condition.
<b>D5038 Low Voltage Security</b>	1977	1996	4	DCS	04/18/16	Most outside doors on modern card key access system, but secure inside doors have obsolete cypher-locks. Closed circuit television limited to a small number of departmental cameras. No apparent intrusion detection. Overall poor condition.
<b>D5039 Low Voltage Data</b>	1977	2015	2	DCS	04/18/16	County data center at basement level in good condition including uninterruptible power supply and raised floor, with fiber optic service. Limited wireless access protocol in common and public areas.
<b>D5090 Other Electrical Systems</b>	1977	1977	3	DCS	04/18/16	Standby/emergency power from adjacent Building 3 generator system. Exit signs are a mix

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<b>D Services</b>			<b>3.4</b>			
Electrical						
D5090 Other Electrical Systems						of old emergency power and newer battery-backed type.
<b>E Equipment and Furnishings</b>			<b>3.0</b>			
Equipment						
E1010 Commercial Equipment	1977	1996	3	DCS	04/18/16	Break room appliances; mix of older and newer; worn but functional.
E1020 Institutional Equipment	1977	1996	3	DCS	04/18/16	Wet lab equipment in fair to good condition.
E1030 Vehicular Equipment	1977	1977	3	DCS	04/18/16	Loading dock bumpers worn but functional.
E1090 Other Equipment	1977	1996	5	DCS	04/18/16	Rooftop weather station appears failed (<\$5K to replace).
<b>F Special Construction</b>			<b>2.0</b>			
Special Construction						
F1020 Integrated Construction	1977	1977	2	JWB	04/18/16	Raised floor at data center in good condition.



## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Thurston County Courthouse Building #1	Superstructure	\$101,500	\$30,450	\$32,988	\$82,469	\$247,406	\$229,088
	Exterior Closure	\$278,800	\$83,640	\$90,610	\$226,525	\$679,575	\$617,957
	Roofing	\$140,250	\$42,075	\$45,581	\$113,953	\$341,859	\$327,788
	Interior Construction	\$285,750	\$85,725	\$92,869	\$232,172	\$696,516	\$632,660
	Interior Finishes	\$573,719	\$172,116	\$186,459	\$466,147	\$1,398,440	\$1,305,176
	Vertical Transportation	\$100,000	\$30,000	\$32,500	\$81,250	\$243,750	\$230,085
	Plumbing	\$94,382	\$28,315	\$30,674	\$76,685	\$230,056	\$212,153
	HVAC	\$749,076	\$224,723	\$243,450	\$608,624	\$1,825,872	\$1,726,798
	Electrical	\$180,661	\$54,198	\$58,715	\$146,787	\$440,361	\$423,745
	<b>Facility Total</b>	<b>\$2,504,138</b>	<b>\$751,241</b>	<b>\$813,845</b>	<b>\$2,034,612</b>	<b>\$6,103,836</b>	<b>\$5,705,451</b>
Thurston County Courthouse Building #2	Exterior Closure	\$125,200	\$37,560	\$40,690	\$101,725	\$305,175	\$278,499
	Roofing	\$148,125	\$44,438	\$48,141	\$120,352	\$361,055	\$345,338
	Interior Construction	\$272,250	\$81,675	\$88,481	\$221,203	\$663,609	\$602,772
	Interior Finishes	\$314,438	\$94,331	\$102,192	\$255,480	\$766,441	\$709,695
	Vertical Transportation	\$200,000	\$60,000	\$65,000	\$162,500	\$487,500	\$460,171
	Plumbing	\$35,313	\$10,594	\$11,477	\$28,691	\$86,074	\$79,484
	HVAC	\$673,188	\$201,956	\$218,786	\$546,965	\$1,640,895	\$1,551,642
	Electrical	\$108,500	\$32,550	\$35,263	\$88,156	\$264,469	\$254,958
	<b>Facility Total</b>	<b>\$1,877,013</b>	<b>\$563,104</b>	<b>\$610,029</b>	<b>\$1,525,073</b>	<b>\$4,575,218</b>	<b>\$4,282,558</b>
Thurston County Courthouse Building #3	Exterior Closure	\$101,850	\$30,555	\$33,101	\$82,753	\$248,259	\$227,497
	Roofing	\$264,825	\$79,448	\$86,068	\$215,170	\$645,511	\$615,620
	Interior Construction	\$388,000	\$116,400	\$126,100	\$315,250	\$945,750	\$866,946
	Interior Finishes	\$952,592	\$285,778	\$309,592	\$773,981	\$2,321,943	\$2,145,446
	Vertical Transportation	\$200,000	\$60,000	\$65,000	\$162,500	\$487,500	\$460,171
	Plumbing	\$171,349	\$51,405	\$55,688	\$139,221	\$417,663	\$397,057
	HVAC	\$1,265,757	\$379,727	\$411,371	\$1,028,427	\$3,085,282	\$2,920,549
	Fire Protection	\$75,000	\$22,500	\$24,375	\$60,938	\$182,813	\$182,813
	Electrical	\$198,372	\$59,512	\$64,471	\$161,177	\$483,532	\$467,588
	Equipment	\$600,000	\$180,000	\$195,000	\$487,500	\$1,462,500	\$1,462,500
	Special Construction	\$17,600	\$5,280	\$5,720	\$14,300	\$42,900	\$39,724


## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604


Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$101,500
System: Superstructure					Total System Deficiency Repair Cost (Marked Up):				\$247,406
Floor Construction									
Floor framing	4	4	2016		14,500	\$7.00	SF	\$101,500	\$247,406
Floor framing sagging, plywood appears deteriorated in places.				Remove flooring, replace plywood where needed, relevel floor, replace flooring.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Building #1				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$278,800
System:	Exterior Closure				Total System Deficiency Repair Cost (Marked Up):				\$679,575
Exterior Windows									
Exterior windows	4	5	2016		2,800	\$95.00	SF	\$266,000	\$648,375
Windows are single glazed units.				Remove and replace windows and frames with new dual glazed units.					
									




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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$278,800
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$679,575
Exterior Doors									
Door Hardware	4	5	2016		8	\$950.00	EA	\$7,600	\$18,525
Door hardware in poor condition.				Remove and replace door hardware with new accessible hardware.					




## Detailed Assessment - Observed Deficiencies 2016 - 2021

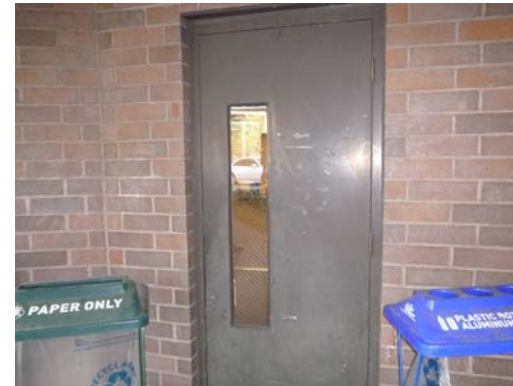
Thurston County

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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$278,800
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$679,575
Exterior Doors									
HM Doors	4	2	2016		8	\$650.00	EA	\$5,200	\$12,675
HM doors dented, paint faded, scratches.				Prep and repaint exterior HM doors, adjust as necessary.					



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Deficiency				Action					
Facility:	Thurston County Courthouse Building #1				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$140,250
System:	Roofing				Total System Deficiency Repair Cost (Marked Up):				\$341,859
Roof Coverings									
Metal roofing	5	2	2016		7,600	\$15.00	SF	\$114,000	\$277,875

Metal roofing finish deteriorated, painted over multiple times, peeling, flaking, flashings are rusting.

Remove metal roofing and replace with new.



Detailed Assessment - Observed Deficiencies 2016 - 2021

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$140,250
System: Roofing					Total System Deficiency Repair Cost (Marked Up):				\$341,859
Projections									
Covered walks	4	3	2016		70	\$375.00	LF	\$26,250	\$63,984
Covered walks wood framing exposed, metal roofing poor condition, soffits cracked.				Replace roofing, replace damaged soffit, paint exposed wood.					




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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$285,750
System: Interior Construction					Total System Deficiency Repair Cost (Marked Up):				\$696,516
Interior Doors									
Interior doors	4	5	2016		127	\$2,250.00	EA	\$285,750	\$696,516
Doors worn, de-laminating, hardware outdated.				Remove and replace with new doors in existing frames.					
									





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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$573,719
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$1,398,441
Wall Finishes									
Vinyl wall covering	4	4	2016		20,000	\$2.25	SF	\$45,000	\$109,688

Vinyl wall covering aged, discolored, shows wear and tear.

Remove and replace with new vinyl wall covering.




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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$573,719
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$1,398,441
Floor Finishes									
Carpet	4	3	2016		35,000	\$6.70	SF	\$234,500	\$571,594
Carpet is old, stained and worn.				Remove and replace with new carpet.					
									



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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Building #1				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$573,719
System:	Interior Finishes				Total System Deficiency Repair Cost (Marked Up):				\$1,398,441
Ceiling Finishes									
ACT	4	4	2016		43,588	\$6.75	SF	\$294,219	\$717,159
Ceiling tiles and ACT worn and faded.				Remove older glue on tiles and ACT, replace with all new ACT system, abate as necessary.					



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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$100,000
System: Vertical Transportation					Total System Deficiency Repair Cost (Marked Up):				\$243,750
Elevators and Lifts									
Elevator	4	3	2016		1	\$100,000.00	LS	\$100,000	\$243,750

Original elevator in noisy and slow with obsolete relay control; operating under a non-compliance waiver from Labor & Industries.

Renew elevator; three-stop hydraulic, 4 klb capacity.



Detailed Assessment - Observed Deficiencies 2016 - 2021

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Building #1				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$94,382
System:	Plumbing				Total System Deficiency Repair Cost (Marked Up):				\$230,057
Plumbing Fixtures									
Faucets	4	2	2016		20	\$750.00	EA	\$15,000	\$36,563

Original faucets at many lavatories are failing; some actively leaking.

Replace original faucets with modern County standard.



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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$94,382
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$230,057
Domestic Water Distribution									
Water service	4	3	2016		1	\$14,000.00	LS	\$14,000	\$34,125

Original water service entry line is galvanized steel pipe with failures patched in several locations. No apparent backflow prevention at service entry.

Replace water service entry piping including code required backflow prevention.



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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$94,382
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$230,057
Sanitary Waste									
Drain, waste & vent piping	4	5	2016		43,588	\$1.50	SF	\$65,382	\$159,369

Reports of limited cast iron and/or galvanized drain, waste & vent piping failure (leaks).

Clean, test and inspect drain, waste & vent piping and renew as needed.



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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$749,076
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,825,872
Energy Supply									
Hydronic main piping	4	2	2016		200	\$150.00	FT	\$30,000	\$73,125

Heating hot water and chilled water from campus central plant at Building 3 via poly-vinyl chloride piping; this piping is inappropriate for heating & cooling water application.

Replace heating hot water and chilled water service mains.





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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$749,076
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,825,872
HVAC Distribution Systems									
Air handling units	4	3	2016		2	\$25,000.00	EA	\$50,000	\$121,875

Air handling units are leaking air; have light corrosion;  
have loose, damaged or failing dampers; and marginal  
air filtration.

Refurbish air handling units.




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Deficiency				Action					
Facility: Thurston County Courthouse Building #1				Total System Deficiency Repair Cost (Undiscounted/Unescalated):					\$749,076
System: HVAC				Total System Deficiency Repair Cost (Marked Up):					\$1,825,872
HVAC Distribution Systems									
Ductwork	4	3	2016		43,588	\$3.00	SF	\$130,764	\$318,737
Distribution ductwork especially grills, registers & diffusers are damaged, dirty, loose and provide marginal comfort in many locations.				Refurbish, replace and reconfigure ductwork and grills, registers & diffusers to improve thermal comfort and air quality.					



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Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$749,076
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,825,872
HVAC Distribution Systems									
Hydronic distribution piping	4	2	2016		43,588	\$1.00	SF	\$43,588	\$106,246

Heating hot water and chilled water piping is poly-vinyl chloride; this piping is inappropriate for heating & cooling water application.

Replace heating hot and chilled water distribution piping with metallic mains and copper and/or cross-linked polyethylene distribution tubing.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$749,076
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,825,872
Terminal and Package Units									
Terminal units	4	3	2016		43,588	\$8.00	SF	\$348,704	\$849,966

Variable air volume terminal units are obsolete pneumatic units with insufficient capacity in some areas, and poor zoning in others.

Replace and reconfigure terminal units in conjunction with ductwork renewal to improve comfort.



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$8,918,095
Site: Thurston County Courthouse Campus	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Building #1				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$749,076
System:	HVAC				Total System Deficiency Repair Cost (Marked Up):				\$1,825,872
Controls and Instrumentation									
Controls	4	3	2016		43,588	\$3.35	SF	\$146,020	\$355,923

Mix of newer direct digital control controls for air handling units and obsolete pneumatic controls for terminal units; with poor thermal comfort in many areas.

Upgrade all pneumatic controls to County standard.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$180,661
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$440,362
Electrical Service and Distribution									
208V panels	4	2	2016		6	\$6,500.00	EA	\$39,000	\$95,063
Insufficient panel spaces for needed receptacles.				Install two new receptacle panels per floor.					



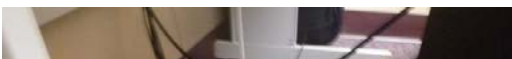
## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$180,661
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$440,362
Lighting and Branch Wiring									
Branch wiring	4	2	2016		43,588	\$1.50	SF	\$65,382	\$159,369
Original wiring, light switches and receptacles, some damaged. Insufficient receptacles for plug loads.				Replace damaged switches and receptacles. Add new receptacles where needed.					
									




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$180,661
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$440,362
Low Voltage Security									
Security	4	2	2016		43,588	\$1.25	SF	\$54,485	\$132,807
Obsolete cypher locks on inside doors, no central closed circuit television and little intrusion detection.				Upgrade security to County standard including inside card key access, closed circuit television and intrusion detection.					






## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #1					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$180,661
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$440,362
Other Electrical Systems									
Emergency lighting	4	2	2016		43,588	\$0.50	SF	\$21,794	\$53,123
Some older exit signs hard to see and/or with confusion directioning. No instant-on egress lighting.				Replace older exit signs with new; check directioning and add battery-backed egress lighting to main corridors.					



## Facility Summary

### Thurston County

### Thurston County Courthouse Campus

### Thurston County Courthouse Building #2

2000 Lakeridge Dr SW  
Olympia, WA 98502

#### Facility Code

Facility Size - Gross S.F.	41,250
Year Of Original Construction	1977
Facility Use Type	Courthouse Multistory
Construction Type	Medium
# of Floors	2
Energy Source	Gas
Year Of Last Renovation	1977
Historic Register	No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	3.2			
Facility Condition Index (FCI)	0.20			
Current Replacement Value (CRV)	\$22,652,000	Predicted Renewal Budget (6 yrs)	\$5,320,000	\$5,119,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$10,709,000	\$9,515,000
		Observed Deficiencies (6 yrs)	\$4,575,000	\$4,283,000
		Observed Deficiencies (ALL)	\$4,575,000	\$4,283,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Structure in fair condition, flat roofing fair but pitched roofing poor, windows in poor condition and most doors in fair condition. Covered walks are in poor condition. Interior doors are poor and delaminating and other finishes are a mix of some newer and older with varying condition. Most MEP systems original in fair condition; but with some needing renewal including elevator, plumbing trim, HVAC, and electrical wiring. Heating hot water and chilled water are from adjacent Building 3 central plant.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			3.0			
Foundations						
A1010 Standard Foundations	1977	1977	3	JWB	04/18/16	Concrete in fair condition.
A1030 Slab On Grade	1977	1977	3	JWB	04/18/16	Concrete in fair condition.

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #2

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
A Substructure				3.0			
Foundations							
A1030	Slab On Grade						
Basements							
A2020	Basement Walls						
		1977	1977	3		JWB 04/18/16	Concrete in fair condition.
B Shell				3.2			
Superstructure							
B1010	Floor Construction						
		1977	1977	3		JWB 04/18/16	Plywood on open web bar joists on wood, CMU and concrete walls in fair condition.
B1020	Roof Construction						
		1977	1977	3		JWB 04/18/16	Wood truss in fair condition.
Exterior Closure							
B2010	Exterior Walls						
		1977	1977	3		JWB 04/18/16	Brick veneer showing efflorescence, cast in place concrete in good condition, plaster soffit in poor condition.
B2020	Exterior Windows						
		1977	1977	4		JWB 04/18/16	Single pane, aluminum window units in poor condition.
B2030	Exterior Doors						
		1977	1977	4		JWB 04/18/16	Aluminum storefront in fair condition, HM doors in HM frames at service areas in poor condition, <\$5K to repaint. Hardware in poor condition.
Roofing							
B3010	Roof Coverings						
		1977	1977	4		JWB 04/18/16	Thermoplastic membrane roofing at flat areas in fair condition, metal roofing at pitched roof areas in poor condition.
B3030	Projections						
		1977	1977	4		JWB 04/18/16	Wood framed covered walks with metal roofing in poor condition.

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #2

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components							Surveyor/ Survey Date	Comments	
Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs			
B Shell							3.2		
Roofing									
B3030	Projections								
C Interiors							3.2		
Interior Construction									
C1010	Partitions		1977	1977	3		JWB	04/18/16	Mix of wood and steel framed, fair condition.
C1020	Interior Doors		1977	1977	4		JWB	04/18/16	Wood doors in HM frames, some plastic laminate, hardware mix of compliant and non-compliant ADA hardware. Service doors HM in HM frames, non-compliant hardware.
C1030	Fittings		1977	1977	3		JWB	04/18/16	Original plastic laminate restroom partitions in fair condition.
Staircases									
C2010	Stair Construction		1977	1977	3		JWB	04/18/16	Metal stairs with concrete pan infill in fair condition, main public stairs wood framed in fair condition.
C2020	Stair Finishes		1977	2014	2		JWB	04/18/16	Carpet at main stairs in good condition.
Interior Finishes									
C3010	Wall Finishes		1977	1977	4		JWB	04/18/16	Vinyl wall covering aged, wall paint in fair condition, ceramic tile in restrooms in fair condition, some wood panels in court rooms in fair condition.
C3020	Floor Finishes		1977	2014	2		JWB	04/18/16	Mix of mostly newer carpet and some VCT at break rooms in fair condition, ceramic tile in restrooms in fair condition.
C3030	Ceiling Finishes								

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #2

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components								
Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
C Interiors					3.2			
Interior Finishes								
C3030	Ceiling Finishes		1977	1977	4		JWB 04/18/16	Mostly 2x4 ACT in poor condition, worn tiles, faded, marked.
D Services					3.3			
Vertical Transportation								
D1010	Elevators and Lifts		1977	1977	4		DCS 04/18/16	Original elevators are noisy and slow with obsolete relay control.
Plumbing								
D2010	Plumbing Fixtures		1977	1977	3		DCS 04/18/16	Original faucets at many lavatories are failing.
D2020	Domestic Water Distribution		1977	1977	3		DCS 04/18/16	No reported issues; but most departments have bottled water and/or filtered water machines; assume water service main needs replacement. Electric domestic hot water heater in fair condition.
D2030	Sanitary Waste		1977	1977	3		DCS 04/18/16	No failures reported, except at one water closet on ground floor; however many tested fixtures flushed slowly.
D2040	Rain Water Drainage		1977	1977	3		DCS 04/18/16	While roof drains & overflow roof drains are in fair to good condition; overhanging trees cause periodic back-ups; French gutters experience similar issues.
D2090	Other Plumbing Systems		1977	1977	3		DCS 04/18/16	Compressed air from Building 3 for control air in fair condition, but likely eliminated when controls are upgraded to full direct digital controls (<\$5K to demolish).
HVAC								
D3010	Energy Supply							

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #2

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				3.3			
HVAC							
D3010	Energy Supply	1977	1977	4	DCS	04/18/16	Heating hot water and chilled water from campus central plant at Building 3 via poly-vinyl chloride piping; this piping is inappropriate for heating & cooling water application.
D3040	HVAC Distribution Systems	1977	1977	4	DCS	04/18/16	Heating hot water and chilled water distribution piping is poly-vinyl chloride, not appropriate for this service. Air handling unit leaks & squeaks and needs refurbishment or replacement. Distribution ductwork, especially grills, registers & diffusers are damaged, dirty and function poorly.
D3050	Terminal and Package Units	1977	1977	4	DCS	04/18/16	Variable air volume terminal units are obsolete pneumatic units with insufficient capacity in some areas, and poor zoning in others.
D3060	Controls and Instrumentation	1977	1977	4	DCS	04/18/16	Mix of newer direct digital control controls for Air handling units and obsolete pneumatic controls for terminal units; with poor thermal comfort in many areas.
Fire Protection							
D4010	Fire Protection Sprinkler Systems	1977	1977	3	DCS	04/18/16	Wet and dry piping fire sprinkler systems fully tested in 2015 in fair condition.
Electrical							
D5010	Electrical Service and Distribution	1977	1977	3	DCS	04/18/16	Original main 480V, 1200A main switchboard, 75 kVA transformer and 208V switchboard, feeds and sub-panels in fair condition, noting many 208V panels are near capacity.
D5020	Lighting and Branch Wiring	1977	1977	3	DCS	04/18/16	Mostly newer T-8 fluorescent fixtures in 2012 and some older recessed can lights with all manual control. Minimal receptacles in office and work areas; but new floor receptacles in courtrooms. Newer fixtures in good condition;

## Facility Summary

Thurston County

Thurston County Courthouse Campus

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### Facility Components

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## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #2

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
E Equipment and Furnishings				3.0			
Furnishings							
E2010	Fixed Furnishings						
		1977	1977	3		JWB 04/18/16	Fixed wood seating in courtrooms in fair condition, casework original in fair condition.
F Special Construction				2.9			
Special Construction							
F1020	Integrated Construction						
		1977	1977	3		JWB 04/18/16	Wood Judge's bench areas in courtrooms in fair condition, high density storage in Clerk's area in fair condition.
F1040	Special Facilities						
		1977	1996	2		JWB 04/18/16	Metal detector unit in fair condition.



## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Thurston County Courthouse Building #1	Superstructure	\$101,500	\$30,450	\$32,988	\$82,469	\$247,406	\$229,088
	Exterior Closure	\$278,800	\$83,640	\$90,610	\$226,525	\$679,575	\$617,957
	Roofing	\$140,250	\$42,075	\$45,581	\$113,953	\$341,859	\$327,788
	Interior Construction	\$285,750	\$85,725	\$92,869	\$232,172	\$696,516	\$632,660
	Interior Finishes	\$573,719	\$172,116	\$186,459	\$466,147	\$1,398,440	\$1,305,176
	Vertical Transportation	\$100,000	\$30,000	\$32,500	\$81,250	\$243,750	\$230,085
	Plumbing	\$94,382	\$28,315	\$30,674	\$76,685	\$230,056	\$212,153
	HVAC	\$749,076	\$224,723	\$243,450	\$608,624	\$1,825,872	\$1,726,798
	Electrical	\$180,661	\$54,198	\$58,715	\$146,787	\$440,361	\$423,745
	<b>Facility Total</b>	<b>\$2,504,138</b>	<b>\$751,241</b>	<b>\$813,845</b>	<b>\$2,034,612</b>	<b>\$6,103,836</b>	<b>\$5,705,451</b>
Thurston County Courthouse Building #2	Exterior Closure	\$125,200	\$37,560	\$40,690	\$101,725	\$305,175	\$278,499
	Roofing	\$148,125	\$44,438	\$48,141	\$120,352	\$361,055	\$345,338
	Interior Construction	\$272,250	\$81,675	\$88,481	\$221,203	\$663,609	\$602,772
	Interior Finishes	\$314,438	\$94,331	\$102,192	\$255,480	\$766,441	\$709,695
	Vertical Transportation	\$200,000	\$60,000	\$65,000	\$162,500	\$487,500	\$460,171
	Plumbing	\$35,313	\$10,594	\$11,477	\$28,691	\$86,074	\$79,484
	HVAC	\$673,188	\$201,956	\$218,786	\$546,965	\$1,640,895	\$1,551,642
	Electrical	\$108,500	\$32,550	\$35,263	\$88,156	\$264,469	\$254,958
	<b>Facility Total</b>	<b>\$1,877,013</b>	<b>\$563,104</b>	<b>\$610,029</b>	<b>\$1,525,073</b>	<b>\$4,575,218</b>	<b>\$4,282,558</b>
Thurston County Courthouse Building #3	Exterior Closure	\$101,850	\$30,555	\$33,101	\$82,753	\$248,259	\$227,497
	Roofing	\$264,825	\$79,448	\$86,068	\$215,170	\$645,511	\$615,620
	Interior Construction	\$388,000	\$116,400	\$126,100	\$315,250	\$945,750	\$866,946
	Interior Finishes	\$952,592	\$285,778	\$309,592	\$773,981	\$2,321,943	\$2,145,446
	Vertical Transportation	\$200,000	\$60,000	\$65,000	\$162,500	\$487,500	\$460,171
	Plumbing	\$171,349	\$51,405	\$55,688	\$139,221	\$417,663	\$397,057
	HVAC	\$1,265,757	\$379,727	\$411,371	\$1,028,427	\$3,085,282	\$2,920,549
	Fire Protection	\$75,000	\$22,500	\$24,375	\$60,938	\$182,813	\$182,813
	Electrical	\$198,372	\$59,512	\$64,471	\$161,177	\$483,532	\$467,588
	Equipment	\$600,000	\$180,000	\$195,000	\$487,500	\$1,462,500	\$1,462,500
	Special Construction	\$17,600	\$5,280	\$5,720	\$14,300	\$42,900	\$39,724

## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$125,200
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$305,176
Exterior Walls									
Soffit	4	3	2016		1	\$15,000.00	LS	\$15,000	\$36,563

Soffits are water damaged and show signs of leaking.

Repair soffits, replace plaster system as necessary, allowance.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$125,200
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$305,176
Exterior Windows									
Exterior windows	4	5	2016		1,100	\$95.00	SF	\$104,500	\$254,719


Windows are single glazed units.

Remove and replace windows and frames with new dual glazed units.



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$8,918,095
Site: Thurston County Courthouse Campus	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$125,200
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$305,176
Exterior Doors									
Door Hardware	4	5	2016		6	\$950.00	EA	\$5,700	\$13,894
Door hardware in poor condition.				Remove and replace door hardware with new accessible hardware.					



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$148,125
System: Roofing					Total System Deficiency Repair Cost (Marked Up):				\$361,055
Roof Coverings									
Metal roofing	5	2	2016		6,750	\$15.00	SF	\$101,250	\$246,797

Metal roofing finish deteriorated, painted over multiple times, peeling, flaking, flashings are rusting.

Remove metal roofing and replace with new.



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$8,918,095
Site: Thurston County Courthouse Campus	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$148,125
System: Roofing					Total System Deficiency Repair Cost (Marked Up):				\$361,055
Projections									
Covered walks	4	3	2016		125	\$375.00	LF	\$46,875	\$114,258
Covered walks wood framing exposed, metal roofing poor condition, soffits cracked.				Replace roofing, replace damaged soffit, paint exposed wood.					




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$272,250
System: Interior Construction					Total System Deficiency Repair Cost (Marked Up):				\$663,609
Interior Doors									
Interior doors	4	5	2016		121	\$2,250.00	EA	\$272,250	\$663,609
Doors worn, de-laminating, hardware outdated.				Remove and replace with new doors in existing frames.					
									



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$314,438
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$766,441
Wall Finishes									
Vinyl wall covering	4	4	2016		16,000	\$2.25	SF	\$36,000	\$87,750

Vinyl wall covering aged, discolored, shows wear and tear.

Remove and replace with new vinyl wall covering.






## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Building #2				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$314,438
System:	Interior Finishes				Total System Deficiency Repair Cost (Marked Up):				\$766,441
Ceiling Finishes									
ACT	4	4	2016		41,250	\$6.75	SF	\$278,438	\$678,691
Ceiling tiles and ACT worn and faded.				Remove older glue on tiles and ACT, replace with all new ACT system, abate as necessary.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Building #2				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$200,000
System:	Vertical Transportation				Total System Deficiency Repair Cost (Marked Up):				\$487,500
Elevators and Lifts									
Elevator	4	3	2016		2	\$100,000.00	EA	\$200,000	\$487,500

Original elevators are noisy and slow with obsolete relay control.

Renew one 2-stop and one 3-stop hydraulic elevators.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$35,313
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$86,075
Plumbing Fixtures									
Faucets & flush valves	4	3	2016		20	\$750.00	EA	\$15,000	\$36,563
Original faucets and flush valves are failing, especially in public toilet rooms.				Replace with County standard faucets and flush valves.					



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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$35,313
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$86,075
Domestic Water Distribution									
Water service	4	5	2016		1	\$10,000.00	LS	\$10,000	\$24,375
Assume original galvanized steel water service at end of life and without backflow prevention.				Replace water service main and add backflow prevention per code.					




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$35,313
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$86,075
Sanitary Waste									
Drain, waste & vent piping	4	5	2016		41,250	\$0.25	SF	\$10,313	\$25,137
Many fixtures slow to flush and at least one on lower level chronically backs-up.				Clean, test, inspect and repair drain, waste & vent piping.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$673,188
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,640,895
Energy Supply									
Hydronic piping	4	2	2016		200	\$100.00	FT	\$20,000	\$48,750
Poly-vinyl chloride hydronic piping is inappropriate for this service.				Replace with metallic mains and copper and/or cross-linked polyethylene run-outs to terminal units.					
									




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$673,188
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,640,895
HVAC Distribution Systems									
Air handling unit	4	3	2016		1	\$20,000.00	LS	\$20,000	\$48,750
Air handling unit is leaking air; has light corrosion; has loose, damaged or failing dampers; and marginal air filtration.				Refurbish air handling unit.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$673,188
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,640,895
HVAC Distribution Systems									
Ductwork	4	3	2016		41,250	\$3.00	SF	\$123,750	\$301,641
Distribution ductwork especially grills, registers & diffusers are damaged, dirty, loose and provide marginal comfort in many locations.				Refurbish, replace and reconfigure ductwork and grills, registers & diffusers to improve thermal comfort and air quality.					





Detailed Assessment - Observed Deficiencies 2016 - 2021

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					

Facility:	Thurston County Courthouse Building #2	Total System Deficiency Repair Cost (Undiscounted/Unescalated):	\$673,188
System:	HVAC	Total System Deficiency Repair Cost (Marked Up):	\$1,640,895

HVAC Distribution Systems

Hydronic distribution piping	4	2	2016		41,250	\$1.00	SF	\$41,250	\$100,547
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Heating hot water and chilled water piping is poly-vinyl chloride; this piping is inappropriate for heating & cooling water application.

Replace heating hot and chilled water distribution piping with metallic mains and copper and/or cross-linked polyethylene distribution tubing.



Detailed Assessment - Observed Deficiencies 2016 - 2021

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Site: Thurston County Courthouse Campus	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$673,188
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,640,895
Terminal and Package Units									
Terminal units	4	3	2016		41,250	\$8.00	SF	\$330,000	\$804,375
Variable air volume terminal units are obsolete pneumatic units with insufficient capacity in some areas, and poor zoning in others.				Replace and reconfigure terminal units in conjunction with ductwork renewal to improve comfort.					



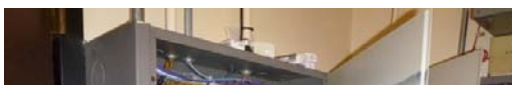
## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$673,188
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$1,640,895
Controls and Instrumentation									
Controls	4	3	2016		41,250	\$3.35	SF	\$138,188	\$336,832
Mix of newer direct digital control controls for air handling units and obsolete pneumatic controls for terminal units; with poor thermal comfort in many areas.				Upgrade all pneumatic controls to County standard.					




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$108,500
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$264,469
Electrical Service and Distribution									
208V panels	4	2	2016		4	\$6,500.00	EA	\$26,000	\$63,375
Insufficient panel spaces for needed receptacles.				Install two new receptacle panels per floor.					




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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$108,500
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$264,469
Lighting and Branch Wiring									
Branch wiring	4	2	2016		41,250	\$1.50	SF	\$61,875	\$150,820
Original wiring, light switches and receptacles, some damaged. Insufficient receptacles for plug loads.				Replace damaged switches and receptacles. Add new receptacles where needed.					
									




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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$108,500
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$264,469
Low Voltage Security									
Duress system	4	1	2016		41,250	\$0.25	SF	\$10,313	\$25,137
Duress system is residential grade.				Upgrade to County standard duress system.					




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Thurston County

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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #2					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$108,500
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$264,469
Other Electrical Systems									
Emergency lighting	4	2	2016		41,250	\$0.25	SF	\$10,313	\$25,137
Some older exit signs hard to see. No instant-on egress lighting.				Replace older exit signs with new; check directioning and add battery-backed egress lighting to main corridors.					



## Facility Summary

### Thurston County

### Thurston County Courthouse Campus

### Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

#### Facility Code

Facility Size - Gross S.F.	77,248
Year Of Original Construction	1977
Facility Use Type	Detention Center - Low rise
Construction Type	Heavy
# of Floors	2
Energy Source	Gas
Year Of Last Renovation	1984
Historic Register	No



Weighted Avg Condition Score	3.3		Total Project Cost	Total Project Cost - Present Value
Facility Condition Index (FCI)	0.24			
Current Replacement Value (CRV)	\$44,863,000	Predicted Renewal Budget (6 yrs)	\$9,836,000	\$9,521,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$24,290,000	\$21,512,000
		Observed Deficiencies (6 yrs)	\$10,324,000	\$9,786,000
		Observed Deficiencies (ALL)	\$10,324,000	\$9,786,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Structure in fair condition, flat roofing and pitched roofing poor condition, windows in poor condition and most doors in fair condition needing paint and some hardware. Covered walks are in poor condition. Interior doors are poor and delaminating and other finishes are a mix of some newer and older with varying condition. Courthouse campus central plant at Building 3 with boiler & chiller plant modernized in 2003 in fair to good condition, but original electrical in fair condition. Building 3 mechanical, electrical and plumbing systems mostly original with piece-meal upgrades including new light fixtures; but many needing renewal including elevators, plumbing fixture trim, HVAC and wiring.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			3.0			
Foundations						
A1010 Standard Foundations	1977	1984	3		JWB 04/19/16	Concrete in fair condition.
A1030 Slab On Grade						



## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments	
Systems									
A Substructure					3.0				
Foundations									
A1030	Slab On Grade		1977	1984	3		JWB	04/19/16	Concrete in fair condition.
Basements									
A2020	Basement Walls		1977	1984	3		JWB	04/19/16	Concrete and CMU in fair condition.
B Shell					3.1				
Superstructure									
B1010	Floor Construction		1977	1984	3		JWB	04/19/16	Concrete deck on concrete & CMU walls in good condition.
B1020	Roof Construction		1977	1984	3		JWB	04/19/16	Concrete deck on wood frame and concrete and CMU walls in good condition.
Exterior Closure									
B2010	Exterior Walls		1977	1984	3		JWB	04/19/16	Brick veneer showing efflorescence, cast in place concrete in good condition, plaster soffit in poor condition.
B2020	Exterior Windows		1977	1984	3		JWB	04/19/16	Non detention windows are single pane, aluminum window units in poor condition. Detention windows in fair condition.
B2030	Exterior Doors		1977	1984	4		JWB	04/19/16	Aluminum storefront in fair condition, HM doors in HM frames at service areas in poor condition, <\$5K to repaint. Steel doors in steel frames at detention areas in need of paint, <\$5K. Door hardware in poor condition.
Roofing									
B3010	Roof Coverings		1977	1984	4		JWB	04/19/16	Bitumen roofing at flat areas in poor condition, metal roofing at pitched roof areas in poor

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
B Shell				3.1			
Roofing							
B3010	Roof Coverings						condition.
B3020	Roof Openings	1977	1984	4	JWB	04/19/16	Glass pane skylight above entrance in poor condition, leaking, polycarbonate skylights at addition in poor condition, seals failed, leaking.
B3030	Projections	1977	1984	4	JWB	04/19/16	Wood framed covered walks with metal roofing in poor condition.
C Interiors				3.3			
Interior Construction							
C1010	Partitions	1977	1984	3	JWB	04/19/16	Mix of CMU, wood and steel framed, fair condition.
C1020	Interior Doors	1977	1984	3	JWB	04/19/16	Wood doors in HM frames, some plastic laminate, hardware mix of compliant and non-compliant ADA hardware. Service doors HM in HM frames, non-compliant hardware. Steel doors in steel frames at detention areas, paint scratched and marked.
C1030	Fittings	1977	1984	3	JWB	04/19/16	Original plastic laminate restroom partitions in fair condition.
Staircases							
C2010	Stair Construction	1977	1984	3	JWB	04/19/16	Metal stairs with concrete pan infill in fair condition.
Interior Finishes							
C3010	Wall Finishes	1977	1984	4	JWB	04/19/16	Wall paint in poor condition, ceramic tile in restrooms in fair condition.

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
C Interiors				3.3			
Interior Finishes							
C3020	Floor Finishes	1977	1984	4		JWB 04/19/16	Mix of some new and old carpet, first floor carpet in poor condition, some areas at second floor in poor condition as well, limited VCT at break rooms in fair condition, ceramic tile in restrooms in fair condition.
C3030	Ceiling Finishes	1977	1984	4		JWB 04/19/16	Mostly 2x4 ACT in poor condition, worn tiles, faded, marked. 12x12 glue on tiles at detention areas in poor condition.
D Services				3.3			
Vertical Transportation							
D1010	Elevators and Lifts	1977	1977	4		DCS 04/19/16	Original elevators are noisy and slow with obsolete relay control.
Plumbing							
D2010	Plumbing Fixtures	1977	1977	3		DCS 04/19/16	Original faucets and flush valves at many fixtures are failing. Detention area fixture trim (flush valve, faucet and shower controls) also failing. Detention fixtures themselves are worn but functional.
D2020	Domestic Water Distribution	1977	1977	3		DCS 04/19/16	Water pressure somewhat low at 65 psig, but most top floor tested fixtures flow acceptably. Office area domestic hot water heater is under active replacement. The two detention domestic hot water heaters are at end of life and appear abandoned in place. Reports of failing piping were not confirmed during site visit.
D2030	Sanitary Waste	1977	1977	3		DCS 04/19/16	Minor failures reported, and some tested fixtures flushed or drained slowly. Two sanitary lift stations each with duplex grinder pumps in fair condition; the jail addition station requires frequent service (cleaning) when the jail is operating.

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				3.3			
Plumbing							
D2040	Rain Water Drainage	1977	1977	4		DCS 04/19/16	While roof drains & overflow roof drains appear to have cast iron bodies, checked rain leaders are poly-vinyl chloride, hence approaching end of life. Additionally nearby trees cause periodic back-ups; both French and traditional gutters experience similar issues.
D2090	Other Plumbing Systems	1977	1996	3		DCS 04/19/16	Central plant control air compressor supplies campus, and is in fair to good condition; but excessive run-time suggests distribution and/or control device leakage (<\$5K to inspect and correct).
HVAC							
D3010	Energy Supply	1977	2002	2		DCS 04/19/16	Natural gas piping to newer boilers from newer gas service. Fuel oil piping to boilers from newer fuel oil storage tank. Both natural gas piping and fuel oil piping is newer (2002) in good condition.
D3020	Heat Generating Systems	1977	2002	3		DCS 04/19/16	Three modern dual-fuel (natural gas and diesel fuel oil) boilers in fair to good condition. Boiler and heating hot water distribution pumps in good condition. Metal heating hot water piping in boiler room in good condition.
D3030	Cooling Generating Systems	1977	2002	3		DCS 04/19/16	Two modern screw-type chillers in boiler room, one outside cooling tower, condenser water pumps, and primary & secondary chilled water pumps; all in fair to good condition, excepting primary pumps motors which run unusually hot (<\$5K to diagnose).
D3040	HVAC Distribution Systems	1977	1977	4		DCS 04/19/16	Heating hot water and chilled water distribution piping is poly-vinyl chloride, not appropriate for this service. Three original air handling units leak & squeak and need refurbishment or replacement. Distribution ductwork, especially grills, registers & diffusers are damaged, dirty and function poorly. Newer (2006) heat recovery unit serving jail addition area in good condition,

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			3.3			
<b>HVAC</b>						
D3040 HVAC Distribution Systems						excepting exposed ductwork at roof level (<\$5K to better protect).
D3050 Terminal and Package Units	1977	1977	4	DCS	04/19/16	Variable air volume terminal units are obsolete pneumatic units with insufficient capacity in some areas, and poor zoning in others. Two somewhat newer roof top unit heat pumps serve the jail addition and are in fair condition. Several electric unit heaters in fair to good condition.
D3060 Controls and Instrumentation	1977	2003	4	DCS	04/19/16	Mix of newer direct digital control controls for central plant and air handling units, with obsolete pneumatic controls for terminal units; marginal to poor thermal comfort in many areas. Overall poor condition.
D3090 Other HVAC Systems and Equipment	1977	1977	5	DCS	04/19/16	Kitchen grease and dish-wash hoods with dedicated air handling unit at rooftop penthouse all tagged-out and abandoned in place. Small through-wall air conditioning unit at rooftop penthouse radio room (<\$5K to replace with ductless split-direct expansion system).
<b>Fire Protection</b>						
D4010 Fire Protection Sprinkler Systems	1977	1977	3	DCS	04/19/16	Wet pipe fire sprinkler system with multiple FDCs fully tested in 2015 in fair condition. Some detention areas not protected; many detention areas without detention-type heads.
D4020 Stand-Pipe and Hose Systems	1977	1977	3	DCS	04/19/16	Standpipe system with FDC and several hose stations in detention areas in fair condition.
D4090 Other Fire Protection Systems	1977	1977	5	DCS	04/19/16	Kitchen grease hood fire suppression system; assume inoperable.
<b>Electrical</b>						

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			3.3			
<b>Electrical</b>						
<b>D5010 Electrical Service and Distribution</b>	1977	1977	3		DCS 04/19/16	Main switchboard for Courthouse campus at 480V, 4000A with 1200A to Building 1, 800A to Building 2, 1600A to Building 3 and 800A to Jail Addition. Separate 208V pad-mounted transformer at service yard to 208V switchboard. All in aging but operable condition with parts available, but expensive. Limited 208/120V circuits in office areas. No sub-metering of Buildings.
<b>D5020 Lighting and Branch Wiring</b>	1977	1977	3		DCS 04/19/16	Mostly newer T-8 fluorescent fixtures in 2012 for offices and T-8 lamps & ballasts in detention. Minimal receptacles in office and work areas. Newer fixtures in good to excellent condition; original branch wiring in fair condition.
<b>D5032 Low Voltage Communication</b>	1977	2015	3		DCS 04/19/16	New voice-over-internet-protocol phone system in good to excellent condition. Limited cable television in fair condition. Older public address in fair condition. Newer DAS-type inside antenna system in good condition. Several types of intercom systems in fair condition. Detention visitation area phone system is not functional.
<b>D5037 Low Voltage Fire Alarm</b>	1977	2006	3		DCS 04/19/16	Modern addressable fire alarm with fire alarm control panel at boiler room; detectors in corridors and common areas, but not in private offices; meets code minimum requirements. Overall fair condition.
<b>D5038 Low Voltage Security</b>	1977	2012	3		DCS 04/19/16	Modern card key access system for many non-detention areas; but some cypher-locks still present. Mix of older and newer closed circuit television. Overall fair condition.
<b>D5039 Low Voltage Data</b>	1977	2015	2		DCS 04/19/16	Recently upgraded main distribution frame at basement level in good condition with new Cat 6 cabling. Wireless access protocol in some areas in good condition.

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components										
Systems		Original System Date		Last Major System Renew.		Cond. Scores	Subsystem Remain. Useful Life - Yrs		Surveyor/ Survey Date	Comments
D Services						3.3				
Electrical										
D5090	Other Electrical Systems									
			1977	1977	3		DCS	04/19/16	Standby/emergency power from central plant 500 kW diesel generator, aged but functional. One automatic transfer switch with emergency panel in fair condition. Exit signs are a mix of old emergency power and newer battery-backed type.	
E Equipment and Furnishings						4.6				
Equipment										
E1010	Commercial Equipment									
			1977	1996	3		DCS	04/19/16	Break room appliances; mix of older and newer; older appliances worn but functional. Trash compactor in fair condition. Failed commercial laundry equipment.	
E1020	Institutional Equipment									
			1977	1977	5		DCS	04/19/16	Commercial kitchen equipment including electric and gas-fired appliances, walk-in cooler & freezer, and scullery with dishwasher; all heavily used in failed to poor condition. Large outside cooler to south; reportedly operable as of 2015; <\$5K estimated for return to limited use.	
E1090	Other Equipment									
			1977	2010	3		DCS	04/19/16	Modern touch-screen type detention door control system in fair to good condition; but should be fully serviced prior to use (<\$5K).	
Furnishings										
E2010	Fixed Furnishings									
			1977	1984	3		JWB	04/19/16	Window blinds older, worn, broken, older, <\$5K to replace. Casework in fair condition.	
F Special Construction						3.1				
Special Construction										
F1020	Integrated Construction									
			1977	1984	4		JWB	04/19/16	Detention area tables, cots are worn, bent in poor condition.	

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Building #3

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
F Special Construction			3.1			

#### Special Construction

##### F1050 Special Controls and Instrumentation

1977	1984	3	JWB	04/19/16	Detention controls system appears functioning but not in use.
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## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Campus Infrastructure

2000 Lakeridge Dr SW  
Olympia, WA 98502

## Facility Condition Summary

Site in fair condition with some parking areas showing wear and tear and some walks deflecting from tree roots. Landscaping in good condition but irrigation system is inoperable. City water, sewer & storm in good condition, excepting moderately low water pressure. PSE power and natural gas reportedly adequate for loads, but previous power quality issues at Building 3 detention addition remain unresolved. High-speed fiber optic data service.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2010 Roadways</b>	1977	1977	3	JWB	04/18/16	AC paved with concrete curbs in fair condition, some areas worn and cracked, need slurry coat. Replace broken concrete curbs <\$5K.
<b>G2020 Parking Lots</b>	1977	1977	3	JWB	04/18/16	AC paved with concrete curbs in fair condition, some areas worn and cracked, need slurry coat. Replace broken concrete curbs, <\$5K.
<b>G2030 Pedestrian Paving</b>	1977	1977	3	JWB	04/18/16	Concrete walks in fair condition, some unlevelled from tree roots - need replacement.
<b>G2040 Site Development</b>	1977	1977	3	JWB	04/18/16	Some site fencing, security fencing, retaining walls all in fair condition.
<b>G2050 Landscaping</b>	1977	1977	3	JWB	04/18/16	Trees, shrubs and lawn areas in good condition. Irrigation system not functioning.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	1977	1996	3	DCS	04/18/16	City water supplies fire loop in fair condition with somewhat low pressure (65 psig at served buildings); multiple meters and unclear backflow prevention; water quality and pressure & flow tests are suggested (<\$5K).
<b>G3020 Sanitary Sewer</b>						

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Campus Infrastructure

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
	1977	1977	3		DCS 04/18/16	Reported lift station to city sewer with no issues noted. Consider proactive tree root control near sanitary main (<\$5K).
<b>G3030 Storm Sewer</b>	1977	1977	3		DCS 04/18/16	Storm drain collection at parking lot and roadways leading to City storm service with apparent overflow from last catch basin to east. Ponding in several small areas can be corrected for <\$5K.
<b>G3040 Heating Distribution</b>	1977	1977	4		DCS 04/18/16	Heating hot water from Building 3 central plant to Buildings 1 & 2 via covered walk ceiling space. Poly-vinyl chloride piping not appropriate for this service, resulting inability to fully heat Buildings 1 & 2.
<b>G3050 Cooling Distribution</b>	1977	1977	4		DCS 04/18/16	Chilled water from Building 3 central plant to Buildings 1 & 2 via covered walk ceiling space. Poly-vinyl chloride piping not appropriate for this service, regardless of low temperature; piping is subject easy damage and premature failure.
<b>G3060 Fuel Distribution</b>	1977	1996	3		DCS 04/18/16	PSE natural gas service underground to Building 3 central plant and to modular Work Release building in fair condition. Double contained diesel fuel oil storage tank above grade at Building 3 central plant in fair to good condition.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	1977	1996	3		DCS 04/18/16	Campus medium voltage service switch and meter to north, then underground to Building 3 service yard transformers; all aging but functional, in fair condition. Power distribution from Building 3 to Buildings 1 & 2 underground. Past power quality issues reported at Building 3 jail should be investigated and resolved (<\$5K for investigation).
<b>G4020 Site Lighting</b>	1977	2015	3		DCS 04/18/16	Original roadway and parking lot light poles

## Facility Summary

Thurston County

Thurston County Courthouse Campus

Thurston County Courthouse Campus Infrastructure

2000 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Electrical utilities</b>						
<b>G4020 Site Lighting</b>						recently upgraded to light-emitting diode heads in good condition; however poor lighting remains in some areas, such as west of Building 2 at judges entrance. Pedestrian pathway lighting is largely original with aging fixtures. No lighting at covered walks between Buildings 1, 2 & 3.
<b>G4030 Site Communications and Security</b>	1977	1993	3		DCS 04/18/16	High-speed fiber optic service and copper land-lines routed in conduit underground between vaults around site perimeter with feeds to Buildings. Minimal site security. Overall in fair condition.
<b>Other Site Construction</b>						
<b>G9010 Service and Pedestrian Tunnels</b>	1977	1977	3		DCS 04/18/16	Tunnels between Buildings in fair to good condition.

## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Thurston County Courthouse Building #1	Superstructure	\$101,500	\$30,450	\$32,988	\$82,469	\$247,406	\$229,088
	Exterior Closure	\$278,800	\$83,640	\$90,610	\$226,525	\$679,575	\$617,957
	Roofing	\$140,250	\$42,075	\$45,581	\$113,953	\$341,859	\$327,788
	Interior Construction	\$285,750	\$85,725	\$92,869	\$232,172	\$696,516	\$632,660
	Interior Finishes	\$573,719	\$172,116	\$186,459	\$466,147	\$1,398,440	\$1,305,176
	Vertical Transportation	\$100,000	\$30,000	\$32,500	\$81,250	\$243,750	\$230,085
	Plumbing	\$94,382	\$28,315	\$30,674	\$76,685	\$230,056	\$212,153
	HVAC	\$749,076	\$224,723	\$243,450	\$608,624	\$1,825,872	\$1,726,798
	Electrical	\$180,661	\$54,198	\$58,715	\$146,787	\$440,361	\$423,745
	<b>Facility Total</b>	<b>\$2,504,138</b>	<b>\$751,241</b>	<b>\$813,845</b>	<b>\$2,034,612</b>	<b>\$6,103,836</b>	<b>\$5,705,451</b>
Thurston County Courthouse Building #2	Exterior Closure	\$125,200	\$37,560	\$40,690	\$101,725	\$305,175	\$278,499
	Roofing	\$148,125	\$44,438	\$48,141	\$120,352	\$361,055	\$345,338
	Interior Construction	\$272,250	\$81,675	\$88,481	\$221,203	\$663,609	\$602,772
	Interior Finishes	\$314,438	\$94,331	\$102,192	\$255,480	\$766,441	\$709,695
	Vertical Transportation	\$200,000	\$60,000	\$65,000	\$162,500	\$487,500	\$460,171
	Plumbing	\$35,313	\$10,594	\$11,477	\$28,691	\$86,074	\$79,484
	HVAC	\$673,188	\$201,956	\$218,786	\$546,965	\$1,640,895	\$1,551,642
	Electrical	\$108,500	\$32,550	\$35,263	\$88,156	\$264,469	\$254,958
	<b>Facility Total</b>	<b>\$1,877,013</b>	<b>\$563,104</b>	<b>\$610,029</b>	<b>\$1,525,073</b>	<b>\$4,575,218</b>	<b>\$4,282,558</b>
Thurston County Courthouse Building #3	Exterior Closure	\$101,850	\$30,555	\$33,101	\$82,753	\$248,259	\$227,497
	Roofing	\$264,825	\$79,448	\$86,068	\$215,170	\$645,511	\$615,620
	Interior Construction	\$388,000	\$116,400	\$126,100	\$315,250	\$945,750	\$866,946
	Interior Finishes	\$952,592	\$285,778	\$309,592	\$773,981	\$2,321,943	\$2,145,446
	Vertical Transportation	\$200,000	\$60,000	\$65,000	\$162,500	\$487,500	\$460,171
	Plumbing	\$171,349	\$51,405	\$55,688	\$139,221	\$417,663	\$397,057
	HVAC	\$1,265,757	\$379,727	\$411,371	\$1,028,427	\$3,085,282	\$2,920,549
	Fire Protection	\$75,000	\$22,500	\$24,375	\$60,938	\$182,813	\$182,813
	Electrical	\$198,372	\$59,512	\$64,471	\$161,177	\$483,532	\$467,588
	Equipment	\$600,000	\$180,000	\$195,000	\$487,500	\$1,462,500	\$1,462,500
	Special Construction	\$17,600	\$5,280	\$5,720	\$14,300	\$42,900	\$39,724

## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Facility	System		Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
		<b>Facility Total</b>	<b>\$4,235,345</b>	<b>\$1,270,603</b>	<b>\$1,376,487</b>	<b>\$3,441,218</b>	<b>\$10,323,653</b>	<b>\$9,785,909</b>
Thurston County Courthouse Campus Infrastructure	Site Improvements		\$214,100	\$64,230	\$69,583	\$173,956	\$521,869	\$512,891
	Site Civil / Mechanical Utilities		\$65,000	\$19,500	\$21,125	\$52,813	\$158,438	\$150,006
	Site Electrical utilities		\$22,500	\$6,750	\$7,313	\$18,281	\$54,844	\$52,774
	<b>Facility Total</b>		<b>\$301,600</b>	<b>\$90,480</b>	<b>\$98,020</b>	<b>\$245,050</b>	<b>\$735,150</b>	<b>\$715,672</b>
		<b>Site Total</b>	<b>\$8,918,095</b>	<b>\$2,675,429</b>	<b>\$2,898,381</b>	<b>\$7,245,952</b>	<b>\$21,737,857</b>	<b>\$20,489,591</b>

## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$101,850
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$248,260
Exterior Walls									
Soffit	4	3	2016		1	\$23,000.00	LS	\$23,000	\$56,063

Soffits are water damaged and show signs of leaking.


Repair soffits, replace plaster system as necessary, allowance.

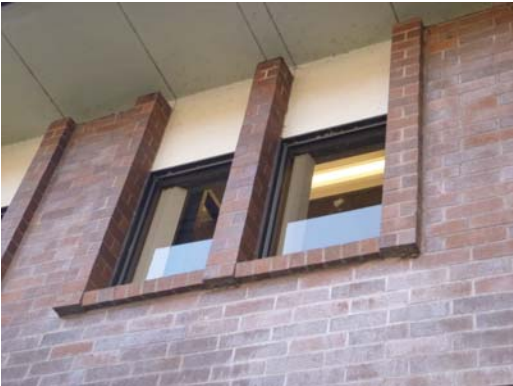


Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$101,850
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$248,260
Exterior Windows									
Exterior windows	4	5	2016		750	\$95.00	SF	\$71,250	\$173,672
Non detention windows are single glazed units.				Remove and replace windows and frames with new dual glazed units.					
									



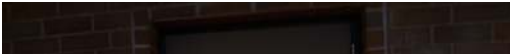
## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$101,850
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$248,260
Exterior Doors									
Door Hardware	4	5	2016		8	\$950.00	EA	\$7,600	\$18,525
Door hardware in poor condition.				Remove and replace door hardware with new accessible hardware.					






Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Building #3				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$264,825
System:	Roofing				Total System Deficiency Repair Cost (Marked Up):				\$645,512
Roof Coverings									
Bitumen roofing	4	3	2016		19,600	\$4.50	SF	\$88,200	\$214,988
Bitumen roofing deteriorated.				Remove roofing and replace with new.					



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$264,825
System: Roofing					Total System Deficiency Repair Cost (Marked Up):				\$645,512
Roof Coverings									
Metal roofing	5	2	2016		7,800	\$15.00	SF	\$117,000	\$285,188

Metal roofing finish deteriorated, painted over multiple times, peeling, flaking, flashings are rusting.

Remove metal roofing and replace with new.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

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Deficiency				Action					
Facility: Thurston County Courthouse Building #3				Total System Deficiency Repair Cost (Undiscounted/Unescalated):					\$264,825
System: Roofing				Total System Deficiency Repair Cost (Marked Up):					\$645,512
Roof Openings									
Skylights	4	2	2016		1	\$24,000.00	LS	\$24,000	\$58,500
Glass panel and polycarbonate skylights seals failed, leak.				Remove polycarbonate skylights, replace with new units, remove frames and glazing of glass panel skylight, replace with new glass and seals.					



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$264,825
System: Roofing					Total System Deficiency Repair Cost (Marked Up):				\$645,512
Projections									
Covered walks	4	3	2016		95	\$375.00	LF	\$35,625	\$86,836
Covered walks wood framing exposed, metal roofing poor condition, soffits cracked.				Replace roofing, replace damaged soffit, paint exposed wood.					




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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$388,000
System: Interior Construction					Total System Deficiency Repair Cost (Marked Up):				\$945,751
Interior Doors									
Door paint	4	3	2016		140	\$650.00	EA	\$91,000	\$221,813
Detention doors are scratched, scuffed.				Prep and repaint doors.					




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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$388,000
System: Interior Construction					Total System Deficiency Repair Cost (Marked Up):				\$945,751
Interior Doors									
Interior doors	4	5	2016		132	\$2,250.00	EA	\$297,000	\$723,938
Doors worn, de-laminating, hardware outdated.				Remove and replace with new doors in existing frames.					
									



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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Building #3				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$952,592
System:	Interior Finishes				Total System Deficiency Repair Cost (Marked Up):				\$2,321,943
Wall Finishes									
Wall paint	4	5	2016		77,248	\$3.50	SF	\$270,368	\$659,022
Wall paint is faded, scratched and shows signs of wear.				Prep and repaint interior walls.					




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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$952,592
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$2,321,943
Floor Finishes									
Carpet	4	3	2016		24,000	\$6.70	SF	\$160,800	\$391,950
Carpet is old, stained and worn.				Remove and replace with new carpet.					






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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$952,592
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$2,321,943
Ceiling Finishes									
ACT	4	4	2016		77,248	\$6.75	SF	\$521,424	\$1,270,971
Ceiling tiles and ACT worn and faded. Some damage to gypsum systems.				Remove older glue on tiles and ACT, replace with all new ACT system, abate as necessary.					
									



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$200,000
System: Vertical Transportation					Total System Deficiency Repair Cost (Marked Up):				\$487,500
Elevators and Lifts									
Elevator	4	3	2016		2	\$100,000.00	EA	\$200,000	\$487,500

Original elevators are noisy and slow with obsolete relay control.

Renew two hydraulic elevators.



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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$171,349
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$417,663
Plumbing Fixtures									
Fixtures & trim	4	3	2016		100	\$750.00	EA	\$75,000	\$182,813
Original faucets and flush valves are failing at many fixtures; some detention fixtures have minor damage.				Replace with County standard faucets and flush valves; repair damaged detention fixtures.					




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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$171,349
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$417,663
Domestic Water Distribution									
Domestic hot water heaters	5	0	2016		2	\$25,000.00	EA	\$50,000	\$121,875
Detention domestic hot water electric resistance heaters appear failed and abandoned in place.				Replace with new gas-fired heaters.					




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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$171,349
System: Plumbing					Total System Deficiency Repair Cost (Marked Up):				\$417,663
Sanitary Waste									
Drain, waste & vent piping	4	5	2016		77,248	\$0.25	SF	\$19,312	\$47,073
Some fixtures slow to flush.				Clean, test, inspect and repair drain, waste & vent piping.					




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Deficiency				Action					
Facility:	Thurston County Courthouse Building #3				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$171,349
System:	Plumbing				Total System Deficiency Repair Cost (Marked Up):				\$417,663
Rain Water Drainage									
Poly-vinyl chloride rain leaders	4	5	2016		77,248	\$0.35	SF	\$27,037	\$65,902
Poly-vinyl chloride roof drain leader piping nearing end of life.				Replace roof drain & overflow roof drain poly-vinyl chloride rain leader piping with new; inspect					



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$1,265,757
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$3,085,283
HVAC Distribution Systems									
Air handling units	4	3	2016		3	\$15,000.00	LS	\$45,000	\$109,688

Air handling units are leaking air; have light corrosion; have loose, damaged or failing dampers; and marginal air filtration.

Refurbish air handling units.




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Deficiency				Action					
Facility:	Thurston County Courthouse Building #3				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$1,265,757
System:	HVAC				Total System Deficiency Repair Cost (Marked Up):				\$3,085,283
HVAC Distribution Systems									
Ductwork	4	3	2016		77,248	\$3.00	SF	\$231,744	\$564,876
Distribution ductwork especially grills, registers & diffusers are damaged, dirty, loose and provides marginal comfort in many locations.				Refurbish, replace and reconfigure ductwork and grills, registers & diffusers to improve thermal comfort and air quality.					





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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$1,265,757
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$3,085,283
HVAC Distribution Systems									
Hydronic distribution piping	4	2	2016		77,248	\$1.00	SF	\$77,248	\$188,292

Heating hot water and chilled water piping is poly-vinyl chloride; this piping is inappropriate for heating & cooling water application.

Replace heating hot and chilled water distribution piping with metallic mains and copper and/or cross-linked polyethylene distribution tubing.



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Deficiency				Action					
Facility:	Thurston County Courthouse Building #3				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$1,265,757
System:	HVAC				Total System Deficiency Repair Cost (Marked Up):				\$3,085,283
Terminal and Package Units									
Terminal units	4	3	2016		77,248	\$8.00	SF	\$617,984	\$1,506,336

Variable air volume terminal units are obsolete pneumatic units with insufficient capacity in some areas, and poor zoning in others.

Replace and reconfigure terminal units in conjunction with ductwork renewal to improve comfort.



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Deficiency				Action					
Facility:	Thurston County Courthouse Building #3				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$1,265,757
System:	HVAC				Total System Deficiency Repair Cost (Marked Up):				\$3,085,283
Controls and Instrumentation									
Controls	4	3	2016		77,248	\$3.35	SF	\$258,781	\$630,778

Mix of newer direct digital control controls for central plant and air handling units with obsolete pneumatic controls for terminal units; with poor thermal comfort in many areas.

Upgrade all pneumatic controls to County standard.



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$1,265,757
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$3,085,283
Other HVAC Systems and Equipment									
Kitchen HVAC	5	0	2016		1	\$35,000.00	LS	\$35,000	\$85,313

Kitchen make-up, exhaust, and grease & moisture hoods tagged-out and currently inoperable.

Clean, test, inspect and repair or replace kitchen HVAC equipment and ductwork to restore to operable condition.



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$75,000
System: Fire Protection					Total System Deficiency Repair Cost (Marked Up):				\$182,813
Fire Protection Sprinkler Systems									
Fire sprinkler	5	0	2016		20,000	\$3.50	SF	\$70,000	\$170,625

Some detention areas not sprinkled; many detention areas have standard instead of detention-type heads.

Add fire sprinkler protection to currently unprotected areas, and replaced standard with detention heads in detention areas.



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$75,000
System: Fire Protection					Total System Deficiency Repair Cost (Marked Up):				\$182,813
Other Fire Protection Systems									
Grease hood fire suppression	5	0	2016		1	\$5,000.00	LS	\$5,000	\$12,188

Inoperable grease hood fire suppression system.

Service and return to operable condition prior to grease hood use.




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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$198,372
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$483,533
Electrical Service and Distribution									
208V panels	4	2	2016		5	\$6,500.00	EA	\$32,500	\$79,219
Insufficient panel spaces for needed receptacles.				Install two new receptacle panels per floor.					




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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$198,372
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$483,533
Lighting and Branch Wiring									
Branch wiring	4	2	2016		77,248	\$1.50	SF	\$115,872	\$282,438
Original wiring, light switches and receptacles, some damaged. Insufficient receptacles for plug loads.				Replace damaged switches and receptacles. Add new receptacles where needed.					
									






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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$198,372
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$483,533
Low Voltage Communication									
Visitation phones	5	0	2016		1	\$25,000.00	LS	\$25,000	\$60,938
Visitation phone system handsets are removed; system is not operational.				Replace detention visitation phone system.					



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$198,372
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$483,533
Other Electrical Systems									
Automatic transfer switch	4	2	2016		1	\$25,000.00	LS	\$25,000	\$60,938

Both life/safety and standby powered loads on one automatic transfer switch and distribution panel.

Install separate transfer switch and panel for standby (non-life/safety) loads.



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$600,000
System: Equipment					Total System Deficiency Repair Cost (Marked Up):				\$1,462,500
Commercial Equipment									
Laundry equipment	5	0	2016		1	\$150,000.00	LS	\$150,000	\$365,625

Failed washers and dryers with no trash rack or lint collection systems. Insufficient ventilation.

Install trash rack and lint collection systems; replace two washers and four dryers. Provide ventilation per code.



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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$600,000
System: Equipment					Total System Deficiency Repair Cost (Marked Up):				\$1,462,500
Institutional Equipment									
Kitchen equipment	5	0	2016		1	\$450,000.00	LS	\$450,000	\$1,096,875

Commercial kitchen equipment including electric and gas-fired appliances, walk-in cooler & freezer, and scullery with dishwasher; all heavily used in failed to poor condition.

Clean, inspect and repair or replace to return kitchen to operable, code compliant condition; assume most equipment to be replaced.




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Deficiency				Action					
Facility: Thurston County Courthouse Building #3					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$17,600
System: Special Construction					Total System Deficiency Repair Cost (Marked Up):				\$42,900
Integrated Construction									
Detention area tables	4	4	2016		8	\$2,200.00	EA	\$17,600	\$42,900
Detention area tables are worn, bent in poor condition.				Remove and replace with new detention quality tables.					
									



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Deficiency				Action					
Facility:	Thurston County Courthouse Campus Infrastructure				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$214,100
System:	Site Improvements				Total System Deficiency Repair Cost (Marked Up):				\$521,869
Roadways									
Roadway AC paving	4	3	2016		21,000	\$1.75	SF	\$36,750	\$89,578
AC paving cracked and worn.				Clean, repair low areas, surface with AC top coat and restripe.					




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Deficiency				Action					
Facility: Thurston County Courthouse Campus Infrastructure					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$214,100
System: Site Improvements					Total System Deficiency Repair Cost (Marked Up):				\$521,869
Parking Lots									
Parking AC paving	4	3	2016		14,000	\$1.75	SF	\$24,500	\$59,719
AC paving cracked and worn.				Clean, repair low areas, surface with AC top coat and restripe.					



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Deficiency				Action					
Facility:	Thurston County Courthouse Campus Infrastructure				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$214,100
System:	Site Improvements				Total System Deficiency Repair Cost (Marked Up):				\$521,869
Pedestrian Paving									
Concrete paving	4	2	2016		1,200	\$5.50	SF	\$6,600	\$16,088

Concrete walks un-level. Remove and replace upheaved concrete walks.






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Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Campus Infrastructure					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$214,100
System: Site Improvements					Total System Deficiency Repair Cost (Marked Up):				\$521,869
Landscaping									
Irrigation	5	0	2016		195,000	\$0.75	SF	\$146,250	\$356,484
Irrigation system not functioning.				Renovate as needed existing irrigation system including new controllers.					



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse Campus Infrastructure					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$65,000
System: Site Civil / Mechanical Utilities					Total System Deficiency Repair Cost (Marked Up):				\$158,438
Water Supply									
Fire Service	4	1	2016		1	\$5,000.00	LS	\$5,000	\$12,188

Intermittent fire sprinkler system low pressure alarms at Courthouse Campus Buildings 1, 2 and/or 3.


Test and identify source of low pressure alarms, coordinate with City water utility to provide reliable fire flow and pressure to Courthouse Campus per applicable code and standards.



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095  
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Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Campus Infrastructure				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$65,000
System:	Site Civil / Mechanical Utilities				Total System Deficiency Repair Cost (Marked Up):				\$158,438
Heating Distribution									
Heating water poly-vinyl chloride piping	4	3	2016		300	\$100.00	FT	\$30,000	\$73,125
Poly-vinyl chloride not suitable for heating hot water application.				Replace with metallic piping.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County  
Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095  
Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse Campus Infrastructure				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$65,000
System:	Site Civil / Mechanical Utilities				Total System Deficiency Repair Cost (Marked Up):				\$158,438
Cooling Distribution									
Chilled water poly-vinyl chloride piping	4	3	2016		300	\$100.00	FT	\$30,000	\$73,125
Poly-vinyl chloride not suitable for chilled water application.				Replace with metallic piping.					



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse Campus

Total Observed Deficiency Repair Direct Cost : \$8,918,095

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$20,489,604

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					

Facility:	Thurston County Courthouse Campus Infrastructure	Total System Deficiency Repair Cost (Undiscounted/Unescalated):	\$22,500
System:	Site Electrical utilities	Total System Deficiency Repair Cost (Marked Up):	\$54,844

### Site Lighting

Site lighting	4	2	2016		25	\$900.00	EA	\$22,500	\$54,844
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Poor lighting at Judges Building entry south of Building 2. No lighting at covered walks between Buildings 1, 2 & 3. Obsolete and damaged pedestrian bollard-type lighting. Failed in-ground up-lights.

Improve lighting at judges approach to Building 2. Add lighting per code to covered walks between Buildings. Modernize bollard fixtures. Repair or replace in-ground lighting.



## Facility Summary

### Thurston County

### Thurston County Courthouse 4

### Thurston County Courthouse 4

929 Lakeridge Dr SW  
Olympia, WA 98502

#### Facility Code

Facility Size - Gross S.F. 16,219  
Year Of Original Construction 1979  
Facility Use Type Office  
Construction Type Medium  
# of Floors 2  
Energy Source Gas  
Year Of Last Renovation 1979  
Historic Register No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	3.3			
Facility Condition Index (FCI)	0.22			
Current Replacement Value (CRV)	\$7,970,000	Predicted Renewal Budget (6 yrs)	\$2,024,000	\$1,946,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$4,112,000	\$3,664,000
		Observed Deficiencies (6 yrs)	\$2,025,000	\$1,947,000
		Observed Deficiencies (ALL)	\$2,025,000	\$1,947,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Structure in good to fair condition due to age, exterior windows reported leaks. Roof in fair condition. Interiors in fair condition except carpet poor in office areas. Most mechanical, electrical and plumbing systems are original in fair condition excepting, failing elevator, roof top unit gas-packs at end of life, no building automation system and no fire sprinkler.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			3.0			
Foundations						
A1010 Standard Foundations	1979	1979	3		JWB 04/19/16	Concrete in fair condition.
A1030 Slab On Grade	1979	1979	3		JWB 04/19/16	Concrete in fair condition.

## Facility Summary

Thurston County

Thurston County Courthouse 4

Thurston County Courthouse 4

929 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
A Substructure					3.0			
Basements								
A2020	Basement Walls		1979	1979	3	JWB	04/19/16	Concrete in fair condition.
B Shell					3.1			
Superstructure								
B1010	Floor Construction		1979	1979	3	JWB	04/19/16	Wood joists in fair condition.
B1020	Roof Construction		1979	1979	3	JWB	04/19/16	Wood joists in fair condition.
Exterior Closure								
B2010	Exterior Walls		1979	1979	3	JWB	04/19/16	Brick veneer with some wood siding. Brick in good condition, wood siding is faded, cracked and checked in poor condition. Upper walls have metal panel siding in good condition.
B2020	Exterior Windows		1979	1979	4	JWB	04/19/16	Dual glazed windows with leaks, reported installed backwards, poor condition.
B2030	Exterior Doors		1979	1979	3	JWB	04/19/16	Storefront assembly in fair condition with ADA hardware.
Roofing								
B3010	Roof Coverings		1979	1979	3	JWB	04/19/16	Thermoplastic membrane roofing in fair condition.
C Interiors					3.4			
Interior Construction								
C1010	Partitions		1979	1979	3	JWB	04/19/16	Wood framed walls in fair condition.
C1020	Interior Doors							

## Facility Summary

Thurston County

Thurston County Courthouse 4

Thurston County Courthouse 4

929 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
C Interiors					3.4			
Interior Construction								
C1020	Interior Doors		1979	1979	3	JWB	04/19/16	Wood doors in HM frames in fair condition, mix of ADA compliant and non-compliant hardware, <\$5,000 to replace.
C1030	Fittings		1979	1979	3	JWB	04/19/16	Plastic laminate restroom partitions in fair condition.
Staircases								
C2010	Stair Construction		1979	1979	3	JWB	04/19/16	Concrete to small basement in good condition, wood framed to 2nd floor in fair condition.
C2020	Stair Finishes		1979	1979	2	JWB	04/19/16	Newer rubber stair treads in good condition.
Interior Finishes								
C3010	Wall Finishes		1979	1979	3	JWB	04/19/16	Wall paint in fair condition, 1/2 height ceramic tile in restrooms in fair condition.
C3020	Floor Finishes		1979	1979	4	JWB	04/19/16	Carpet at corridors at first floor in good condition, remaining areas carpet in poor condition. Sheet vinyl at break room and restrooms in fair condition.
C3030	Ceiling Finishes		1979	1979	4	JWB	04/19/16	2x2 ACT in most areas in poor condition.
D Services					3.4			
Vertical Transportation								
D1010	Elevators and Lifts		1979	1979	4	DCS	04/19/16	Original two-stop hydraulic elevator is slow, noisy and past useful life.
Plumbing								
D2010	Plumbing Fixtures							



## Facility Summary

Thurston County

Thurston County Courthouse 4

Thurston County Courthouse 4

929 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			3.4			
<b>Plumbing</b>						
	1979	1979	3		DCS 04/19/16	Original fixtures in fair condition, some with failing trim (faucets & flush valves).
<b>D2020 Domestic Water Distribution</b>	1979	1979	3		DCS 04/19/16	Reported failing galvanized piping not found, but assume pending failure in concealed spaces. Domestic hot water heater in basement in fair condition.
<b>D2030 Sanitary Waste</b>	1979	1979	3		DCS 04/19/16	Some tested fixtures flush or drain slow, but most OK; overall fair condition.
<b>D2040 Rain Water Drainage</b>	1979	1979	3		DCS 04/19/16	Roof drain leader inside brick columns to grade in fair to good condition. Overflow roof drains at high soffit in good condition.
<b>HVAC</b>						
<b>D3010 Energy Supply</b>	1979	1996	4		DCS 04/19/16	Natural gas piping to roof top units is rusted and wood support sleepers are dry-rotting; less than \$5K to correct.
<b>D3040 HVAC Distribution Systems</b>	1979	1996	3		DCS 04/19/16	Sheet metal and flexible duct to ceiling supply air diffusers, including local active variable air volume diffusers in private offices; all in fair to good condition.
<b>D3050 Terminal and Package Units</b>	1979	1996	4		DCS 04/19/16	Five older (1996) rooftop gas-pack units approaching end of life with failing economizers, rust & corrosion and noise. One newer (2015) roof top unit recently replaced in excellent condition.
<b>D3060 Controls and Instrumentation</b>	1979	1996	4		DCS 04/19/16	Older stand-alone thermostats, one for each roof top unit; no direct digital control system. While older thermostats are in fair condition stand alone technology does not meet County standards.

## Facility Summary

Thurston County

Thurston County Courthouse 4

Thurston County Courthouse 4

929 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components								
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments	
D Services				3.4				
Fire Protection								
D4010	Fire Protection Sprinkler Systems		1979	1979	5	DCS	04/19/16	No fire sprinkler system.
Electrical								
D5010	Electrical Service and Distribution		1979	1979	3	DCS	04/19/16	Service to 208V, 1000A switchboard in closet near south entry aging but functional. Circuits reportedly cross-wired.
D5020	Lighting and Branch Wiring		1979	1979	4	DCS	04/19/16	Mostly original obsolete T-12 lighting and original wiring and devices.
D5032	Low Voltage Communication		1979	2012	2	DCS	04/19/16	Newer voice-over-internet-protocol phone system in good condition.
D5037	Low Voltage Fire Alarm		1979	2006	3	DCS	04/19/16	Modern addressable fire alarm system in fair condition.
D5038	Low Voltage Security		1979	2010	3	DCS	04/19/16	Card key access at entries and selected spaces inside in good condition. Little or no closed circuit television or intrusion detection; assume any present in fair condition.
D5039	Low Voltage Data		1979	2013	2	DCS	04/19/16	Newer main distribution frame on second floor with fiber optic service and Cat 6 cabling to data drops; all in good condition.
D5090	Other Electrical Systems		1979	1996	3	DCS	04/19/16	Mix of older and newer exit signs and egress lighting ranging from poor to good (<\$5K to upgrade older).
E Equipment and Furnishings				3.0				
Equipment								
E1010	Commercial Equipment							

## Facility Summary

Thurston County

Thurston County Courthouse 4

Thurston County Courthouse 4

929 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components								
Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
E Equipment and Furnishings					3.0			
Equipment								
E1010	Commercial Equipment		1979	1979	4		DCS 04/19/16	Aged appliances in break rooms in poor to fair condition (<\$5K to replace).
Furnishings								
E2010	Fixed Furnishings		1979	1979	3		JWB 04/19/16	Modern casework in fair condition.

## Facility Summary

Thurston County

Thurston County Courthouse 4

Thurston County Courthouse 4 Infrastructure

929 Lakeridge Dr SW  
Olympia, WA 98502

## Facility Condition Summary

Site in fair condition, parking paving showing wear and tear, landscape in good condition. City water, sewer & storm in fair condition, excepting crushed side sewer connection causing periodic back-ups and no roof drain connection to storm resulting in standing water at foundation perimeter. PSE power and natural gas is adequate for loads.

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2020 Parking Lots</b>	1979	1979	3	JWB	04/19/16	AC paved with concrete curbs in fair condition.
<b>G2030 Pedestrian Paving</b>	1979	1979	3	JWB	04/19/16	Concrete walks in fair condition.
<b>G2040 Site Development</b>	1979	1979	4	JWB	04/19/16	Retaining walls in parking lot are made of treated lumber and now in poor condition.
<b>G2050 Landscaping</b>	1979	1979	2	JWB	04/19/16	Irrigated trees, shrubs in good condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	1979	1979	3	DCS	04/19/16	City water with good pressure and color with no odor.
<b>G3020 Sanitary Sewer</b>	1979	1979	4	DCS	04/19/16	City side sewer partially collapsed between building and city main to north, resulting in periodic back-ups.
<b>G3030 Storm Sewer</b>	1979	1979	4	DCS	04/19/16	Two catch basins at south parking. Roof drains not connected to the storm system. Sump pump installed at Southeast corner to reduce basement flooding.
<b>G3060 Fuel Distribution</b>						

## Facility Summary

Thurston County

Thurston County Courthouse 4

Thurston County Courthouse 4 Infrastructure

929 Lakeridge Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3060 Fuel Distribution</b>	1979	1996	3	DCS	04/19/16	Natural gas from PSE meter with 1,000 cfh capacity at east side of building, in good condition including seismic shut-off valve.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	1979	1979	3	DCS	04/19/16	Underground power assumed from PSE pad-mounted equipment at Northwest corner of site to main electrical panel near Southwest corner of building with no issues.
<b>G4020 Site Lighting</b>	1979	1979	3	DCS	04/19/16	Original high-intensity discharge fixtures at parking lot aging but functional; high-intensity discharge wall-packs and incandescent soffit lighting at building; most fair condition; some need minor work (<\$5K).
<b>G4030 Site Communications and Security</b>	1979	2013	3	DCS	04/19/16	High-speed fiber optic service in good condition.
<b>Other Site Construction</b>						
<b>G9090 Other Site Systems</b>	2000	2012	2	DCS	04/19/16	Weather station at south parking in good condition.

## Deficiency Repair Cost Markups By System

2016 - 2021



### Thurston County

#### Site: Thurston County Courthouse 4

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Thurston County Courthouse 4	Exterior Closure	\$135,663	\$40,699	\$44,090	\$110,226	\$330,677	\$322,961
	Interior Finishes	\$180,816	\$54,245	\$58,765	\$146,913	\$440,738	\$425,702
	Vertical Transportation	\$75,000	\$22,500	\$24,375	\$60,938	\$182,813	\$175,914
	Plumbing	\$39,329	\$11,799	\$12,782	\$31,954	\$95,863	\$88,376
	HVAC	\$140,548	\$42,164	\$45,678	\$114,195	\$342,585	\$323,378
	Fire Protection	\$89,205	\$26,761	\$28,991	\$72,479	\$217,436	\$217,435
	Electrical	\$170,300	\$51,090	\$55,347	\$138,368	\$415,105	\$392,923
	<b>Facility Total</b>	<b>\$830,858</b>	<b>\$249,257</b>	<b>\$270,029</b>	<b>\$675,072</b>	<b>\$2,025,217</b>	<b>\$1,946,690</b>
Thurston County Courthouse 4 Infrastructure	Site Improvements	\$7,000	\$2,100	\$2,275	\$5,688	\$17,063	\$16,738
	Site Civil / Mechanical Utilities	\$12,500	\$3,750	\$4,063	\$10,156	\$30,469	\$29,660
	<b>Facility Total</b>	<b>\$19,500</b>	<b>\$5,850</b>	<b>\$6,338</b>	<b>\$15,844</b>	<b>\$47,531</b>	<b>\$46,398</b>
<b>Site Total</b>		<b>\$850,358</b>	<b>\$255,107</b>	<b>\$276,366</b>	<b>\$690,916</b>	<b>\$2,072,748</b>	<b>\$1,993,088</b>

Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$850,358
Site: Thurston County Courthouse 4	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse 4				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$135,663
System:	Exterior Closure				Total System Deficiency Repair Cost (Marked Up):				\$330,678
Exterior Walls									
Wood siding	4	2	2016		4,155	\$7.50	SF	\$31,163	\$75,959
Wood siding is faded, cracked and checked.				Replace damaged areas, prep and repaint or reseal.					




## Detailed Assessment - Observed Deficiencies 2016 - 2021

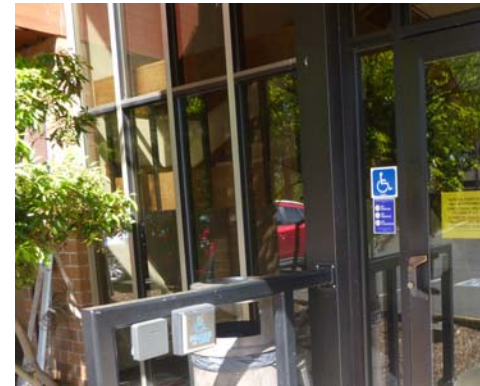
Thurston County

Site: Thurston County Courthouse 4

Total Observed Deficiency Repair Direct Cost : \$850,358

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$135,663
System: Exterior Closure					Total System Deficiency Repair Cost (Marked Up):				\$330,678
Exterior Windows									
Windows	5	1	2016		1,100	\$95.00	SF	\$104,500	\$254,719
Dual glazed windows set incorrectly in frames.				Remove windows and frames, install new dual glazed windows and frames.					





Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$850,358
Site: Thurston County Courthouse 4	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$180,816
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$440,738
Floor Finishes									
Carpet	4	1	2016		16,000	\$6.70	SF	\$107,200	\$261,300

Carpet in most office areas in poor condition, heavy traffic marks and discoloration.

Remove and replace with new carpet.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse 4

Total Observed Deficiency Repair Direct Cost : \$850,358

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$180,816
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$440,738
Ceiling Finishes									
ACT	4	3	2016		22,651	\$3.25	SF	\$73,616	\$179,438
ACT is aged, discolored, grid in good condition.				Remove ceiling tiles and replace with new.					
									



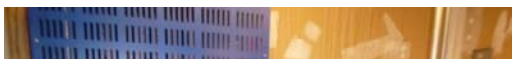
## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse 4

Total Observed Deficiency Repair Direct Cost : \$850,358


Total Observed Deficiency Repair Cost (Marked Up Present Value): \$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$75,000
System: Vertical Transportation					Total System Deficiency Repair Cost (Marked Up):				\$182,813
Elevators and Lifts									
Elevator	4	2	2016		1	\$75,000.00	LS	\$75,000	\$182,813
Original two-stop hydraulic elevator is slow, noisy and past useful life.				Refurbish or replace elevator.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$850,358
Site: Thurston County Courthouse 4	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse 4				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$39,329
System:	Plumbing				Total System Deficiency Repair Cost (Marked Up):				\$95,864
Plumbing Fixtures									
Fixture trim	4	3	2016		20	\$750.00	EA	\$15,000	\$36,563
Failing trim (faucets & flush valves).				Replace with County standard.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$850,358
Site: Thurston County Courthouse 4	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse 4				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$39,329
System:	Plumbing				Total System Deficiency Repair Cost (Marked Up):				\$95,864
Domestic Water Distribution									
Water piping	4	5	2016		16,219	\$1.50	SF	\$24,329	\$59,301
Reported galvanized piping in concealed spaces.				Replace with copper or cross-linked polyethylene.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$850,358
Site: Thurston County Courthouse 4	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$140,548
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$342,585
Terminal and Package Units									
Roof top units	4	3	2016		5	\$20,000.00	EA	\$100,000	\$243,750

Older roof top units approaching end of life with failing economizers, rust & corrosion and noise.

Replace older gas-pack roof top units with new.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse 4

Total Observed Deficiency Repair Direct Cost : \$850,358

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$140,548
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$342,585
Controls and Instrumentation									
Controls	4	3	2016		16,219	\$2.50	SF	\$40,548	\$98,835

Older stand-alone thermostats, one for each roof top unit; no direct digital controls.

Install County standard direct digital control controls upon replacement of roof top units.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse 4

Total Observed Deficiency Repair Direct Cost : \$850,358

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$89,205
System: Fire Protection					Total System Deficiency Repair Cost (Marked Up):				\$217,436
Fire Protection Sprinkler Systems									
Fire sprinkler	5	0	2016		16,219	\$5.50	SF	\$89,205	\$217,436
No fire sprinkler.				Install wet pipe fire sprinkler system per code and County standards.					
									





## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse 4

Total Observed Deficiency Repair Direct Cost : \$850,358

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$170,300
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$415,105
Electrical Service and Distribution									
Circuits	4	2	2016		16,219	\$1.50	SF	\$24,329	\$59,301

Circuits reportedly cross-wired.

Test, troubleshoot and uncross crossed wiring per code.




## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse 4

Total Observed Deficiency Repair Direct Cost : \$850,358

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$170,300
System: Electrical					Total System Deficiency Repair Cost (Marked Up):				\$415,105
Lighting and Branch Wiring									
Lighting & wiring	4	3	2016		16,219	\$9.00	SF	\$145,971	\$355,804
Obsolete T-12 lighting with older manual controls.				Upgrade to modern T-8 lighting with controls per energy code.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$850,358
Site: Thurston County Courthouse 4	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					

Facility:	Thurston County Courthouse 4 Infrastructure	Total System Deficiency Repair Cost (Undiscounted/Unescalated):	\$7,000
System:	Site Improvements	Total System Deficiency Repair Cost (Marked Up):	\$17,063

Site Development									
Treated Lumber retaining walls	4	1	2016	The treated lumber was used for training walls in the parking lot and has now become displaced and deteriorated/rotten.	70	\$100.00	LF	\$7,000	\$17,063

Rotten and displaced treated lumber that forms landscaping retaining walls.

Remove treated lumber and replace with cast-in-place concrete retaining walls for improved durability and lower maintenance.

Assumes demo at \$2,000 and CIP concrete replacement at \$5,000 for labor and materials.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Courthouse 4

Total Observed Deficiency Repair Direct Cost : \$850,358

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Courthouse 4 Infrastructure					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$12,500
System: Site Civil / Mechanical Utilities					Total System Deficiency Repair Cost (Marked Up):				\$30,469
Sanitary Sewer									
Side sewer	4	2	2016		1	\$5,000.00	LS	\$5,000	\$12,188

City side sewer partially collapsed between building and city main to north, periodically backing-up.

Coordinate with City to repair or replace the side sewer.



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$850,358
Site: Thurston County Courthouse 4	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$1,993,087

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Courthouse 4 Infrastructure				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$12,500
System:	Site Civil / Mechanical Utilities				Total System Deficiency Repair Cost (Marked Up):				\$30,469
Storm Sewer									
Storm drain	4	1	2016		10	\$750.00	EA	\$7,500	\$18,281

Roof drains to grade are not piped to storm, resulting in basement flooding and risk of water intrusion around building perimeter.

Pipe roof drains to site storm drain system.



## Facility Summary

### Thurston County

### Thurston County Emergency Services

### Thurston County Emergency Services Building

2703 Pacific Ave SE  
Olympia, WA 98502

#### Facility Code

Facility Size - Gross S.F.	17,997
Year Of Original Construction	1977
Facility Use Type	Comm Center
Construction Type	Medium
# of Floors	1
Energy Source	Gas
Year Of Last Renovation	1997
Historic Register	No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	3.1			
Facility Condition Index (FCI)	0.16			
Current Replacement Value (CRV)	\$13,217,000	Predicted Renewal Budget (6 yrs)	\$2,339,000	\$2,168,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$8,033,000	\$6,870,000
		Observed Deficiencies (6 yrs)	\$377,000	\$352,000
		Observed Deficiencies (ALL)	\$377,000	\$352,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Building originally used by other agency and remodeled in 1997 to house Thurston County dispatch center. Structure in fair condition, remodeled exterior and interior in fair condition. The facility HVAC system is old and at end of life. The level of redundancy and protection of the data center is below current standards for cooling, fire protection and detection and electrical surge suppression. Otherwise the building systems, while older appear very functional. Overall systems are in fair condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			3.0			
Foundations						
A1010 Standard Foundations	1977	1997	3		JWB 05/04/16	Standard concrete foundations, fair condition.
A1030 Slab On Grade	1977	1997	3		JWB 05/04/16	Standard concrete slab on grade in fair condition.

## Facility Summary

Thurston County

Thurston County Emergency Services

Thurston County Emergency Services Building

2703 Pacific Ave SE  
Olympia, WA 98502

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
A Substructure				3.0			
Foundations							
A1030	Slab On Grade						
Basements							
A2020	Basement Walls						
		1977	1997	3	JWB	05/04/16	Cast in place concrete walls in fair condition.
B Shell				3.1			
Superstructure							
B1010	Floor Construction						
		1977	1997	3	JWB	05/04/16	Wood framed floor area above basement in fair condition, wood framed raised floor area above central portion of building in fair condition.
B1020	Roof Construction						
		1977	1997	3	JWB	05/04/16	Wood car decking on wood post and beam in fair condition.
Exterior Closure							
B2010	Exterior Walls						
		1977	1997	3	JWB	05/04/16	Brick veneer and metal siding in fair condition.
B2020	Exterior Windows						
		1977	1997	3	JWB	05/04/16	South side of building with retrofit dual glazing in original aluminum frames in fair condition, some windows newer dual glazed in newer frames, glass block at west end of building, all in fair condition.
B2030	Exterior Doors						
		1977	1997	2	JWB	05/04/16	Aluminum storefront at main entry, some HM doors in HM frames with ADA hardware in good condition.
Roofing							
B3010	Roof Coverings						
		1977	1997	4	JWB	05/04/16	Single ply membrane, bitumen roofing in fair condition but with less than five years remaining life.

## Facility Summary

Thurston County

Thurston County Emergency Services

Thurston County Emergency Services Building

2703 Pacific Ave SE  
Olympia, WA 98502

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
C Interiors				3.2			
Interior Construction							
C1010	Partitions	1977	1997	3	JWB	05/04/16	Framed walls, operable partition in meeting room, in fair condition.
C1020	Interior Doors	1977	1997	3	JWB	05/04/16	Wood doors in HM frames with ADA hardware in fair condition. Some HM doors in HM frames with acoustic cores in good condition.
C1030	Fittings	1977	1997	3	JWB	05/04/16	Plastic laminate restroom partitions and metal lockers in fair condition.
Staircases							
C2010	Stair Construction	1977	1997	3	JWB	05/04/16	Wood framed stairs in fair condition.
C2020	Stair Finishes	1977	1997	2	JWB	05/04/16	Rubber stair treads in good condition.
Interior Finishes							
C3010	Wall Finishes	1977	1997	3	JWB	05/04/16	Wall paint, acoustic wall fabric in call center in fair condition, plastic laminate in restrooms in poor condition, <\$5,000 to replace.
C3020	Floor Finishes	1977	1997	4	JWB	05/04/16	Carpet in offices and Medic One area in poor condition, VCT in storage areas in fair condition, carpet in call center in good condition.
C3030	Ceiling Finishes	1977	1997	3	JWB	05/04/16	Mostly 2x4 ACT, some gypsum in fair condition.
D Services				3.0			
Vertical Transportation							
D1010	Elevators and Lifts	1977	1997	3	JDH	05/04/16	Hydraulic elevator is functional and in fair condition.



## Facility Summary

Thurston County

Thurston County Emergency Services

Thurston County Emergency Services Building

2703 Pacific Ave SE  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			3.0			
Vertical Transportation						
D1010 Elevators and Lifts						
Plumbing						
D2010 Plumbing Fixtures	1977	1997	3	JDH	05/04/16	Manual operation, floor mount flush valve toilets, standard water flow. System condition is fair.
D2020 Domestic Water Distribution	1977	1997	3	JDH	05/04/16	Hot water tanks in crawl space, small electric units with 20 gallon tank for kitchen. System condition is fair.
D2030 Sanitary Waste	1977	1997	3	JDH	05/04/16	Waste system is operational and in fair condition.
D2040 Rain Water Drainage	1977	1997	3	JDH	05/04/16	Building down spout system is in fair condition.
HVAC						
D3010 Energy Supply	1977	1997	3	JDH	05/04/16	Electricity is the energy supply for the building and is in fair condition.
D3020 Heat Generating Systems	1977	1997	3	JDH	05/04/16	Split system heat pumps provide heat for the building and they are in fair condition.
D3030 Cooling Generating Systems	1977	1997	3	JDH	05/04/16	Split system heat pumps provide cooling to the building. The R-22 units have underground line and do not have accumulators and remote dryers or site glasses installed. Units require frequent maintenance and are approaching end of life.
D3040 HVAC Distribution Systems	1977	1997	3	JDH	05/04/16	Constant volume fan coil units distribute the conditioned air to the facility. VVT boxes and bypass dampers provide zone control. VVT box dampers have been replaced with floating point control actuators. Fan coil units are old, requiring high maintenance and approaching end of life. System is in fair condition.

## Facility Summary

Thurston County

Thurston County Emergency Services

Thurston County Emergency Services Building

2703 Pacific Ave SE  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			3.0			
<b>HVAC</b>						
D3040 HVAC Distribution Systems						
D3050 Terminal and Package Units	1977	1997	3	JDH	05/04/16	Diffusers in data room can be served from different cooling units depending on the positioning of manual dampers. This function should be automated with motorized dampers. Dampers should be rated for the unit static pressure. System is in fair condition.
D3060 Controls and Instrumentation	1977	1997	3	JDH	05/04/16	DDC based system with control panel that has local over rides switches. System is LON based and web connected. System is in fair condition.
D3090 Other HVAC Systems and Equipment	1977	1997	3	JDH	05/04/16	Central vacuum system for carpet care of 911 call center is in fair condition.
<b>Fire Protection</b>						
D4010 Fire Protection Sprinkler Systems	1977	1997	3	JDH	05/04/16	NFPA 13 sprinkler system is operational and in fair condition.
D4030 Fire Protection Specialties	1977	1997	3	JDH	05/04/16	Riser system has wet system, dry system and preaction system for data room. System is in fair condition.
<b>Electrical</b>						
D5010 Electrical Service and Distribution	1977	1997	3	JDH	05/04/16	120/208 volt, three-phase four-wire, 1600 amp electrical service with six disconnects. 1000 amp generator powered switchboard and ATS. No surge suppression is installed. System is in fair condition.
D5020 Lighting and Branch Wiring	1977	1997	3	JDH	05/04/16	Fluorescent lighting is T-8. Dimmable indirect system is installed in call center. Batteries in all egress fixtures need replaced cost is <\$5,000. System is in fair condition.

## Facility Summary

Thurston County

Thurston County Emergency Services

Thurston County Emergency Services Building

2703 Pacific Ave SE  
Olympia, WA 98502

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				3.0			
Electrical							
D5032	Low Voltage Communication	1977	1997	3	JDH	05/04/16	Building communications systems are operational and in fair condition.
D5037	Low Voltage Fire Alarm	1977	1997	3	JDH	05/04/16	Low voltage addressable fire alarm system has FACP and graphic in the building lobby with radio transmitter in the attic area. System has been upgraded but date not available. System is in fair condition.
D5038	Low Voltage Security	1977	1997	3	JDH	05/04/16	IP camera system with analog output to alarm monitors, newer camera system. Access control, card key system for doors is approaching end of life. System condition is fair.
D5039	Low Voltage Data	1977	1997	3	JDH	05/04/16	Cat 5 structured cable system partial upgrade to fiber in some areas. System is in fair condition.
D5090	Other Electrical Systems	1977	1997	3	JDH	05/04/16	48V DC power system installed for tel/con equipment. System is in fair condition.
E Equipment and Furnishings				3.0			
Furnishings							
E2010	Fixed Furnishings	1977	1997	3	JWB	05/04/16	Modern casework in fair condition, window blinds in fair condition.

## Facility Summary

Thurston County

Thurston County Emergency Services

Thurston County Emergency Services Infrastructure

2703 Pacific Ave SE  
Olympia, WA 98502

## Facility Condition Summary

Site in fair condition, parking areas fair but showing some signs of wear. Large two tower antenna array in fair condition. The site utilities are all connected to city systems. Power and communications are routed underground. The site lighting standards are beginning to have some rust. The video surveillance system is separate from the building interior system. Overall the systems are in fair condition.

## Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>							
<b>Site Improvements</b>							
<b>G2010</b>	<b>Roadways</b>	1977	1997	2	JWB	05/04/16	AC paved drive with concrete curb in good condition.
<b>G2020</b>	<b>Parking Lots</b>	1977	1997	3	JWB	05/04/16	AC paved at north of building and separate lot at south of building, both in fair condition.
<b>G2030</b>	<b>Pedestrian Paving</b>	1977	1997	3	JWB	05/04/16	Concrete walks, concrete steps with metal railings in fair condition.
<b>G2040</b>	<b>Site Development</b>	1977	1997	3	JWB	05/04/16	Steel stairs at west end of building in fair condition, site fencing in fair condition, cast in place retaining wall at west side of building in fair condition. Large antenna array in fair condition.
<b>G2050</b>	<b>Landscaping</b>	1977	1997	2	JWB	05/04/16	Trees, shrubs and some irrigated lawn in good condition.
<b>Site Civil / Mechanical Utilities</b>							
<b>G3010</b>	<b>Water Supply</b>	1977	1997	2	JDH	05/04/16	Connected to the city water supply and the system is in good condition.
<b>G3020</b>	<b>Sanitary Sewer</b>	1977	1997	2	JDH	05/04/16	Connected to city waste system, operational and in good condition.

## Facility Summary

Thurston County

Thurston County Emergency Services

Thurston County Emergency Services Infrastructure

2703 Pacific Ave SE  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3030 Storm Sewer</b>	1977	1997	3		JDH 05/04/16	Storm sewer system is operational and in fair condition.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	1977	1997	3		JDH 05/04/16	300 kVA PSE transformer services building with underground feed. Separate 45 KVA transformer in back of building is partially pushed off pad and needs immediate review. Cost of correct <\$5,000
<b>G4020 Site Lighting</b>	1977	1997	3		JDH 05/04/16	Shoe box style HID site lights are pole mounted. Building mounted site lights have yellowed lenses. Condition of system is fair.
<b>G4030 Site Communications and Security</b>	1977	1997	3		JDH 05/04/16	Gates with card key and cameras with fenced perimeter. Communications tower and equipment shelter on back of site. Multiple antenna cables in utility trench from tower to building. Condition is fair.
<b>Other Site Construction</b>						
<b>G9090 Other Site Systems</b>	1977	1997	3		JDH 05/04/16	250 kW Generator and separate 2,000 insulated fuel tank are located on site and serve the building. System condition is fair.

Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County  
Site: Thurston County Emergency Services

Facility	System		Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Thurston County Emergency Services Building	Roofing		\$101,250	\$30,375	\$32,906	\$82,266	\$246,797	\$228,523
	Interior Finishes		\$53,600	\$16,080	\$17,420	\$43,550	\$130,650	\$123,325
		Facility Total	\$154,850	\$46,455	\$50,326	\$125,816	\$377,447	\$351,848
		Site Total	\$154,850	\$46,455	\$50,326	\$125,816	\$377,447	\$351,848

Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$154,850
Site: Thurston County Emergency Services	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$351,850

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Emergency Services Building				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$101,250
System:	Roofing				Total System Deficiency Repair Cost (Marked Up):				\$246,797
Roof Coverings									
Roofing	3	4	2016		13,500	\$7.50	SF	\$101,250	\$246,797
Roofing appears to have less than five years remaining life.				Remove roofing and replace with composition shingle roofing.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$154,850
Site: Thurston County Emergency Services	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$351,850

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Emergency Services Building				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$53,600
System:	Interior Finishes				Total System Deficiency Repair Cost (Marked Up):				\$130,650
Floor Finishes									
Carpet	4	3	2016		8,000	\$6.70	SF	\$53,600	\$130,650

Carpet on main level corridors and east end of building worn, stained.

Remove carpet and replace with new carpet.





## Facility Summary

### Thurston County

### Thurston County Family Justice Center

### Thurston County Family Justice Center

2801 32nd Ave  
Tumwater, WA 98502

#### Facility Code

Facility Size - Gross S.F.	83,225
Year Of Original Construction	1998
Facility Use Type	Detention Center - Low rise
Construction Type	Medium
# of Floors	2
Energy Source	Gas
Year Of Last Renovation	2005
Historic Register	No



Weighted Avg Condition Score	2.5	Total Project Cost	Total Project Cost - Present Value
Facility Condition Index (FCI)	0.10		
Current Replacement Value (CRV)	\$46,033,000	Predicted Renewal Budget (6 yrs)	\$219,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$19,382,000
		Observed Deficiencies (6 yrs)	\$589,000
		Observed Deficiencies (ALL)	\$589,000
		Opportunity Total Project Cost	N/A

## Facility Condition Summary

Building structure in good condition with exterior wall and roofing improvements made in past seven years. Interior subsystems in good to fair condition for both courthouse areas and detentions areas. The majority of the building system are original from 1998. Several of these systems are approaching end of life. The rooftop AC units were upgraded by replacing gas furnaces with hydronic heating coils and set up with variable frequency drives to modulate air flow for demand. The cooling for these rooftop units are still the original R-22 air cool compressors in the packaged units. Overall the building systems are in fair condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	1998	1998	2		JWB 05/03/16	Concrete system in good condition.
A1030 Slab On Grade						

## Facility Summary

Thurston County

Thurston County Family Justice Center

Thurston County Family Justice Center

2801 32nd Ave  
Tumwater, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
A Substructure					2.0			
Foundations								
A1030	Slab On Grade		1998	1998	2		JWB 05/03/16	Concrete slab on grade in good condition, some differential settlement observed at C/D Housing Unit near classroom, additional repair needed, <\$5,000.
B Shell					2.4			
Superstructure								
B1010	Floor Construction		1998	1998	2		JWB 05/03/16	Concrete slab on metal deck on steel beam and steel columns in good condition.
B1020	Roof Construction		1998	1998	2		JWB 05/03/16	Insulated metal deck on steel beams and columns in good condition.
Exterior Closure								
B2010	Exterior Walls		1998	2005	3		JWB 05/03/16	Some CMU at detention areas with peeling paint in poor condition, Courthouse areas have original EFIS stucco with metal siding installed over the top of it in 2005, metal wall siding in good condition.
B2020	Exterior Windows		1998	2005	2		JWB 05/03/16	Dual glazed aluminum windows retrofitted in 2005 in good condition. Detention areas have laminated security glazing in steel frames in good condition.
B2030	Exterior Doors		1998	1998	2		JWB 05/03/16	HM doors in HM frames with ADA hardware, aluminum storefront at main entry, steel doors in steel frames at detention areas, all in good condition.
Roofing								
B3010	Roof Coverings		1998	2005	3		JWB 05/03/16	Upper roof at Courthouse portion, Thermoplastic polyolefin (TPO) single-ply roofing membrane in fair condition. Detention lower roof with newer

## Facility Summary

Thurston County

Thurston County Family Justice Center

Thurston County Family Justice Center

2801 32nd Ave  
Tumwater, WA 98502

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
B Shell				2.4			
Roofing							
B3010	Roof Coverings						single play modified bitumen roofing in good condition.
B3020	Roof Openings	1998	1998	3	JWB	05/03/16	Dual glazed skylights in good condition.
B3030	Projections	1998	1998	2	JWB	05/03/16	Metal mechanical screens at upper roof in good condition with metal siding, loading dock metal framed canopy in fair condition.
C Interiors				2.3			
Interior Construction							
C1010	Partitions	1998	1998	2	JWB	05/03/16	Framed walls and CMU in good condition.
C1020	Interior Doors	1998	1998	2	JWB	05/03/16	Courthouse with wood doors in HM frames with ADA hardware. Detention areas with steel doors in steel frames, service doors HM in HM frames, all in good condition.
C1030	Fittings	1998	1998	2	JWB	05/03/16	Metal lockers, restrooms include plastic laminate partitions and modern accessories in good condition.
Staircases							
C2010	Stair Construction	1998	1998	2	JWB	05/03/16	Steel stairs with concrete pan infill in good condition.
C2020	Stair Finishes	1998	1998	3	JWB	05/03/16	Rubber treads in fair condition.
Interior Finishes							
C3010	Wall Finishes	1998	1998	3	JWB	05/03/16	Wall paint, acoustic panels on courtrooms, full

## Facility Summary

Thurston County

Thurston County Family Justice Center

Thurston County Family Justice Center

2801 32nd Ave  
Tumwater, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>C Interiors</b>			<b>2.3</b>			
<b>Interior Finishes</b>						
<b>C3010 Wall Finishes</b>						height ceramic tile in public restrooms, all in fair condition.
<b>C3020 Floor Finishes</b>	1998	1998	3	JWB	05/03/16	Carpet in courthouse and office areas, some sheet vinyl in wet areas, combination of epoxy floors and sealed concrete in detention areas. Carpet is showing wear and age, other floors in good condition.
<b>C3030 Ceiling Finishes</b>	1998	1998	3	JWB	05/03/16	Courthouse areas includes a mix of 2x2 and 2x4 ACT, detention areas have gypsum and 12x12 ceiling tiles, all in fair condition.
<b>D Services</b>			<b>2.7</b>			
<b>Vertical Transportation</b>						
<b>D1010 Elevators and Lifts</b>	1998	1998	3	JDH	05/03/16	Hydraulic elevators are operational and in fair condition.
<b>Plumbing</b>						
<b>D2010 Plumbing Fixtures</b>	1998	1998	3	JDH	05/03/16	Standard flow, manual operation, floor mounted toilets w/ flush valves. System is operational and in fair condition.
<b>D2020 Domestic Water Distribution</b>	1998	1998	3	JDH	05/03/16	Copper pipe water distribution system with 4" RPBP at service point. Combined water heater and storage tank. Dual pressure reducing valves: 1" and 4" piped in parallel to mitigate water pressure fluctuation caused by nearby bottling plant. Bottle plant modified their water flow valve speed and build pressure problem is resolved. Overall system is in fair condition.
<b>D2030 Sanitary Waste</b>	1998	1998	3	JDH	05/03/16	Operational waste system, some floor drains in detention yard are plugged. Cost to fix <\$5,000. Overall condition of system is fair.

## Facility Summary

Thurston County

Thurston County Family Justice Center

Thurston County Family Justice Center

2801 32nd Ave  
Tumwater, WA 98502

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.7			
Plumbing							
D2030	Sanitary Waste						
D2040	Rain Water Drainage	1998	1998	3		JDH 05/03/16	Roof drain system with suppers high on wall for overflow. Overall system is in fair condition.
HVAC							
D3010	Energy Supply	1998	1998	3		JDH 05/03/16	Gas and electricity supply energy to the building and are in fair condition.
D3020	Heat Generating Systems	1998	2012	3		JDH 05/03/16	Three standard efficiency boilers are connected to a common manifold (two from 1998 and one from 2012). The older two boilers are approaching end of life. Hydronic heating water supplies heating coils in roof top units (units retrofitted and original gas furnace sections replaced with coils). Heat recovery hydronic coils also utilized. System is in fair condition.
D3030	Cooling Generating Systems	1998	1998	3		JDH 05/03/16	Dx cooling in rooftop units is in fair condition.
D3040	HVAC Distribution Systems	1998	1998	3		JDH 05/03/16	Ducted air via variable flow fans in rooftop units to squeeze boxes (VVT). Low wall return in day room needs cleaned out but access is difficult. System is in fair condition.
D3050	Terminal and Package Units	1998	1998	2		JDH 05/03/16	Cabinet and ceiling heaters located in entry areas. These units are in good condition.
D3060	Controls and Instrumentation	1998	2012	2		JDH 05/03/16	AHU controllers are new with 2012 upgrade. Zone boxes have original controllers. Condition of BACNET control system is good.
D3090	Other HVAC Systems and Equipment	1998	1998	3		JDH 05/03/16	HVAC pressurization/exhaust system for detention area requested by Code Official in 2012. Condition of system is fair.

## Facility Summary

Thurston County

Thurston County Family Justice Center

Thurston County Family Justice Center

2801 32nd Ave  
Tumwater, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.7			
HVAC						
D3090 Other HVAC Systems and Equipment						
Fire Protection						
D4010 Fire Protection Sprinkler Systems	1998	1998	3	JDH	05/03/16	NFPA 13 Sprinkler system with recessed heads in some areas is in fair condition.
D4030 Fire Protection Specialties	1998	1998	3	JDH	05/03/16	Wet and dry zones for building. The compressor appears to be having operational issues, cost to replace <\$5,000. System is in fair condition.
Electrical						
D5010 Electrical Service and Distribution	1998	1998	3	JDH	05/03/16	480 /277 volt, three-phase four-wire , 1600 amp electrical service with six service disconnect switches. No surge suppression is installed. The system is in fair condition.
D5020 Lighting and Branch Wiring	1998	1998	3	JDH	05/03/16	T-8 and compact fluorescent lighting with low voltage relay cabinet controls integrated with the building control system provide the majority of the lighting system. The system is in fair condition.
D5032 Low Voltage Communication	1998	1998	3	JDH	05/03/16	Telephone system, door intercom, and control system is operational and in fair condition.
D5037 Low Voltage Fire Alarm	1998	1998	3	JDH	05/03/16	Low voltage addressable fire alarm system with smoke detection and pull stations. Smoke detector replacements are difficult to procure for this particular fire alarm system. Overall the system is in fair condition.
D5038 Low Voltage Security	1998	1998	3	JDH	05/03/16	Extensive door control and security system. Overall the system is in fair condition.
D5039 Low Voltage Data	1998	1998	3	JDH	05/03/16	Cat 5 structured cable system is installed from

## Facility Summary

Thurston County

Thurston County Family Justice Center

Thurston County Family Justice Center

2801 32nd Ave  
Tumwater, WA 98502

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.7			
Electrical							
D5039	Low Voltage Data						station outlets to modular patch panels in equipment racks. Fiber optic backbone interconnects the switches. Overall the system is in fair condition.
D5090	Other Electrical Systems		1998	1998	2	JDH 05/03/16	Courtroom video system and sound system is in good condition. Video switch is newer, replaced in 2013. All analog system. Exterior video is separate. UPS system 130 kVA output capacity running at 25% load is at end of expected life and should be replaced.
E Equipment and Furnishings				3.0			
Equipment							
E1010	Commercial Equipment		1998	1998	3	JWB 05/03/16	Two each commercial grade clothes washers and dryers, reach in cooler, various appliances all in fair condition.
Furnishings							
E2010	Fixed Furnishings		1998	1998	3	JWB 05/03/16	Wood pew style seating in courtrooms, modern casework, window blinds at offices all in fair condition.
F Special Construction				2.1			
Special Construction							
F1020	Integrated Construction		1998	1998	3	JWB 05/03/16	Wood judge's and clerk's work areas and bench in courtrooms, raised floor system at control room, steel detention tables, high density storage, all in fair condition.
F1050	Special Controls and Instrumentation		1998	1998	2	JWB 05/03/16	Detention security door controls systems in good condition.

## Facility Summary

Thurston County

Thurston County Family Justice Center

Thurston County Family Justice Center Infra

2801 32nd Ave  
Tumwater, WA 98502

## Facility Condition Summary

Large parking areas in fair condition, perimeter roadway in fair condition, landscaping in fair condition. The site utilities are all connected to city systems. Power and communications are routed underground. The site lighting standards are beginning to have some rust. The video surveillance system is separate from the building interior system. Overall the systems are in fair condition.

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2010 Roadways</b>	1998	1998	3	JWB	05/03/16	AC paved roadways with concrete curbs leading parking, paved perimeter road, all in fair condition.
<b>G2020 Parking Lots</b>	1998	1998	3	JWB	05/03/16	AC paved parking with concrete curbs in fair condition, some cracks, alligating. Parking striping faded, worn, needs repainting.
<b>G2030 Pedestrian Paving</b>	1998	1998	3	JWB	05/03/16	Concrete walks, ramps, stairs with metal handrails in fair condition.
<b>G2040 Site Development</b>	1998	1998	3	JWB	05/03/16	CMU screen walls, security chain link fencing with motorized gates in fair condition.
<b>G2050 Landscaping</b>	1998	1998	3	JWB	05/03/16	Irrigated lawn, trees and shrubs in fair condition. Irrigation reported in working condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	1998	1998	3	JDH	05/03/16	City utility water supply, operational and in fair condition.
<b>G3020 Sanitary Sewer</b>	1998	1998	3	JDH	05/04/16	City sewer system connection, operational and in fair condition.



## Facility Summary

Thurston County

Thurston County Family Justice Center

Thurston County Family Justice Center Infra

2801 32nd Ave  
Tumwater, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3030 Storm Sewer</b>	1998	1998	3		JDH 05/05/16	Storm drainage system connects into city drainage system, it is operational and in fair condition.
<b>G3060 Fuel Distribution</b>	1998	1998	3		JDH 05/08/16	Natural gas piping system with earthquake valve. Meter is rated at 7,000 CFH, distribution to building is at 2 psi. The system is in fair condition.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	1998	1998	3		JDH 05/09/16	PSE pad mount 500 kVA transformer with underground feed and underground power to the building. The system is in fair condition.
<b>G4020 Site Lighting</b>	1998	1998	3		JDH 05/10/16	Site lighting is low glare. Lighting standards (poles) have rust and corrosion. Overall the system is in fair condition.
<b>G4030 Site Communications and Security</b>	1998	2010	3		JDH 05/11/16	There is a remote fire alarm annunciator panel grouped with the PIV and pumper connection for the fire protection system on the site. CCTV camera system is new in 2010 it is operational and separate from the building system. Overall systems are in fair condition.

## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Thurston County Family Justice Center

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Thurston County Family Justice Center	Exterior Closure	\$40,625	\$12,188	\$13,203	\$33,008	\$99,023	\$95,287
	Interior Finishes	\$201,000	\$60,300	\$65,325	\$163,313	\$489,938	\$445,022
	<b>Facility Total</b>	<b>\$241,625</b>	<b>\$72,488</b>	<b>\$78,528</b>	<b>\$196,320</b>	<b>\$588,961</b>	<b>\$540,308</b>
Thurston County Family Justice Center Infra	Site Improvements	\$8,000	\$2,400	\$2,600	\$6,500	\$19,500	\$19,130
	<b>Facility Total</b>	<b>\$8,000</b>	<b>\$2,400</b>	<b>\$2,600</b>	<b>\$6,500</b>	<b>\$19,500</b>	<b>\$19,130</b>
	<b>Site Total</b>	<b>\$249,625</b>	<b>\$74,888</b>	<b>\$81,128</b>	<b>\$202,820</b>	<b>\$608,461</b>	<b>\$559,438</b>

Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$249,625
Site: Thurston County Family Justice Center	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$559,437

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Family Justice Center				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$40,625
System:	Exterior Closure				Total System Deficiency Repair Cost (Marked Up):				\$99,023
Exterior Walls									
CMU Paint	4	2	2016		12,500	\$3.25	SF	\$40,625	\$99,023

CMU paint bubbling, peeling. Remove last coat of paint, prep and repaint CMU walls.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Family Justice Center

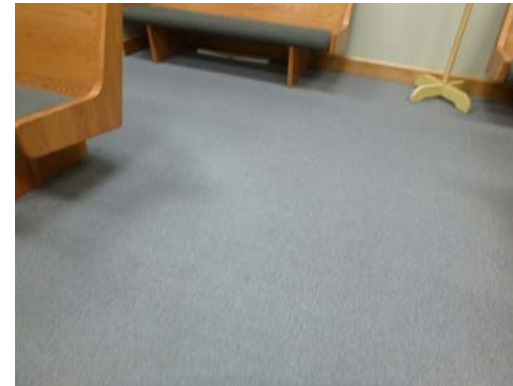
Total Observed Deficiency Repair Direct Cost : \$249,625

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$559,437

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Family Justice Center					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$201,000
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$489,938
Floor Finishes									
Carpet	4	5	2016		30,000	\$6.70	SF	\$201,000	\$489,938

Carpet in offices and courtrooms is showing signs of wear and age.

Remove and replace with new carpet.



## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Family Justice Center

Total Observed Deficiency Repair Direct Cost : \$249,625

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$559,437

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Family Justice Center Infra					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$8,000
System: Site Improvements					Total System Deficiency Repair Cost (Marked Up):				\$19,500
Parking Lots									
Parking striping	4	1	2016		1	\$8,000.00	LS	\$8,000	\$19,500

Parking area striping worn and faded.

Prep and repaint parking lot striping.



## Facility Summary

Thurston County  
Thurston County Health  
Thurston County Health Building

412 Lilly Rd NE  
Olympia, WA 98506

### Facility Code

Facility Size - Gross S.F. 24,226  
Year Of Original Construction 2001  
Facility Use Type Health Clinic  
Construction Type Medium  
# of Floors 2  
Energy Source Gas  
Year Of Last Renovation 2001  
Historic Register No



Weighted Avg Condition Score	2.3	Total Project Cost	Total Project Cost - Present Value
Facility Condition Index (FCI)	0.08		
Current Replacement Value (CRV)	\$10,073,000	Predicted Renewal Budget (6 yrs)	\$320,000 \$309,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$4,012,000 \$3,282,000
		Observed Deficiencies (6 yrs)	\$579,000 \$551,000
		Observed Deficiencies (ALL)	\$579,000 \$551,000
		Opportunity Total Project Cost	N/A

## Facility Condition Summary

Building structure in good condition, exterior windows, doors and roofing in good condition, interior doors and finishes in good condition except carpet showing wear and tear. Three split system HVAC units with indirect gas heat supply the building via VAV boxes. Plumbing fixtures are all original manual operation, standard flow. Building lighting is predominately direct/indirect low glare T-8 fixtures. Overall the building MEP systems are in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	2001	2001	2	JWB	04/20/16	Concrete in good condition.
A1030 Slab On Grade	2001	2001	2	JWB	04/20/16	Concrete in good condition.

## Facility Summary

Thurston County  
Thurston County Health  
Thurston County Health Building

412 Lilly Rd NE  
Olympia, WA 98506

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
A Substructure			2.0					
Foundations								
A1030	Slab On Grade							
B Shell			2.0					
Superstructure								
B1010	Floor Construction		2001	2001	2	JWB	04/20/16	Concrete deck on concrete columns in good condition.
B1020	Roof Construction		2001	2001	2	JWB	04/20/16	Wood joists on concrete columns in good condition.
Exterior Closure								
B2010	Exterior Walls		2001	2001	2	JWB	04/20/16	Brick veneer and high wall metal panels in good condition.
B2020	Exterior Windows		2001	2001	2	JWB	04/20/16	Aluminum frames with dual glazing in good condition.
B2030	Exterior Doors		2001	2001	2	JWB	04/20/16	Aluminum storefront and some HM doors and HM frames with ADA hardware all in good condition.
Roofing								
B3010	Roof Coverings		2001	2001	2	JWB	04/20/16	Metal roof system in good condition.
B3020	Roof Openings		2001	2001	2	JWB	04/20/16	Glass pane skylights in good condition.
C Interiors			2.0					
Interior Construction								
C1010	Partitions		2001	2001	2	JWB	04/20/16	Metal framed in good condition, operable

## Facility Summary

Thurston County  
Thurston County Health  
Thurston County Health Building

412 Lilly Rd NE  
Olympia, WA 98506

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
C Interiors				2.0			
Interior Construction							
C1010	Partitions						partitions in meeting room in good condition.
C1020	Interior Doors	2001	2001	2	JWB	04/20/16	Wood in HM frames, HM doors in HM frames at service areas all with ADA hardware, all in good condition.
C1030	Fittings	2001	2001	2	JWB	04/20/16	Plastic laminate restroom partitions in good condition.
Staircases							
C2010	Stair Construction	2001	2001	2	JWB	04/20/16	Wood framed stairs in good condition.
C2020	Stair Finishes	2001	2001	2	JWB	04/20/16	Carpet on stairs in good condition.
Interior Finishes							
C3010	Wall Finishes	2001	2001	2	JWB	04/20/16	Wall paint in good condition.
C3020	Floor Finishes	2001	2001	2	JWB	04/20/16	Carpet at 2/3 of 1st floor and 2nd floor in poor condition, show signs of wear and tear. Other carpet in newer condition. VCT in break rooms and sheet vinyl in restrooms in good condition.
C3030	Ceiling Finishes	2001	2001	2	JWB	04/20/16	2x4 ACT in good condition.
D Services				2.7			
Plumbing							
D2010	Plumbing Fixtures	2001	2001	2	JDH	04/20/16	Standard flow, manual operation, floor mounted toilets w/ flush valves. System is operational and in good condition



## Facility Summary

Thurston County  
Thurston County Health  
Thurston County Health Building

412 Lilly Rd NE  
Olympia, WA 98506

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.7			
Plumbing							
D2020 Domestic Water Distribution		2001	2001	2		JDH 04/20/16	Overall piping in good shape. Hot water tank outside jacket is failing, to replace < 5,000 to repair.
D2030 Sanitary Waste		2001	2001	2		JDH 04/20/16	Sanitary waste system is operational and in good condition.
D2040 Rain Water Drainage		2001	2001	3		JDH 04/20/16	Roof gutter on south side of building is not draining. Overall gutter system is in fair condition.
HVAC							
D3010 Energy Supply		2001	2001	2		JDH 04/20/16	Natural gas and electric (Dx) cooling energy supply systems are in good condition.
D3020 Heat Generating Systems		2001	2001	3		JDH 04/20/16	Gas indirect heat at each of the three air handling units is in fair condition.
D3030 Cooling Generating Systems		2001	2001	3		JDH 04/20/16	Dx cooling provided by three outdoor condensing units. Unit 101 replaced 2011, coils replaced in unit 201, in 2013. Original units R-22 refrigerant, unit 101 R -410A. Cooling system is in fair condition.
D3040 HVAC Distribution Systems		2001	2001	2		JDH 04/20/16	Variable air volume systems with return plenum open to mechanical room are in good condition.
D3050 Terminal and Package Units		2001	2001	2		JDH 04/20/16	Variable air volume terminal boxes throughout facility are in good condition.
D3060 Controls and Instrumentation		2001	2001	4		JDH 04/20/16	Gateway frame supporting local communication link to remote monitor system is present. System is in good condition.

## Facility Summary

Thurston County  
Thurston County Health  
Thurston County Health Building

412 Lilly Rd NE  
Olympia, WA 98506

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.7			
<b>Fire Protection</b>						
<b>D4010 Fire Protection Sprinkler Systems</b>	2001	2001	3		JDH 04/20/16	NFPA 13 fire protection system is operational and in fair condition.
<b>D4030 Fire Protection Specialties</b>	2001	2001	3		JDH 04/20/16	Riser system and PIV are operational and in fair condition.
<b>Electrical</b>						
<b>D5010 Electrical Service and Distribution</b>	2001	2001	3		JDH 04/20/16	Service size 1600 A, 120/208 V three-phase four-wire main circuit breaker. Second floor electrical room clearance for electrical panels does not meet National Electrical Code. Other wise the system is in fair condition.
<b>D5020 Lighting and Branch Wiring</b>	2001	2001	3		JDH 04/20/16	Lighting is typically direct/indirect T-8 fluorescent low glare fixtures. Lighting and branch wiring are in fair condition.
<b>D5032 Low Voltage Communication</b>	2001	2001	3		JDH 04/20/16	Telephone and communication systems are operational and in fair condition.
<b>D5037 Low Voltage Fire Alarm</b>	2001	2001	3		JDH 04/20/16	Low voltage addressable system fire alarm system is in fair condition.
<b>D5038 Low Voltage Security</b>	2001	2001	3		JDH 04/20/16	Building security, video surveillance and access control systems are operational and in fair condition.
<b>D5039 Low Voltage Data</b>	2001	2001	3		JDH 04/20/16	The structured cable system including data outlets, station cables and rack mounted modular patch panels are in fair condition.
<b>D5090 Other Electrical Systems</b>	2001	2001	3		JDH 04/20/16	Conference room sound system is operational an in fair condition.

## Facility Summary

Thurston County  
Thurston County Health  
Thurston County Health Building

412 Lilly Rd NE  
Olympia, WA 98506

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
E Equipment and Furnishings				2.5			
Equipment							
E1010	Commercial Equipment	2001	2001	3	JWB	04/20/16	Residential appliances in fair condition.
Furnishings							
E2010	Fixed Furnishings	2001	2001	2	JWB	04/20/16	Window blinds and casework in good condition.
F Special Construction				2.0			
Special Construction							
F1020	Integrated Construction	2001	2001	2	JWB	04/20/16	High density storage in good condition.

## Facility Summary

Thurston County  
Thurston County Health  
Thurston County Health Infrastructure

412 Lilly Rd NE  
Olympia, WA 98506

## Facility Condition Summary

Parking lot and landscaping in good condition. City utilities are provided for domestic water, fire protection, sewer, storm, natural gas, power, phone / data. Systems are in good condition. Earthquake valve is installed at gas meter.

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
G Sitework							
Site Improvements							
G2020	Parking Lots	2001	2001	2		JWB 04/20/16	AC paved parking with concrete curbs in good condition.
G2030	Pedestrian Paving	2001	2001	2		JWB 04/20/16	Concrete walks and entrance plaza in good condition.
G2050	Landscaping	2001	2001	2		JWB 04/20/16	Trees, shrubs and lawn in good condition, irrigation in good condition.
Site Civil / Mechanical Utilities							
G3010	Water Supply	2001	2001	3		JDH 04/20/16	The building domestic water supply service is operational and in fair condition.
G3020	Sanitary Sewer	2001	2001	3		JDH 04/20/16	The sanitary sewer system is operational and in fair condition.
G3030	Storm Sewer	2001	2001	3		JDH 04/20/16	Downspouts tightlined to storm drainage system. The Storm sewer system is operational and in fair condition.
G3060	Fuel Distribution	2001	2001	3		JDH 04/20/16	Natural gas, PSE serving utility. AL-1000 meter, with earthquake valve. The system is operational and in fair condition.
Site Electrical utilities							

## Facility Summary

Thurston County

Thurston County Health

Thurston County Health Infrastructure

412 Lilly Rd NE  
Olympia, WA 98506

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>G4010 Electrical Distribution</b>	2001	2001	3	JDH	04/20/16	Underground power to facility via 300 kVA pad mount transformer. Primary power is overhead at the street with underground routed south of building to transformer. The system is in fair condition.
<b>G4020 Site Lighting</b>	2001	2001	3	JDH	04/20/16	Parking lighting is shoebox type high cutoff fixtures. Building mounted security lights have yellowed lenses that need replacement. Uplighting along much of the building perimeter. Overall the site lighting system is in fair condition.
<b>Other Site Construction</b>						
<b>G9090 Other Site Systems</b>	2001	2001	3	JDH	04/20/16	Diesel generator in WP enclosure with skid mount base tank to supply emergency/backup power to the facility. The generator system is in fair condition.

Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County  
Site: Thurston County Health

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Thurston County Health Building	Interior Finishes	\$140,700	\$42,210	\$45,728	\$114,319	\$342,956	\$323,729
	HVAC	\$96,904	\$29,071	\$31,494	\$78,735	\$236,204	\$227,292
	Facility Total	\$237,604	\$71,281	\$77,221	\$193,053	\$579,160	\$551,021
	Site Total	\$237,604	\$71,281	\$77,221	\$193,053	\$579,160	\$551,021

## Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County

Site: Thurston County Health

Total Observed Deficiency Repair Direct Cost : \$237,604

Total Observed Deficiency Repair Cost (Marked Up Present Value): \$551,020

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Thurston County Health Building					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$140,700
System: Interior Finishes					Total System Deficiency Repair Cost (Marked Up):				\$342,956
Floor Finishes									
Carpet	4	3	2016		21,000	\$6.70	SF	\$140,700	\$342,956

Carpet is showing wear and tear.

Remove and replace with new carpet at 2nd floor and 2/3 of 1st floor..



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$237,604
Site: Thurston County Health	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$551,020

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	Thurston County Health Building				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$96,904
System:	HVAC				Total System Deficiency Repair Cost (Marked Up):				\$236,204
Controls and Instrumentation									
HVAC controls	4	2	2016		24,226	\$4.00	SF	\$96,904	\$236,204

Obsolete HVAC controls with parts no longer available and no remote monitoring or control.

Install new DDC control system with remote monitoring and control capability per County standard (Delta Controls).





## Facility Summary

**Thurston County**  
**Tilley Maintenance Shop Site**  
**Tilley Shop A**

**9605 Tilley Rd SW**  
**Olympia, WA 98512**

Facility Code  
 Facility Size - Gross S.F. 22,695  
 Year Of Original Construction 1984  
 Facility Use Type Maintenance Shop  
 Construction Type Medium  
 # of Floors 2  
 Energy Source Gas  
 Year Of Last Renovation 2011  
 Historic Register No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	2.4			
Facility Condition Index (FCI)	0.08			
Current Replacement Value (CRV)	\$8,150,000	Predicted Renewal Budget (6 yrs)	\$16,000	\$15,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$2,751,000	\$2,110,000
		Observed Deficiencies (6 yrs)		
		Observed Deficiencies (ALL)		
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Original 1984 maintenance shop added onto with two story newer structure in 2011, both structures in good condition. Exteriors and interior systems in good to fair condition. A combination of shop systems for the shop area and office type systems for the office area. Office area systems all new in 2011 addition. The 2011 systems are typically in good condition and the older shop area systems vary from good to fair depending on the system.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
<b>Foundations</b>						
A1010 Standard Foundations	1984	2011	2	JWB	05/05/16	Standard concrete foundation in good condition.
A1030 Slab On Grade	1984	2011	2	JWB	05/05/16	Standard slab on grade in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop A

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>B Shell</b>			<b>2.7</b>			
<b>Superstructure</b>						
<b>B1010 Floor Construction</b>	1984	2011	2	JWB	05/05/16	Wood framed system in good condition.
<b>B1020 Roof Construction</b>	1984	2011	3	JWB	05/05/16	Original building plywood on open web bar joists on concrete columns in fair condition, newer addition wood on wood joists in good condition.
<b>Exterior Closure</b>						
<b>B2010 Exterior Walls</b>	1984	2011	3	JWB	05/05/16	Metal siding in good condition, cast concrete wall at original shop, CMU at fire pump area, all fair condition, south wall needs paint, <\$5,000 to repaint.
<b>B2020 Exterior Windows</b>	1984	2011	2	JWB	05/05/16	Dual glazed in vinyl frames in good condition.
<b>B2030 Exterior Doors</b>	1984	2011	3	JWB	05/05/16	HM doors in HM frames with ADA hardware, coiling door at delivery, insulated aluminum sectional doors at vehicle bays, all in fair condition.
<b>Roofing</b>						
<b>B3010 Roof Coverings</b>	1984	2011	2	JWB	05/05/16	Metal roofing in good condition.
<b>B3020 Roof Openings</b>	1984	2011	2	JWB	05/05/16	Skylights in good condition.
<b>B3030 Projections</b>	1984	2011	2	JWB	05/05/16	Metal covered walk with metal railing in good condition, railing needs paint <\$5,000.
<b>C Interiors</b>			<b>2.6</b>			
<b>Interior Construction</b>						
<b>C1010 Partitions</b>	1984	2011	3	JWB	05/05/16	Framed walls in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop A

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
C Interiors				2.6			
Interior Construction							
C1010	Partitions						
C1020	Interior Doors						
	1984	2011	2		JWB	05/05/16	Mix of wood doors in HM frames and HM doors in HM frames with ADA hardware in good condition.
C1030	Fittings						
	1984	2011	2		JWB	05/05/16	Stainless steel restroom partitions in good condition, metal lockers in good condition.
Staircases							
C2010	Stair Construction						
	1984	2011	2		JWB	05/05/16	Wood framed in good condition.
C2020	Stair Finishes						
	1984	2011	2		JWB	05/05/16	Rubber treads in good condition.
Interior Finishes							
C3010	Wall Finishes						
	1984	2011	3		JWB	05/05/16	Wall paint, 1/2 height plastic laminate in restrooms, 1/2 height ceramic tile in shower areas, some FRP in places, all in fair condition.
C3020	Floor Finishes						
	1984	2011	3		JWB	05/05/16	Carpet in offices, sheet vinyl in wet areas, sealed concrete, VCT in lower floor areas, all in fair condition.
C3030	Ceiling Finishes						
	1984	2011	2		JWB	05/05/16	Some 2x4 ACT, open ceiling in shop areas, some gypsum ceilings all in good condition.
D Services				2.0			
Plumbing							
D2010	Plumbing Fixtures						
	1984	2011	2		JDH	05/05/16	Manual flush valve toilet and urinals. Shop has emergency shower and eyewash. Condition of fixtures is good.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop A

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.0			
Plumbing							
D2020 Domestic Water Distribution		1984	2011	2		JDH 05/05/16	Tank type electric water heater. RPBA valve at service entrance. Water is fed from site water storage tank (cistern). Overall condition is good.
D2030 Sanitary Waste		1984	2011	2		JDH 05/05/16	Sanitary waste system is operational and in good condition.
D2040 Rain Water Drainage		1984	2011	2		JDH 05/05/16	Gutter and downspout system tight-lined to site storm water system. System is in good
D2090 Other Plumbing Systems		1984	2011	2		JDH 05/05/16	Compressed air system in shop is in good condition.
HVAC							
D3010 Energy Supply		1984	2011	2		JDH 05/05/16	Electricity and gas supply energy to this building. The systems are in good condition.
D3020 Heat Generating Systems		1984	2011	2		JDH 05/05/16	Combination of gas fired infrared and unit heaters in shop and parts area and ground source heat pumps in office area. Systems are in good condition.
D3030 Cooling Generating Systems		1984	2011	2		JDH 05/05/16	Office area is cooled by the ground source heat pumps. These systems are in good condition.
D3040 HVAC Distribution Systems		1984	2011	2		JDH 05/05/16	Ducted ground source hydronic heat pumps provide constant volume air supply to office areas. Shop areas utilize ventilation system consisting of air intake louvers and exhaust fans. These systems are in good condition.
D3050 Terminal and Package Units		1984	2011	2		JDH 05/05/16	Infrared heaters are used in the shop area and unit heaters in the parts shop. Systems are in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop A

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.0			
<b>HVAC</b>						
D3050 Terminal and Package Units						
D3060 Controls and Instrumentation	1984	2011	2	JDH	05/05/16	Building management system provides direct digital control and monitoring for the buildings HVAC system. This system connects to the County's Delta system via internet. System is in good condition.
D3090 Other HVAC Systems and Equipment	1984	2011	2	JDH	05/05/16	Vehicle exhaust system in shop area. System is in good condition.
<b>Fire Protection</b>						
D4010 Fire Protection Sprinkler Systems	1984	2011	2	JDH	05/05/16	NFPA 13 fire protection system is supplied by site water tower and booster pump. Most sprinkler heads are surface type. System condition is good.
D4030 Fire Protection Specialties	1984	2011	2	JDH	05/05/16	Wet and dry systems. Dry system air compressor. System is in good condition.
<b>Electrical</b>						
D5010 Electrical Service and Distribution	1984	2011	2	JDH	05/05/16	600 amp, 480/277 volt, three-phase four-wire. There are seven disconnects for the power which serves this building. While technically the service point is the primary meter with the pad mount sectionalizing switch the service disconnect we recommend eac
D5020 Lighting and Branch Wiring	1984	2011	2	JDH	05/05/16	Lighting system is primarily T-8 fluorescent and in good condition.
D5032 Low Voltage Communication	1984	2011	2	JDH	05/05/16	Communications systems include radio dispatch and telephone. The systems are in good condition.
D5037 Low Voltage Fire Alarm						

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop A

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
D Services				2.0			
Electrical							
D5037	Low Voltage Fire Alarm	1984	2011	2	JDH	05/05/16	The low voltage addressable fire alarm system is in good condition.
D5038	Low Voltage Security	1984	2011	2	JDH	05/05/16	Door access system is in good condition.
D5039	Low Voltage Data	1984	2011	2	JDH	05/05/16	CAT 5 structured cable system with three 19" racks is in good condition.
E Equipment and Furnishings				2.0			
Equipment							
E1030	Vehicular Equipment	1984	2011	2	JWB	05/05/16	Various sizes vehicle lifts in good condition.
E1090	Other Equipment	1984	2011	2	JWB	05/05/16	10 ton bridge crane in good condition.
Furnishings							
E2010	Fixed Furnishings	1984	2011	2	JWB	05/05/16	Modern casework in good condition, window blinds in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop B

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Code

Facility Size - Gross S.F. 12,979  
Year Of Original Construction 2004  
Facility Use Type Maintenance Shop  
Construction Type Medium  
# of Floors 1  
Energy Source Gas  
Year Of Last Renovation 2004  
Historic Register No



Weighted Avg Condition Score	2.2	Total Project Cost	Total Project Cost - Present Value
Facility Condition Index (FCI)	0.06		
Current Replacement Value (CRV)	\$4,794,000	Predicted Renewal Budget (6 yrs) \$237,000	\$216,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs) \$1,491,000	\$1,182,000
		Observed Deficiencies (6 yrs)	
		Observed Deficiencies (ALL)	
		Opportunity Total Project Cost	N/A

## Facility Condition Summary

Shop building structure in good condition, exterior and interior systems in good to fair condition. The HVAC systems are small split systems in most areas with some unit heaters in others. Overall the MEP systems for this building are basic and in fair condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	2004	2004	2	JWB	05/05/16	Standard concrete foundation in good condition.
A1030 Slab On Grade	2004	2004	2	JWB	05/05/16	Standard slab on grade in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop B

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
B Shell				2.0			
<b>Superstructure</b>							
B1010	Floor Construction	2004	2004	2	JWB	05/05/16	Open web bar joists on steel columns in good condition.
B1020	Roof Construction	2004	2004	2	JWB	05/05/16	Open web bar joists on steel columns in good condition.
<b>Exterior Closure</b>							
B2010	Exterior Walls	2004	2004	2	JWB	05/05/16	Wood and metal siding in good condition.
B2020	Exterior Windows	2004	2004	2	JWB	05/05/16	Dual glazed in vinyl frames in good condition.
B2030	Exterior Doors	2004	2004	3	JWB	05/05/16	HM doors in HM frames with ADA hardware, insulated aluminum section overhead doors, all in good condition.
<b>Roofing</b>							
B3010	Roof Coverings	2004	2004	2	JWB	05/05/16	Metal roofing in good condition.
B3030	Projections	2004	2004	3	JWB	05/05/16	Steel covered walk in fair condition.
C Interiors				2.3			
<b>Interior Construction</b>							
C1010	Partitions	2004	2004	2	JWB	05/05/16	Framed walls in good condition.
C1020	Interior Doors	2004	2004	2	JWB	05/05/16	HM doors in HM frames with ADA hardware in good condition.
C1030	Fittings	2004	2004	2	JWB	05/05/16	Metal lockers and metal restroom partitions in



## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop B

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>C Interiors</b>			<b>2.3</b>			
<b>Interior Construction</b>						
<b>C1030 Fittings</b>						good condition.
<b>Staircases</b>						
<b>C2010 Stair Construction</b>	2004	2004	2	JWB	05/05/16	Metal stairs with concrete pan in fill in good condition.
<b>Interior Finishes</b>						
<b>C3010 Wall Finishes</b>	2004	2004	3	JWB	05/05/16	Wall paint, plastic laminate at restrooms, fair condition.
<b>C3020 Floor Finishes</b>	2004	2004	3	JWB	05/05/16	Epoxy flooring, sheet vinyl and carpet at second floor in fair condition.
<b>C3030 Ceiling Finishes</b>	2004	2004	2	JWB	05/05/16	Open ceiling with some 2x4 ACT, all in good condition.
<b>D Services</b>			<b>2.3</b>			
<b>Plumbing</b>						
<b>D2010 Plumbing Fixtures</b>	2004	2004	2	JDH	05/05/16	Manual operation flush valve toilets in good condition.
<b>D2020 Domestic Water Distribution</b>	2004	2004	2	JDH	05/05/16	Copper water piping in good condition.
<b>D2030 Sanitary Waste</b>	2004	2004	2	JDH	05/05/16	Sanitary waste system is operational and in good condition.
<b>D2040 Rain Water Drainage</b>	2004	2004	2	JDH	05/05/16	Gutter and downspout system tight-lined to site storm water system. System is in good

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop B

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
D Services			2.3					
HVAC								
D3010	Energy Supply		2004	2004	3		JDH 05/05/16	Electric energy supply to building is in fair condition.
D3020	Heat Generating Systems		2004	2004	3		JDH 05/05/16	Electric heat pump, R-22, air to air systems are in fair condition.
D3030	Cooling Generating Systems		2004	2004	2		JDH 05/05/16	Electric heat pump, R-22, air to air systems are in fair condition.
D3040	HVAC Distribution Systems		2004	2004	2		JDH 05/05/16	Small vertical fan coil units, access is tight. Distribution system in fair condition.
D3050	Terminal and Package Units		2004	2004	3		JDH 05/05/16	Ventilation/ air circulation in shops with new re-circ fans. Electric unit heater in shop area. Overall system condition is fair.
D3060	Controls and Instrumentation		2004	2004	3		JDH 05/05/16	Basic DDC system with Delta system and remote access.
D3090	Other HVAC Systems and Equipment		2004	2004	3		JDH 05/05/16	Vehicle exhaust system in fair condition. Co-monitoring system for ventilation in fair condition.
Fire Protection								
D4010	Fire Protection Sprinkler Systems		2004	2004	3		JDH 05/05/16	NFPA 12 fire protection, wet system in good condition.
D4030	Fire Protection Specialties		2004	2004	2		JDH 05/05/16	Zone valves only, piped from campus fire riser/pump system. Condition is good.
Electrical								
D5010	Electrical Service and Distribution		2004	2004	2		JDH 05/05/16	1000 amp, 120/208 V., three-phase four-wire

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Shop B

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.3			
Electrical						
D5010 Electrical Service and Distribution						system with 6 disconnect main panel. System condition is good.
D5020 Lighting and Branch Wiring	2004	2004	2	JDH	05/05/16	T-8 florescent lighting is the primary system and it is in good condition.
D5032 Low Voltage Communication	2004	2004	3	JDH	05/05/16	Phone system is operational and in fair condition.
D5037 Low Voltage Fire Alarm	2004	2004	2	JDH	05/05/16	Low voltage addressable fire alarm system is in good condition.
D5039 Low Voltage Data	2004	2004	2	JDH	05/05/16	Cat 5 structured cable system with fiber backbone between switches. Condition is good.
E Equipment and Furnishings			2.0			
Equipment						
E1030 Vehicular Equipment	2004	2004	2	JWB	05/05/16	Vehicle lifts at south shop area in good condition.
Furnishings						
E2010 Fixed Furnishings	2004	2004	2	JWB	05/05/16	Some modern casework in good condition.

## Facility Summary

**Thurston County**  
**Tilley Maintenance Shop Site**  
**Tilley Building C**

**9605 Tilley Rd SW**  
**Olympia, WA 98512**

Facility Code  
 Facility Size - Gross S.F. 24,070  
 Year Of Original Construction 2008  
 Facility Use Type Admin - Low rise  
 Construction Type Medium  
 # of Floors 2  
 Energy Source Gas  
 Year Of Last Renovation 2008  
 Historic Register No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	2.0			
Facility Condition Index (FCI)	0.05			
Current Replacement Value (CRV)	\$12,561,000	Predicted Renewal Budget (6 yrs)	\$64,000	\$59,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$3,091,000	\$2,333,000
		Observed Deficiencies (6 yrs)	\$12,000	\$12,000
		Observed Deficiencies (ALL)	\$12,000	\$12,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Newer building with structure, exterior and interior systems in good condition. The site infrastructure was significantly upgraded in 2012 to support the new buildings and major upgrades at that time. Two on-site wells provide domestic water to all facilities and are in good condition. There are water pressure issues on occasion. On-site septic and storm water retention systems function well and are in good condition. Primary power and site lighting are in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	2008	2008	2	JWB	05/05/16	Standard concrete foundation in good condition.
A1030 Slab On Grade	2008	2008	2	JWB	05/05/16	Standard slab on grade in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building C

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Facility Components							Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems												
A Substructure							2.0					
Foundations												
A1030	Slab On Grade											
B Shell							2.0					
Superstructure												
B1010	Floor Construction						2008	2008	2	JWB	05/05/16	Concrete slab on metal deck on steel beam and concrete columns in good condition..
B1020	Roof Construction						2008	2008	2	JWB	05/05/16	Steel deck on steel beams in good condition.
Exterior Closure												
B2010	Exterior Walls						2008	2008	2	JWB	05/05/16	Metal siding and metal framing in good condition.
B2020	Exterior Windows						2008	2008	2	JWB	05/05/16	Dual glazed in aluminum frames in good condition.
B2030	Exterior Doors						2008	2008	2	JWB	05/05/16	Aluminum storefront in good condition.
Roofing												
B3010	Roof Coverings						2008	2008	2	JWB	05/05/16	Metal roofing with some Thermoplastic polyolefin (TPO) in flat areas in good condition.
B3020	Roof Openings						2008	2008	2	JWB	05/05/16	Skylights in good condition.
B3030	Projections						2008	2008	2	JWB	05/05/16	Steel canopy and window shades in good condition.
C Interiors							2.0					
Interior Construction												

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building C

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>C Interiors</b>			<b>2.0</b>			
<b>Interior Construction</b>						
<b>C1010 Partitions</b>	2008	2008	2	JWB	05/05/16	Framed walls, some CMU in good condition.
<b>C1020 Interior Doors</b>	2008	2008	2	JWB	05/05/16	Wood doors in HM frames, some HM doors in HM frames, all with ADA hardware in good condition.
<b>C1030 Fittings</b>	2008	2008	2	JWB	05/05/16	Metal lockers and stainless steel restroom partitions in good condition.
<b>Staircases</b>						
<b>C2010 Stair Construction</b>	2008	2008	2	JWB	05/05/16	Metal stairs with concrete pan in fill in good condition. Exterior stairs need paint on metal railing, <\$5,000 to paint.
<b>C2020 Stair Finishes</b>	2008	2008	2	JWB	05/05/16	Rubber treads in good condition.
<b>Interior Finishes</b>						
<b>C3010 Wall Finishes</b>	2008	2008	2	JWB	05/05/16	Wall paint, some perforated metal siding, 1/2 height ceramic tile at restrooms, good condition.
<b>C3020 Floor Finishes</b>	2008	2008	2	JWB	05/05/16	Sealed, stained concrete, carpet in offices all in good condition.
<b>C3030 Ceiling Finishes</b>	2008	2008	2	JWB	05/05/16	Open ceiling with some 2x4 ACT, all in good condition.
<b>D Services</b>			<b>2.0</b>			
<b>Vertical Transportation</b>						
<b>D1010 Elevators and Lifts</b>	2008	2008	2	JDH	05/05/16	Hydraulic elevator in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building C

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.0			
<b>Plumbing</b>							
D2010	Plumbing Fixtures	2008	2008	2		JDH 05/05/16	Low flow fixtures with manual operation in good condition.
D2020	Domestic Water Distribution	2008	2008	2		JDH 05/05/16	Copper water piping in good condition. 120-gallon electric water heater in good condition
D2030	Sanitary Waste	2008	2008	2		JDH 05/05/16	Sanitary waste system is operational and in good condition.
D2040	Rain Water Drainage	2008	2008	2		JDH 05/05/16	Upper scupper for overflow and roof drain to water reclaim system. At kitchen/breakroom area downspouts spill on concrete outside of building with no tightline. Creates water problem against building and potential ice issue in winter. Otherwise, system is in good condition.
D2090	Other Plumbing Systems	2008	2008	2		JDH 05/05/16	Grey water system is high maintenance for the building but operational and working as designed. System in good condition.
<b>HVAC</b>							
D3010	Energy Supply	2008	2008	2		JDH 05/05/16	Electricity supplies energy to the building along with ground source loop for hydronic heat pump system. Supply is in good condition.
D3020	Heat Generating Systems	2008	2008	2		JDH 05/05/16	Hydronic heat pumps connected to ground source loop are in good condition.
D3030	Cooling Generating Systems	2008	2008	2		JDH 05/05/16	Hydronic heat pumps connected to ground source loop are in good condition.
D3040	HVAC Distribution Systems	2008	2008	2		JDH 05/05/16	Small hydronic heat pumps are mounted throughout the space and supply constant volume air. Barometric relief of the space is

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building C

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.0			
<b>HVAC</b>						
<b>D3040 HVAC Distribution Systems</b>						functional but does not perform well, it is oversized in some area and is affected by wind and provides pathway for insects into the building. Consider modification of dampers by adding pressure controllers and motorized dampers at key locations. Overall system is in good condition.
<b>D3060 Controls and Instrumentation</b>	2008	2008	2		JDH 05/05/16	Building management system compatible with facilities central monitoring and has remote access via internet. System is in good condition.
<b>Fire Protection</b>						
<b>D4010 Fire Protection Sprinkler Systems</b>	2008	2008	2		JDH 05/05/16	NFPA 13 sprinkler system is in good condition.
<b>D4030 Fire Protection Specialties</b>	2008	2008	2		JDH 05/05/16	Sectionalizing valves are provided per floor and the riser is feed from the central campus fire riser system. System is in good condition.
<b>Electrical</b>						
<b>D5010 Electrical Service and Distribution</b>	2008	2008	2		JDH 05/05/16	480 volt, three-phase four-wire, 800 amp system with multiple disconnects. ATS is installed to campus backup generator power system. System is in good condition.
<b>D5020 Lighting and Branch Wiring</b>	2008	2008	2		JDH 05/05/16	Fluorescent lighting consisting of T-8 and PL type lamps. Fixtures are daylight dimmed. Overall lighting system is in good condition.
<b>D5032 Low Voltage Communication</b>	2008	2008	2		JDH 05/05/16	Communications systems are operational and in good condition.
<b>D5037 Low Voltage Fire Alarm</b>	2008	2008	2		JDH 05/05/16	Low voltage addressable fire alarm system is in good condition.



## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building C

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.0			
Electrical						
D5038 Low Voltage Security	2008	2008	2		JDH 05/05/16	Door access and security system is in good condition.
D5039 Low Voltage Data	2008	2008	2		JDH 05/05/16	Cat. 6 structured cable system with fiber backbone terminates in four 19" racks and is in good condition.
D5090 Other Electrical Systems	2008	2008	2		JDH 05/05/16	Photovoltaic system is installed and in good condition.
E Equipment and Furnishings			2.0			
Furnishings						
E2010 Fixed Furnishings	2008	2008	2		JWB 05/05/16	Modern casework and window blinds all in good condition.

## Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County

Site: Tilley Maintenance Shop Site

Facility	System		Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Tilley Building C	HVAC		\$5,000	\$1,500	\$1,625	\$4,063	\$12,188	\$11,727
		Facility Total	\$5,000	\$1,500	\$1,625	\$4,063	\$12,188	\$11,727
Tilley Building E	HVAC		\$5,000	\$1,500	\$1,625	\$4,063	\$12,188	\$11,727
		Facility Total	\$5,000	\$1,500	\$1,625	\$4,063	\$12,188	\$11,727
		Site Total	\$10,000	\$3,000	\$3,250	\$8,125	\$24,375	\$23,454

Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$10,000
Site: Tilley Maintenance Shop Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$23,456

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Tilley Building C					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$5,000
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$12,188
HVAC Distribution Systems									
Barometric reliefs	4	2	2016		1	\$5,000.00	LS	\$5,000	\$12,188

No motorized dampers for building relief louvers  
subjecting building to pressurization issues during windy  
condition and to insect entry when system is not active.

Install DDC controlled motor-operator control for  
barometric relief louvers.



## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building D

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Code

Facility Size - Gross S.F. 8,786  
Year Of Original Construction 2005  
Facility Use Type Utility Support  
Construction Type Light  
# of Floors 1  
Energy Source Gas  
Year Of Last Renovation 2005  
Historic Register No



Weighted Avg Condition Score	2.0	Total Project Cost	Total Project Cost - Present Value
Facility Condition Index (FCI)	0.04		
Current Replacement Value (CRV)	\$3,189,000	Predicted Renewal Budget (6 yrs)	\$10,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$914,000
		Observed Deficiencies (6 yrs)	
		Observed Deficiencies (ALL)	
		Opportunity Total Project Cost	N/A

## Facility Condition Summary

Light, metal framed enclosed vehicle storage with structure and exterior on good condition. Basic mechanical and electrical systems supply this facility. Building ventilation system has some limitations for cross ventilation, but with the low frequency of operating combustion engines, this is not an issue. Overall the systems are in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	2005	2005	2	JWB	05/05/16	Standard concrete foundation in good condition.
A1030 Slab On Grade	2005	2005	2	JWB	05/05/16	Standard slab on grade in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building D

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>B Shell</b>			<b>2.0</b>			
<b>Superstructure</b>						
<b>B1020 Roof Construction</b>	2005	2005	2	JWB	05/05/16	Steel deck on steel post and beams in good condition.
<b>Exterior Closure</b>						
<b>B2010 Exterior Walls</b>	2005	2005	2	JWB	05/05/16	Metal siding panel system in good condition.
<b>B2030 Exterior Doors</b>	2005	2005	2	JWB	05/05/16	Insulated aluminum sectional overhead doors, HM doors in HM frames with ADA hardware in good condition.
<b>Roofing</b>						
<b>B3010 Roof Coverings</b>	2005	2005	2	JWB	05/05/16	Metal roofing with some Thermoplastic polyolefin (TPO) in flat areas in good condition.
<b>B3030 Projections</b>	2005	2005	2	JWB	05/05/16	Steel canopies in good condition.
<b>C Interiors</b>			<b>2.0</b>			
<b>Interior Construction</b>						
<b>C1010 Partitions</b>	2005	2005	2	JWB	05/05/16	Framed wall in good condition.
<b>C1020 Interior Doors</b>	2005	2005	2	JWB	05/05/16	HM doors in HM frames, all with ADA hardware in good condition.
<b>Interior Finishes</b>						
<b>C3010 Wall Finishes</b>	2005	2005	2	JWB	05/05/16	Wall paint, some OSB wood panel, good condition.
<b>C3020 Floor Finishes</b>	2005	2005	2	JWB	05/05/16	Sealed, stained concrete in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building D

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>C Interiors</b>			<b>2.0</b>			
Interior Finishes						
C3030 Ceiling Finishes	2005	2005	2	JWB	05/05/16	Open ceiling in good condition.
<b>D Services</b>			<b>2.0</b>			
Plumbing						
D2010 Plumbing Fixtures	2005	2005	2	JDH	05/05/16	Plumbing fixtures are in good condition.
D2020 Domestic Water Distribution	2005	2005	2	JDH	05/05/16	Domestic water distribution is copper piping with an RPBP installed at the service point. The hot water tank is an 80 gallon electric tank. They system condition is good.
D2030 Sanitary Waste	2005	2005	2	JDH	05/05/16	Sanitary waste system is operational and in good condition; oil water separator is installed on shop trench drains.
D2040 Rain Water Drainage	2005	2005	2	JDH	05/05/16	Gutter and downspout system tight-lined to site storm water system. System is in good
HVAC						
D3010 Energy Supply	2005	2005	2	JDH	05/05/16	Energy supply is electric and it is in good condition.
D3020 Heat Generating Systems	2005	2005	2	JDH	05/05/16	Electric unit heaters provide heat to the shop.
D3040 HVAC Distribution Systems	2005	2005	2	JDH	05/05/16	No mechanical cooling in the facility, only ventilation system and paddle fans.
D3050 Terminal and Package Units	2005	2005	2	JDH	05/05/16	Unit heaters are in good condition.
D3060 Controls and Instrumentation						

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building D

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.0			
HVAC						
D3060 Controls and Instrumentation	2005	2005	2		JDH 05/05/16	DDC system provides remote access and control, Delta system.
Fire Protection						
D4010 Fire Protection Sprinkler Systems	2005	2005	2		JDH 05/05/16	NFPA 13, dry sprinkler system is in good condition.
D4030 Fire Protection Specialties	2005	2005	2		JDH 05/05/16	Sectionalizing valves are used at service entrance and building is connected to site riser system. Dry pipe air compressor is installed. The system is in good condition.
Electrical						
D5010 Electrical Service and Distribution	2005	2005	2		JDH 05/05/16	225 amp, 480 volt, three-phase four-wire panel. ATS provides generator power from campus generator. Panel power building has no service disconnects labeled. Overall in good condition.
D5020 Lighting and Branch Wiring	2005	2005	2		JDH 05/05/16	Lighting system is primarily T-8 fluorescent and in good condition.
D5032 Low Voltage Communication	2005	2005	2		JDH 05/05/16	Phone system is operational and in fair condition.
D5037 Low Voltage Fire Alarm	2005	2005	2		JDH 05/05/16	Low voltage addressable fire alarm system is in good condition.
D5038 Low Voltage Security	2005	2005	2		JDH 05/05/16	Access control , door alarm and security system is in good condition.
D5039 Low Voltage Data	2005	2005	2		JDH 05/05/16	Building is wired with wall mount patch panel in enclosure and has fiber from fuel station and to fuel reporting station. No data outlets in the building. System is in good condition.

Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building D

9605 Tilley Rd SW  
Olympia, WA 98512

Facility Components						
Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.0			

Electrical  
D5039 Low Voltage Data



## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building E

9605 Tilley Rd SW  
Olympia, WA 98512

Facility Code  
Facility Size - Gross S.F. 11,619  
Year Of Original Construction 2011  
Facility Use Type Comm Center  
Construction Type Medium  
# of Floors 1  
Energy Source Gas  
Year Of Last Renovation 2011  
Historic Register No



		Total Project Cost		Total Project Cost - Present Value
Weighted Avg Condition Score	2.0			
Facility Condition Index (FCI)	0.05			
Current Replacement Value (CRV)	\$8,533,000	Predicted Renewal Budget (6 yrs)	\$79,000	\$74,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$2,783,000	\$2,162,000
		Observed Deficiencies (6 yrs)	\$12,000	\$12,000
		Observed Deficiencies (ALL)	\$12,000	\$12,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Newer Emergency Operation Center with structure, exterior and interior systems in good condition. The emergency operations building systems are in good condition. More protection of the data room from water pipes above could be provided. The building systems includes FM 200 fire suppression system and generator system which are all in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			2.0			
Foundations						
A1010 Standard Foundations	2011	2011	2		JWB 05/05/16	Standard concrete foundation in good condition.
A1030 Slab On Grade	2011	2011	2		JWB 05/05/16	Some standard slab on grade, area at operations center with under floor interstitial space, all in

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building E

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Facility Components							Surveyor/ Survey Date	Comments	
Systems			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs			
A Substructure					2.0				
Foundations									
A1030	Slab On Grade							good condition.	
B Shell					2.0				
Superstructure									
B1020	Roof Construction		2011	2011	2		JWB	05/05/16	Insulated car deck on wood beams on columns in good condition. Exposed wood beams at main entry stain is peeling needs re-stain, <\$5,000.
Exterior Closure									
B2010	Exterior Walls		2011	2011	2		JWB	05/05/16	Metal siding and metal panel in good condition.
B2020	Exterior Windows		2011	2011	2		JWB	05/05/16	Dual glazed in aluminum frames in good condition.
B2030	Exterior Doors		2011	2011	2		JWB	05/05/16	Aluminum storefront and HM doors in HM frames at service areas in good condition.
Roofing									
B3010	Roof Coverings		2011	2011	2		JWB	05/05/16	Metal roofing in good condition.
B3030	Projections		2011	2011	2		JWB	05/05/16	Steel window shades in good condition.
C Interiors					2.0				
Interior Construction									
C1010	Partitions		2011	2011	2		JWB	05/05/16	Framed walls, operable partitions in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building E

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
C Interiors				2.0			
Interior Construction							
C1020	Interior Doors	2011	2011	2	JWB	05/05/16	Wood doors in HM frames, some HM doors in HM frames, all with ADA hardware in good condition.
C1030	Fittings	2011	2011	2	JWB	05/05/16	Metal lockers and stainless steel restroom partitions, large motorized projection screens, all in good condition.
Interior Finishes							
C3010	Wall Finishes	2011	2011	2	JWB	05/05/16	Wall paint, some acoustic panels, 1/2 height ceramic tile at restrooms, good condition.
C3020	Floor Finishes	2011	2011	2	JWB	05/05/16	Carpet tiles, linoleum in break room, 18x18 rubber tiles, ceramic tile in restroom all in good condition.
C3030	Ceiling Finishes	2011	2011	2	JWB	05/05/16	Open ceiling with some 2x4 ACT, all in good condition.
D Services				2.0			
Plumbing							
D2010	Plumbing Fixtures	2011	2011	2	JDH	05/05/16	Low flow plumbing fixtures with manual operation. Floor mount flush valve toilets. System is in good condition
D2020	Domestic Water Distribution	2011	2011	2	JDH	05/05/16	Separate well system with VFD for submersible pump. 120 gallon, electric hot water tank. Portion of grey water system including RBPB is above radio room and should be relocated to avoid potential water damage to electronics cost <\$5,000. Overall system is in good condition.
D2030	Sanitary Waste	2011	2011	2	JDH	05/05/16	Operational and in good condition. Flows to

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building E

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.0			
<b>Plumbing</b>							
D2030	Sanitary Waste						dedicated septic system.
D2040	Rain Water Drainage	2011	2011	2	JDH	05/05/16	Gutter and downspout system tight-lined to site storm water system. System is in good
D2090	Other Plumbing Systems	2011	2011	2	JDH	05/05/16	Grey water system requires high level of maintenance but is operational and in good condition.
<b>HVAC</b>							
D3010	Energy Supply	2011	2011	2	JDH	05/05/16	Electricity supplies energy to this building, the system is in good condition.
D3020	Heat Generating Systems	2011	2011	2	JDH	05/05/16	Air to air split system heat pumps supply heating to the building, the system is in good condition.
D3030	Cooling Generating Systems	2011	2011	2	JDH	05/05/16	Air to air split system heat pumps supply cooling to the building along with four mini split AC units, the systems are in good condition.
D3040	HVAC Distribution Systems	2011	2011	2	JDH	05/05/16	Ducted air is supplied via constant volume fan coil units supplied from the heat pumps. Several of the units have a bypass duct and motorized zone boxes (VVT type system). The system is in good condition.
D3050	Terminal and Package Units	2011	2011	2	JDH	05/05/16	Unit heaters are in good condition.
D3060	Controls and Instrumentation	2011	2011	2	JDH	05/05/16	Building management system provides direct digital control and monitoring for the buildings HVAC system. This system connects to the County's Delta system via internet. System is in good condition.

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building E

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services			2.0			
<b>Fire Protection</b>						
<b>D4010 Fire Protection Sprinkler Systems</b>	2011	2011	2		JDH 05/05/16	NFPA 13 fire protection system is supplied by site water tower and booster pump. Most sprinkler heads are surface type. System condition is good.
<b>D4030 Fire Protection Specialties</b>	2011	2011	2		JDH 05/05/16	Sectionalizing valves are used on the service from the campus fire protection riser. A dry compressor is installed. System is in good condition.
<b>D4090 Other Fire Protection Systems</b>	2011	2011	2		JDH 05/05/16	FM 200 fire suppression system is installed in the data room.
<b>Electrical</b>						
<b>D5010 Electrical Service and Distribution</b>	2011	2011	2		JDH 05/05/16	120/208 volt service with multiple disconnects. Dedicated generator supplies emergency power system. All circuits are fully coordinated with bussman fused panels. System is in good condition.
<b>D5020 Lighting and Branch Wiring</b>	2011	2011	2		JDH 05/05/16	Lighting system is primarily T-8 fluorescent and in good condition. UPS system used for exterior lighting is not functional cost for correction <\$5,000.
<b>D5032 Low Voltage Communication</b>	2011	2011	2		JDH 05/05/16	Telephone and radio systems are in good condition.
<b>D5037 Low Voltage Fire Alarm</b>	2011	2011	2		JDH 05/05/16	Low voltage addressable fire alarm system is in good condition.
<b>D5038 Low Voltage Security</b>	2011	2011	2		JDH 05/05/16	Access control and building security system are in good condition.
<b>D5039 Low Voltage Data</b>						

## Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Building E

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Facility Components		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems							
D Services				2.0			
Electrical							
D5039	Low Voltage Data	2011	2011	2	JDH	05/05/16	Cat. 6 structured cable system with fiber backbone is installed and in good condition.
D5090	Other Electrical Systems	2011	2011	2	JDH	05/05/16	Generator system; data system UPS; radio antenna system: all are in good condition.
E Equipment and Furnishings				2.0			
Furnishings							
E2010	Fixed Furnishings	2011	2011	2	JWB	05/05/16	Modern casework and window blinds in good condition.

## Facility Summary

Thurston County

Tilley Maintenance Shop Site

Tilley Maintenance Site Infrastructure

9605 Tilley Rd SW  
Olympia, WA 98512

## Facility Condition Summary

Large site, survey limited to area adjacent to surveyed buildings. Large parking lot for staff in good condition, paved roads and parking for equipment in fair condition. The site infrastructure was significantly upgraded in 2011. The site includes wells for domestic water, pumped septic system with drain field, water tower for fire protection with booster pump and distribution riser/header, cistern for domestic water storage and ponds for storm water storage. The systems are in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2010 Roadways</b>	1984	2012	2	JWB	05/05/16	AC paved roadways, some with concrete curb in fair condition.
<b>G2020 Parking Lots</b>	1984	2012	2	JWB	05/05/16	AC paved and porous paver parking for smaller vehicles in good condition, large vehicle parking in fair condition.
<b>G2030 Pedestrian Paving</b>	1984	2012	2	JWB	05/05/16	Concrete walks, concrete stairs with metal handrails, some pavers at courtyard area, all in good condition.
<b>G2040 Site Development</b>	1984	2012	2	JWB	05/05/16	Site fencing in fair condition, newer vehicle gates in good condition, steel cross arm gates in fair condition, retaining walls in good condition, water feature newer in good condition, several small out buildings and storage containers in fair condition,
<b>G2050 Landscaping</b>	1984	2012	2	JWB	05/05/16	Trees, shrubs and some lawn areas in good condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	1984	2012	2	JDH	05/05/16	Well system with storage tank and booster pumps supply domestic water to the site. Truck wash is directly off the well. Emergency services

## Facility Summary

Thurston County

Tilley Maintenance Shop Site

Tilley Maintenance Site Infrastructure

9605 Tilley Rd SW  
Olympia, WA 98512

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>						building has stand alone well. Storage tank and booster pumps occasionally have low suction alarms, it appears the three booster pumps may be competing with each other for water. Recommend reconfiguration on inlet piping and review vfd control sequence. Cost of correction <\$5,000. Overall system condition is good.
<b>G3020 Sanitary Sewer</b>	1984	2012	2		JDH 05/05/16	All buildings are on a site septic system. The system is pumped from lift stations to standard drain fields. System is in good condition.
<b>G3030 Storm Sewer</b>	1984	2012	2		JDH 05/05/16	Gravity drain system to multiple on-site retention ponds. Low spot in site at Building A, but a drain was recently added in this area and site drainage is currently working well and in good condition.
<b>G3060 Fuel Distribution</b>	1984	2012	2		JDH 05/05/16	Natural gas is piped throughout the site to feed the multiple buildings. System is in good condition.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>	1984	2012	2		JDH 05/05/16	PSE provides primary power through a single pedestal meter to the site. Primary distribution pad mount gear supplies underground power to pad mount transformers at the various buildings. Primary distribution switch is no longer squarely aligned on its mounted pad, no physical damage observed, this should be reviewed. Overall system is in good shape.
<b>G4020 Site Lighting</b>	1984	2012	2		JDH 05/05/16	LED fixtures are used in most site lighting fixtures throughout the site. Site lighting system is in good condition.
<b>G4030 Site Communications and Security</b>	1984	2012	2		JDH 05/05/16	Site video surveillance systems are installed and communications systems are routed underground. These systems are in good



Facility Summary

Thurston County  
Tilley Maintenance Shop Site  
Tilley Maintenance Site Infrastructure

9605 Tilley Rd SW  
Olympia, WA 98512

Facility Components	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems						

G Sitework

Site Electrical utilities

G4030 Site Communications and Security

condition.

Deficiency Repair Cost Markups By System

2016 - 2021

Thurston County  
Site: Tilley Maintenance Shop Site

Facility	System		Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
Tilley Building C	HVAC		\$5,000	\$1,500	\$1,625	\$4,063	\$12,188	\$11,727
		Facility Total	\$5,000	\$1,500	\$1,625	\$4,063	\$12,188	\$11,727
Tilley Building E	HVAC		\$5,000	\$1,500	\$1,625	\$4,063	\$12,188	\$11,727
		Facility Total	\$5,000	\$1,500	\$1,625	\$4,063	\$12,188	\$11,727
		Site Total	\$10,000	\$3,000	\$3,250	\$8,125	\$24,375	\$23,454

Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$10,000
Site: Tilley Maintenance Shop Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$23,456

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: Tilley Building E					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$5,000
System: HVAC					Total System Deficiency Repair Cost (Marked Up):				\$12,188
HVAC Distribution Systems									
Louvers	4	2	2016		1	\$5,000.00	LS	\$5,000	\$12,188
No motorized dampers for building louvers allowing insect entry when system is not active.				Install DDC controlled motor-operator control for louver dampers.					



## Facility Summary

Thurston County

TwinStar Site

TwinStar Credit Union Building #5

2400 Evergreen Park Dr SW  
Olympia, WA 98502

### Facility Code

Facility Size - Gross S.F. 19,916  
Year Of Original Construction 1986  
Facility Use Type Office  
Construction Type Light  
# of Floors 2  
Energy Source Gas  
Year Of Last Renovation 2013  
Historic Register No



			Total Project Cost	Total Project Cost - Present Value
Weighted Avg Condition Score	2.8			
Facility Condition Index (FCI)	0.13			
Current Replacement Value (CRV)	\$8,808,000	Predicted Renewal Budget (6 yrs)	\$94,000	\$93,000
Beginning Budget Year	2016	Predicted Renewal Budget (20 yrs)	\$4,266,000	\$3,462,000
		Observed Deficiencies (6 yrs)	\$406,000	\$401,000
		Observed Deficiencies (ALL)	\$406,000	\$401,000
		Opportunity Total Project Cost		N/A

## Facility Condition Summary

Structure in good condition, exterior wall veneer needs re-seal, canopy at entry and skylights have failing seals, interiors in fair condition. HVAC and Interior lighting systems were upgraded in 2012 and are in good condition. The plumbing fixtures are in fair condition and are at a point where increased maintenance can be expected. Power distribution appears to be in fair condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
A Substructure			3.0			
Foundations						
A1010 Standard Foundations	1986	1986	3		JWB 04/22/16	Concrete stem wall in fair condition.
B Shell			2.7			

## Facility Summary

Thurston County

TwinStar Site

TwinStar Credit Union Building #5

2400 Evergreen Park Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
B Shell			2.7					
Superstructure								
B1010	Floor Construction		1986	1986	3	JWB	04/22/16	Wood joists on concrete stem wall, spread footings in fair condition, insulation falling, <\$5,000 to replace where fallen.
B1020	Roof Construction		1986	1986	3	JWB	04/22/16	Wood joists on wood framing in fair condition.
Exterior Closure								
B2010	Exterior Walls		1986	1986	3	JWB	04/22/16	Brick veneer fair condition, needs clean and re-seal, Exterior insulation finishing system stucco panels in poor condition, some panels appear to be coming off building, <\$5,000 to repair replace few panels.
B2020	Exterior Windows		1986	1986	2	JWB	04/22/16	Dual glazed, aluminum windows in good condition.
B2030	Exterior Doors		1986	1986	3	JWB	04/22/16	Aluminum storefront entry doors, few HM doors in HM frames, all with ADA hardware in fair condition. Main entry doors no ADA opener, <\$5,000 to install.
Roofing								
B3010	Roof Coverings		1986	1986	2	JWB	04/22/16	Thermoplastic polyolefin (TPO) single-ply roofing membrane in good condition.
B3020	Roof Openings		1986	1986	3	JWB	04/22/16	Glazed skylight units with broken seals in poor condition.
B3030	Projections		1986	1986	4	JWB	04/22/16	Framed canopies, main entry with skylights with failed seals and leaks. Structure in fair condition.

### C Interiors

3.0

#### Interior Construction

Print Date: 05/26/16

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## Facility Summary

Thurston County

TwinStar Site

TwinStar Credit Union Building #5

2400 Evergreen Park Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components			Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
Systems								
C Interiors					3.0			
C1010	Partitions		1986	1986	3	JWB	04/22/16	Wood framed in fair condition.
C1020	Interior Doors		1986	1986	3	JWB	04/22/16	Wood doors in wood frames in fair condition, ADA hardware.
Staircases								
C2010	Stair Construction		1986	1986	3	JWB	04/22/16	Wood framed in fair condition.
C2020	Stair Finishes		1986	1986	2	JWB	04/22/16	Carpet and rubber treads in good condition.
Interior Finishes								
C3010	Wall Finishes		1986	1986	3	JWB	04/22/16	Wall paint in fair condition, restrooms include some FRP and VWC in fair condition.
C3020	Floor Finishes		1986	1986	3	JWB	04/22/16	Carpet in fair condition, sheet vinyl in fair condition.
C3030	Ceiling Finishes		1986	1986	3	JWB	04/22/16	2x4 ACT in good condition.
D Services					2.7			
Vertical Transportation								
D1010	Elevators and Lifts		1986	1986	3	JDH	04/22/16	Elevator cab ceiling, egg crate louver is yellowed and some lighting fixtures are not working. Cost of correction <\$5,000. Overall the system is in fair condition.
Plumbing								
D2010	Plumbing Fixtures		1986	1986	3	JDH	04/22/16	Standard flow plumbing fixtures, floor mounted flush tank water closets. The plumbing fixtures are in fair condition.

## Facility Summary

Thurston County

TwinStar Site

TwinStar Credit Union Building #5

2400 Evergreen Park Dr SW  
Olympia, WA 98502

### Facility Components

Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.7			
<b>Plumbing</b>							
D2010	Plumbing Fixtures						
D2020	Domestic Water Distribution	1986	1986	3		JDH 04/22/16	Domestic water distribution is operational and in fair condition.
D2030	Sanitary Waste	1986	1986	3		JDH 04/22/16	The sanitary sewer system is operational and in fair condition.
D2040	Rain Water Drainage	1986	1986	3		JDH 04/22/16	Entrance awning drains to ATM awning. ATM awning does not have adequate drainage or slope. Cost to correct < \$ 5,000. Otherwise, the rain water drainage system is in fair condition.
<b>HVAC</b>							
D3010	Energy Supply	1986	2012	2		JDH 04/22/16	Natural gas and electric energy systems are in good condition.
D3020	Heat Generating Systems	1986	2012	2		JDH 04/22/16	Gas heating sections in all six rooftop HVAC units. Heating system is in good condition.
D3030	Cooling Generating Systems	1986	2012	2		JDH 04/22/16	Dx cooling systems with 100% modulating economizers and relief fans are in good condition.
D3040	HVAC Distribution Systems	1986	1986	3		JDH 04/22/16	The HVAC distribution is constant volume units except for VVT boxes on AHU-1. The systems are in fair condition.
D3050	Terminal and Package Units	1986	2012	2		JDH 04/22/16	VVT boxes are in good condition.
D3060	Controls and Instrumentation	1986	2012	2		JDH 04/22/16	The control system is operational and in good condition.

## Facility Summary

Thurston County

TwinStar Site

TwinStar Credit Union Building #5

2400 Evergreen Park Dr SW  
Olympia, WA 98502

### Facility Components

Facility Components							
Systems		Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
D Services				2.7			
Fire Protection							
D4010	Fire Protection Sprinkler Systems	1986	1986	5		JDH 04/22/16	Fire sprinkler system not present.
Electrical							
D5010	Electrical Service and Distribution	1986	1986	3		JDH 04/22/16	800 amp, 120/208 volt, three-phase four-wire electrical service with small generator backup is in fair condition.
D5020	Lighting and Branch Wiring	1986	2012	3		JDH 04/22/16	New T-8 lighting fixture and motion sensing controls added in 2012. System is in fair condition.
D5032	Low Voltage Communication	1986	2012	2		JDH 04/22/16	The telephone and communication systems are operational and in good condition.
D5037	Low Voltage Fire Alarm	1986	2012	2		JDH 04/22/16	Low voltage addressable fire alarm system is in good condition.
D5038	Low Voltage Security	1986	2012	3		JDH 04/22/16	Building security system is operational and in fair condition.
D5039	Low Voltage Data	1986	2012	3		JDH 04/22/16	Structed cable system with outlets, station cables and rack mounted modular patch panels is operational and in good condition.
E Equipment and Furnishings				3.0			
Furnishings							
E2010	Fixed Furnishings	1986	1986	3		JWB 04/22/16	Casework and window blinds in fair condition.



## Facility Summary

Thurston County

TwinStar Site

TwinStar Site Infrastructure

2400 Evergreen Park Dr SW  
Olympia, WA 98502

## Facility Condition Summary

Site in fair condition with large parking area paving cracking in some places. Underground power and utility connections for natural gas, sewer, storm, water and tel/com data are in good condition. Site lighting is fully operational, fixtures and poles have some rust and in fair condition.

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2020 Parking Lots</b>	1986	1986	3		JWB 04/22/16	AC paved parking with concrete curbs in good condition, other areas in poor condition, paving shows cracks and wear and tear.
<b>G2030 Pedestrian Paving</b>	1986	1986	3		JWB 04/22/16	Concrete walks in fair condition.
<b>G2050 Landscaping</b>	1986	1986	2		JWB 04/22/16	Irrigated trees and shrubs in good condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3010 Water Supply</b>	1986	1986	3		JDH 04/22/16	Site water supply system is operational and in fair condition.
<b>G3020 Sanitary Sewer</b>	1986	1986	3		JDH 04/22/16	Sanitary sewer system is operational an in fair condition.
<b>G3030 Storm Sewer</b>	1986	1986	3		JDH 04/22/16	Storm sewer system is operational and in fair condition.
<b>G3060 Fuel Distribution</b>	1986	1986	3		JDH 04/22/16	PSE natural gas service, AC 630 meter. No earthquake valve is installed. System is in fair condition.
<b>Site Electrical utilities</b>						
<b>G4010 Electrical Distribution</b>						

## Facility Summary

Thurston County

TwinStar Site

TwinStar Site Infrastructure

2400 Evergreen Park Dr SW  
Olympia, WA 98502

### Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Electrical utilities</b>						
	1986	1986	3		JDH 04/22/16	Underground power, pad mount 150 kVA utility transformer from PSE provide site power to the building and are in fair condition.
<b>G4020 Site Lighting</b>	1986	1986	3		JDH 04/22/16	Building mounted fixture needs lensed replaced and may have water damage. Uplighting at glass awning does not provide adequate light level on walkway for ADA. Cost for correction < \$ 5,000. Some rust on site poles and fixtures. Overall site lighting sys
<b>G4030 Site Communications and Security</b>	1986	1986	3		JDH 04/22/16	Communications system to the building and security are operational and in fair condition.
<b>Other Site Construction</b>						
<b>G9090 Other Site Systems</b>	1986	1986	3		JDH 04/22/16	Small natural gas emergency power generator is in fair condition.

## Deficiency Repair Cost Markups By System

2016 - 2021


Thurston County

Site: TwinStar Site

Facility	System	Direct Construction Cost	Contingency 30%	Contractor's OH & P 25%	Project Soft Cost 50%	Total Project Cost	Total Project Cost (Present Value)
TwinStar Credit Union Building #5	Exterior Closure	\$18,000	\$5,400	\$5,850	\$14,625	\$43,875	\$40,626
	Roofing	\$29,000	\$8,700	\$9,425	\$23,563	\$70,688	\$69,159
	Fire Protection	\$119,496	\$35,849	\$38,836	\$97,091	\$291,272	\$291,272
	<b>Facility Total</b>	<b>\$166,496</b>	<b>\$49,949</b>	<b>\$54,111</b>	<b>\$135,278</b>	<b>\$405,834</b>	<b>\$401,057</b>
TwinStar Site Infrastructure	Site Improvements	\$7,500	\$2,250	\$2,438	\$6,094	\$18,281	\$17,258
	<b>Facility Total</b>	<b>\$7,500</b>	<b>\$2,250</b>	<b>\$2,438</b>	<b>\$6,094</b>	<b>\$18,281</b>	<b>\$17,258</b>
	<b>Site Total</b>	<b>\$173,996</b>	<b>\$52,199</b>	<b>\$56,549</b>	<b>\$141,372</b>	<b>\$424,115</b>	<b>\$418,314</b>

Detailed Assessment - Observed Deficiencies 2016 - 2021


Thurston County	Total Observed Deficiency Repair Direct Cost :	\$173,996
Site: TwinStar Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$418,313

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	TwinStar Credit Union Building #5				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$18,000
System:	Exterior Closure				Total System Deficiency Repair Cost (Marked Up):				\$43,875
Exterior Walls									
Veneer	4	4	2016		6,000	\$3.00	SF	\$18,000	\$43,875
Brick veneer discolored and moss growth.				Clean and reseal exterior brick veneer.					



Detailed Assessment - Observed Deficiencies 2016 - 2021


Thurston County	Total Observed Deficiency Repair Direct Cost :	\$173,996
Site: TwinStar Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$418,313

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	TwinStar Credit Union Building #5				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$29,000
System:	Roofing				Total System Deficiency Repair Cost (Marked Up):				\$70,688
Roof Openings									
Skylights	4	2	2016		10	\$400.00	EA	\$4,000	\$9,750
Skylights have broken seals.				Replace skylight panels with new.					



Detailed Assessment - Observed Deficiencies 2016 - 2021


Thurston County	Total Observed Deficiency Repair Direct Cost :	\$173,996
Site: TwinStar Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$418,313

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	TwinStar Credit Union Building #5				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$29,000
System:	Roofing				Total System Deficiency Repair Cost (Marked Up):				\$70,688
Projections									
Canopy	4	1	2016		1	\$25,000.00	LS	\$25,000	\$60,938
Canopy skylights have broken seals.				Replace skylight panels with new.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$173,996
Site: TwinStar Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$418,313

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility: TwinStar Credit Union Building #5					Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$119,496
System: Fire Protection					Total System Deficiency Repair Cost (Marked Up):				\$291,272
Fire Protection Sprinkler Systems									
Fire Sprinkler	5	0	2016		19,916	\$6.00	SF	\$119,496	\$291,272
No fire sprinkler system.				Install fire sprinkler system.					



Detailed Assessment - Observed Deficiencies 2016 - 2021

Thurston County	Total Observed Deficiency Repair Direct Cost :	\$173,996
Site: TwinStar Site	Total Observed Deficiency Repair Cost (Marked Up Present Value):	\$418,313

Material	Cond.	Material Useful Life	Survey Year	Condition Notes	Qty	Unit Cost	Unit	Direct Constr. Cost	Marked Up Cost
Deficiency				Action					
Facility:	TwinStar Site Infrastructure				Total System Deficiency Repair Cost (Undiscounted/Unescalated):				\$7,500
System:	Site Improvements				Total System Deficiency Repair Cost (Marked Up):				\$18,281
Parking Lots									
AC paving	4	3	2016		7,500	\$1.00	SF	\$7,500	\$18,281

AC paving is cracked at main drive areas and shows surface wear.

Prep, fill cracks and seal coat paving, re-stripe were necessary.





## Facility Summary

Thurston County  
G Lot  
G Lot Infrastructure

2000 Lakeridge Dr SW  
Olympia, WA 98502

## Facility Condition Summary

Roadway leading into site and on site parking in fair condition with newer good condition lighting.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2010 Roadways</b>	2004	2004	3	JWB	04/22/16	AC paved with concrete curbs in fair condition.
<b>G2020 Parking Lots</b>	2004	2004	3	JWB	04/22/16	AC paved with concrete curbs in fair condition.
<b>G2050 Landscaping</b>	2004	2004	3	JWB	04/22/16	Trees, shrubs and some lawn in fair condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3030 Storm Sewer</b>	2004	2004	3	JWB	04/22/16	Storm drain in fair condition.
<b>Site Electrical utilities</b>						
<b>G4020 Site Lighting</b>	2004	2004	2	JWB	04/22/16	Newer LED light fixtures in good condition.

## Facility Summary

Thurston County  
J Lot  
J Lot Infrastructure

910 24th Wy SW  
Olympia, WA 98502

## Facility Condition Summary

Smaller parking lot in good condition.

## Facility Components

Systems	Original System Date	Last Major System Renew.	Cond. Scores	Subsystem Remain. Useful Life - Yrs	Surveyor/ Survey Date	Comments
<b>G Sitework</b>						
<b>Site Improvements</b>						
<b>G2020 Parking Lots</b>	2004	2004	2	JWB	04/22/16	AC paved with concrete curbs in good condition.
<b>G2050 Landscaping</b>	2004	2004	2	JWB	04/22/16	Shrubs in good condition.
<b>Site Civil / Mechanical Utilities</b>						
<b>G3030 Storm Sewer</b>	2004	2004	2	JWB	04/22/16	Storm drain in good condition.
<b>Site Electrical utilities</b>						
<b>G4020 Site Lighting</b>	2004	2004	3	JWB	04/22/16	Light fixtures in fair condition.

## V. EQUIPMENT INVENTORY

## Accountability and Restitution

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	AC-1	AC	Mitsubishi			1st	P9	2009	
ARC	AC-2	AC Split	Liebert			2nd	Mech	2009	
ARC	AC-3	AC Split	Mitsubishi	MSZ-A12NA	7003713	2nd	Mech	2009	
ARC	AC-4	AC Split	Mitsubishi			1st	Mech	2009	Serial not visible
ARC	Compres sor	ACR	Ingersol	SS-8	B000284	1st	Laundry	2009	
ARC		ACR	General Air	LT20033A	LT200-09291174	2nd	Mech	2009	
ARC	AHU-1	AHU	Haakon	095304-1349-C		2nd	Mech	2009	
ARC	AHU-2	AHU	HAAKON	AIRPAK	09-5304-134B-C	2nd	Mech	2009	
ARC	AHU-3	AHU	Haakon	Airpak	09-5304-135-C	2nd	Mech	2009	
ARC	AHU-4	AHU	Haakon	Airpak	09-5304-136-C	2nd	Mech	2009	
ARC	AHU-5	AHU	Haakon	Airpak	09-5304-137-C	2nd	Mech	2009	
ARC	AHU-6	AHU	Haakon	Airpak	09-5304-138-C	2nd	Mech	2009	
ARC		BFA	Wilkins	4"	5880	Outside East	Hotbox		

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	B-1	Boiler	Fulton	DHW2000	NB581	2nd	Mech	2009	
ARC	B-2	Boiler	Fulton	DHW2000	NB1456	2nd	Mech	2009	
ARC		Compactor	Marathon	RJ-250HT	52031967	Outside		2012	
ARC	RHP-6	CP	Bell and Gosset			1st	P10	2009	
ARC	RHWP-1	CP	Bell and Gosset	PL-55B		2nd	Mech	2009	
ARC	RHWP-2	CP	Bell and Gosset	PL-55B	1BL068	2nd	Mech	2009	
ARC	RHWP-3	CP	Bell and Gosset	BF-183		2nd	Mech	2009	
ARC	RHWP-4	CP	Bell and Gosset	PL55B	1BL068	2nd	Mech	2009	
ARC	ACCU-1	CU	Trane	RAUCC204B2030B DF00000	C09E14	Roof		2009	
ARC	ACCU-2	CU	Trane	RAUCC204B2030B DF00000	C09E14568	Roof		2009	
ARC	ACCU-3	CU	Trane	RAUCC254B2030B DF00010	C09E14571	Roof		2009	
ARC	ACCU-4	CU	Trane	RAUCC304B2030B DF00000	C09E14569	Roof		2009	
ARC	ACCU-5	CU	Trane	RAUCC204B2030B DF00010	C09E14572	Roof		2009	

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	ACCU-6	CU	Trane	RAUCC204B2030B DF00010	C09E14573	Roof		2009	
ARC	CU Freeze	CU	Heatcraft	MOZ045L62C	T10A01873	Roof		2009	
ARC	CU Freeze	CU	Heatcraft	MOZ045L62C	T10A01874	Roof		2009	
ARC	CU Freeze	CU	Heatcraft	LZS035M6C	T10A05511	Roof		2009	
ARC	CU Fridge	CU	Heatcraft	LHS015X6C	T10A05512	Roof		2009	
ARC	CU Fridge	CU	Heatcraft	LHS015X6C	T10A05514	Roof		2009	
ARC	CU Fridge	CU	Heatcraft	LZS055L6C	T10A05515	Roof		2009	
ARC	CU Fridge	CU	Heatcraft	LHS015X6C	T10A05513	Roof		2009	
ARC	CU-1	CU	Mitsubishi	PUY-A36NHA2	8ZU02140A	Roof		2009	
ARC	CU-2	CU	Liebert			Roof			No Tag
ARC	CU-3	CU	Mitsubishi	MUZ-A12NA	8003462T	Roof		2009	
ARC	CU-4	CU	Mitsubishi	PUY-A36NHAZ	8Z001789A	Roof		2009	
ARC	CU-5	CU	Mitsubishi	MUZ-A12NA	8003498T	Roof		2009	

## Accountability and Restitution

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	GHW-5B	DHW	Lochinvar		41084-10W	2nd	Mech	2009	
ARC	GWH-1A	DHW	Lochinvar	41066-10W		2nd	Mech	2009	
ARC	GWH-1B	DHW	Lochinvar	41067-10W		2nd	Mech	2009	
ARC	GWH-1C	DHW	Lochinvar	41068-10W		2nd	Mech	2009	
ARC	GWH-2A	DHW	Lochinvar		41072-10W	2nd	Mech	2009	
ARC	GWH-2B	DHW	Lochinvar		41073-10W	2nd	Mech	2009	
ARC	GWH-5A	DHW	Lochinvar		41083-10W	2nd	Mech	2009	
ARC	GWH-6A	DHW	Phoenix	PH199-199	E15021253	1st	P10	2009	
ARC	GWH-6B	DHW	Phoenix	PH199-199	D23P10750	1st	P10	2009	
ARC	GWH-3A	DWH	Lochinvar		41062-10W	2nd	Mech	2009	
ARC	GWH-3B	DWH	Lochinvar		41063-10W	2nd	Mech	2009	
ARC	EF-1	EF	Cook	202 CMX	033SC63547-00/0000701	2nd	Mech	2009	
ARC	EF-10	EF	Cook	150ACE	033SC63730-00/0000701	Roof		2009	

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	EF-11	EF	Cook	70ACE	033SC63730-00/0001901	Roof		2009	
ARC	EF-2	EF	Cook	202QMX	033SC63547-00/0000707	2nd	Mech	2009	
ARC	EF-3	EF	Cook	202 CMX	033SC63547-00/0002301	2nd	Mech	2009	
ARC	EF-4	EF	Cook	202CMX	033SC63547-00/0000703	2nd	Mech	2009	
ARC	EF-5	EF	Cook	330UCRH	033SC6370-00/0003001	Roof		2009	
ARC	EF-6	EF	Cook	135ACRU	033SC63730-00/0004401	Roof		2009	
ARC	EF-7	EF	Cook	330 ACRUH	033SC63730-00/0005601	Roof		2009	
ARC	EF-8	EF	Cook	120ACE	033SC63730-00/0000801	Roof		2009	
ARC	EF-9	EF	Cook	120CPV	033SC63547-00/0004001	Roof		2009	
ARC	Blast Freezer	Freezer	Heatcraft	RBC200-X0042	T29101K09	1st	Mech	2009	
ARC	Blast Freezer	Freezer	Heatcraft	RBC200-X0042	T29102K19	1st	Mech	2009	
ARC	Freezer 1	Freezer	Heatcraft	LCAB160HB		1st	Mech	2009	
ARC	Fridge 1	Fridge	Heatcraft	LCAB160HB	T10A04365	1st	Mech	2009	



Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	Fridge 2	Fridge	Heatcraft	LCAB160HB		1st	Mech	2009	
ARC	Fridge 3	Fridge	Heatcraft	LCAB160HB		1st	Mech	2009	
ARC	Fridge 4	Fridge	Heatcraft	LCAB160HB		1st	Mech	2009	
ARC	Fridge 5	Fridge	Heatcraft	LCAB160HB		1st	Mech	2009	
ARC		Gate	Hy Security	222X2ST	34B732-1013-114	Outside	NW	2010	
ARC		Gen	Genrac	GTA352AIDV	1.00097E+13	Outside	North		
ARC	HRP-1	Recovery Pump	Bell and Gosset	1X525	C084051-03	2nd	Mech	2009	
ARC	HRP-2	Recovery Pump	Bell and Gosset	1X525	C084021-02	2nd	Mech	2009	
ARC	HRP-4	Recovery Pump	Bell and Gosset	1X525	C084021-04	2nd	Mech	2009	
ARC	HRC-3	HRU				2nd	Mech	2009	
ARC	HWP-1	HWP	Bell and Gosset	2.388	PV1647-2	2nd	Mech	2009	
ARC	HWP-2	HWP	Bell and Gosset	2.388	PV1647-1	2nd	Mech	2009	
ARC	HWP-2	HWP	Bell and Gosset	1X525	C084018-03	2nd	Mech	2009	

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	HWP-6	HWP	Bell and Gosset	1X525	C084018-01	2nd	Mech	2009	
ARC	HWP-7	HWP	Bell and Gosset	1X525	C03401-02	2nd	Mech	2009	
ARC	HWP-8	HWP	Bell and Gosset	1X525	C084020-01	2nd	Mech	2009	
ARC	HWR-5	HWP	Bell and Gosset	1X525	C084019-01	2nd	Mech	2009	
ARC	MAU-1	MAU	Greenheck	IGX-120-H32-DB	11723642	Roof		2009	
ARC	MUA-2	MAU	Greenheck	TGX-112-H38-DB	11723643	Roof		2009	
ARC	OHD-1	Roll-up Door				Sally Port		2009	
ARC	OHD-2	Roll-up Door				Sally Port		2009	
ARC	RV-1	RV	Cook	46X58X6TRE	033SC63730-00/001001	Roof		2009	
ARC	RV-2	RV	Cook	46X58X6TRE	033SC63730-00/0010002	Roof		2009	
ARC	RV-3	RV	Cook	42X64X6TRE	033SC63730-00/0011101	Roof		2009	
ARC	RV-4	RV	Cook	42X42X6TRF	033SC63730-00/0012001	Roof		2009	
ARC	RV-5	RV	Cook	42X64X6TRE	033SC82721-00/0000701	Roof		2009	

Accountability and Restitution

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	RV-6	RV	Cook	42X42X6TRE	033SC63730-00/0013801	Roof		2009	
ARC		Sump Pump				North Yard			
ARC	TU-1-201	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-1-202	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-1-203	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-1-204	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-1-205	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-1-206	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-1-207	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-1-208	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-2-201	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-2-202	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-2-203	TU	Titus	DESV		2nd	Mech	2009	

## Accountability and Restitution

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	TU-2-204	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-2-205	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-2-206	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-2-207	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-2-208	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-3-201	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-3-202	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-3-204	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-3-205	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-3-206	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-3-207	TU	Titus	DESV		2nd	Mech	2009	
ARC	TU-6-201	TU	Titus	DESV		2nd	Mech	2009	
ARC	UPS-1	UPS	Liebert	37MB030AAA62N	37-MB-2433	1st	Mech	2009	

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC	UPS-2	UPS	Liebert	37MB080AAA62Q	37MB-2435	1st	P9	2009	
ARC	GWH-4A	WH	Lochinvar		41089-10W	2nd	Mech	2009	
ARC	GWH-4B	WH	Lochinvar		41090-10W	2nd	Mech	2009	

## ARC Work Release

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ARC Work	AC-101	AC Split	Mitsubishi	PKA-A124A4		2nd	Mech		Serial not accessible
ARC Work	RTU-101	AHU	Aaon	RN-016-80-E60Y-244	201301-BNGM27009	Roof			
ARC Work	RPBA-1	BFA	Febco	860	N1212171253	1st	Mech		
ARC Work		BFA	Febco	860	N1212171252	Outside	North		
ARC Work	RHWP-1	CP	Grundfos			1st	Mech		No tag accessible
ARC Work	ACCU-201	CU	Mitsubishi	PUY-A12NHA4	24U06049C	Roof			
ARC Work	GWH-1B	DHW	Lochinvar	SNA500-125	J12C20239206	1st	Mech		
ARC Work	EF-101	EF				Roof			No tag
ARC Work	EF-102	EF				Roof			No tag
ARC Work		Gen	Kohler	250RE0ZJE	SGM323XD8	Outside	South	2012	313 KVA 250 KW
ARC Work	UH-101	UH	Qmark	MUH0581		1st	Fire Riser	2012	
ARC Work	UPS-E	UPS	APC	G35TF10KB4F	PS12248331350	1st	Electrical		

Courthouse Building 1

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 1		ACR	GE Motors	SKH35KN524HX	YHL101890	2nd Floor	Room 223		For Dry System
CH 1		AHU	Energy Systems	TR-25	577-631-2	Roof			
CH 1		AHU				Basement	7		Serves Basement. No Tag
CH 1		Boiler	Chromalox	CAS-200MOPZ-483	8197-17467	2nd Floor	Lab Room 222		
CH 1		Conv Controller	Siemens		257212BP	Basement	Elev Room		
CH 1		Conv Motor	Baldor		39D101W680G1	Basement	Elev Room		
CH 1		CP	Grundfos	UP26-9613F	9446	Basement	Room 010		
CH 1		DHW	AO Smith		SB95 96201Y3	Basement			
CH 1		Dry Cooler	Liebert	CDF415LA	93080202	Outside East		1993	Serves Data Room
CH 1	EF-1	EF	Cook	180ACRU180R6B	0335868937-0010000701	Roof	NE Corner	2005	
CH 1	EF-200	EF				Basement	7		
CH 1	EF-201	EF				Basement	7		
CH 1		EF	Greenheck	GB-10-4	89C03366	Roof	SE Corner		

Courthouse Building 1

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 1		EF	Greenheck	GB-10-4	89C03365	Roof	SE Corner		
CH 1		Split	Liebert	FH245AUAAM	300026-001	Basement	Data Room	1993	
CH 1		UPS	Powerware	50	ER505ZBA18	Basement	Data Room		



Courthouse Building 2

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 2		ACR	GE Motors	5KH35KN524 HX	PJL012165	2nd	213		
CH 2	AHU-210	AHU	Energy Systems	TR-25 AH	577-31-1	Roof			
CH 2	Conv 1	Conv	Otis		811262	Bas	MR01		
CH 2	Conv 2	Conv	Otis		811292	Bas	MR01		
CH 2		Conv Controller	Siemens		BVC2V	Bas	MR01		
CH 2		Conv Controller	Siemens		BVTDZ	Bas	MR01		
CH 2		CP	Grundfos	UP26-96 BF	9502	Bas	FA01	1996	
CH 2		DHW	AO Smith		SB9556203Y3	Bas	FA01	1996	
CH 2	EF-211	EF	LC		92791-5772	Roof			

Courthouse Building 3

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 3		AC Split	Hampton Bay	HBLG8003RT4	312TA004989	Roof	Radio Room		
CH 3	ACO-1	ACR	Quincy	370	9702884	Mech			
CH 3	ACO-2	ACR	Quincy	370L	20040313-0005	Mech			
CH 3		ACR	Hitachi	EC-12		Outside			
CH 3	AHU-2	AHU	Huntair	Cat# EM3661T		Bas Mech 2			
CH 3	AHU-254	AHU							
CH 3		AHU	Energy Systems	TR-15 AH	577-631-4	Roof			
CH 3		AHU	Energy Systems	TR-2511	577-631-3	Roof			
CH 3		AHU				Roof			
CH 3		BFA	Watts	3"	6284	Mech			
CH 3		BFA	CLA-Valco	4-90-01AB	90-01-55E	Mech			
CH 3		BFA	Watts	4"		Mech			
CH 3		BFA	Crispin	BD00A11RF61	10110303	Bas Mech 2			

Courthouse Building 3

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 3		BFA	Crispin	BD00A11RF61	10110228	Bas Mech 2			
CH 3	Boiler-1	Boiler	DE Dietrich	GT409A	0230404/4	Mech		2002	
CH 3	Boiler-2	Boiler	DE Dietrich	GT409A	0277672/1	Mech		2002	
CH 3	Boiler-3	Boiler	DE Dietrich	GT409A	0230404/3	Mech		2002	
CH 3	WH-1	Boiler	PVI	45-0500-A-E	3844536	Bas Mech 2			
CH 3	WH-2	Boiler	PVI	18-G-200-A-E	38452502	Bas Mech 2			
CH 3	BLRP-2	Boiler Pump	Paco	16-30707-130101-1622EE	8967-B	Mech			
CH 3	BLRP-3	Boiler Pump	Paco	16-30707-130101-1622EE	8967-A	Mech			
CH 3	BLRP-3	Boiler Pump	Paco	16-30707-130101-1622EE	8967-C	Mech			
CH 3	BLRP-4	Boiler Pump	Paco	16-30707-130101-1622EE	8976-B	Mech			
CH 3	BLRP-5	Boiler Pump	Paco	16-30707-130101-1622EE	8976-A	Mech			
CH 3		Check Valve	Surgebuster	7204		Mech			
CH 3		Check Valve	Surgebuster	7204		Mech			

Courthouse Building 3

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 3	CWP-1	Chill Water Pump	Baldor	16-50957-13109-17821	8954-B	Mech			
CH 3	CWP-2	Chill Water Pump	Baldor	16-50957-13109-17821	8954-A	Mech			
CH 3	CWS-1A	Chill Water Supply	Paco	16-30957-130101-168211	8984-B	Mech			
CH 3	CWS-1B	Chill Water Supply	Paco	16-30957-130101-168212	8984-A	Mech			
CH 3	CWS-2A	Chill Water Supply	Paco	16-30957-130101-168213	8965-B	Mech			
CH 3	CWS-2B	Chill Water Supply	Paco	16-30957-130101-168214	8965-A	Mech			
CH 3	CWS-3A	Chill Water Supply	Paco	16-30957-130101-168215	8958-B	Mech			
CH 3	CWS-3B	Chill Water Supply	Paco	16-30957-130101-168216	8958-A	Mech			
CH 3	WCH-1	Chiller	Trane	RTHC1B1F0H0B1L2 B1LFV0U0D	U02K06884	Mech		2002	
CH 3	WCH-2	Chiller	Trane	RTHC1B1F0H0B1L2 B1LFV0U0D	U02K06883	Mech		2002	
CH 3	CHP-1	Chiller Pump	Paco	16-40707-130101-1662EE	9002-A	Mech			
CH 3	CHP-2	Chiller Pump	Paco	16-60967-140101-182xx	9002-B	Mech			
CH 3	Conv 1	Conv	Otis		81126X	Mech			

Courthouse Building 3

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 3	Conv 2	Conv	Otis		811263	Mech			
CH 3		Cooler	Heatcraft	LCA616AMC2B	D05D05287	Outside			Walk In Evap Only
CH 3	CT-1	Cooling Tower	Marley	HW7V3B2-C	22809-A1NC8303DL1CM	Outside		2002	
CH 3	CHCP-1	CP	Paco	16-60967-140101-182xx	3966201A	Mech			
CH 3	CHCP-2	CP	Paco	16-60967-140101-182xx	3966201B	Mech			
CH 3	CP-1	CP	Bell and Gosset	C60	C017788-01	Mech			
CH 3	CP-2	CP	Bell and Gosset	C60	C017788-02	Mech			
CH 3		CP	Taco			Bas Mech 2			
CH 3		CP	Taco			Bas Mech 2			
CH 3	EF-1	EF	Loren Cook	18L65B	92791-5773	Roof			
CH 3	EF-2	EF		CH3-0103-BFNX02		Mech			
CH 3	EF-3	EF	Loren Cook	27LC7B	92791-5774	Roof			
CH 3	EF-4	EF		CH3-0103-BFNX02		Mech			

Courthouse Building 3

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 3		EF	Loren Cook	150CPV	1.78047E+22	Roof			
CH 3		Gen	Cummins	VTA-1710-G	10616318	Mech			
CH 3		Heat Exchanger	Muller	AT10-F20	295739	Mech			
CH 3	HRU-1	Heat Recovery	Huntair		EM3770T	Roof New Jail		1997	
CH 3	HWS-1A	Hot Water Supply	Paco	16-25953-130101-16820E	8987-B	Mech			
CH 3	HWS-1B	Hot Water Supply	Paco	16-25953-130101-16820E	8987-A	Mech			
CH 3	HWS-2A	Hot Water Supply	Paco	16-25953-130101-16820E	8985-B	Mech			
CH 3	HWS-2B	Hot Water Supply	Paco	16-25953-130101-16820E	8985-A	Mech			
CH 3	HWS-3A	Hot Water Supply	Paco	16-25953-130101-16820E	8980-B	Mech			
CH 3	HWS-3B	Hot Water Supply	Paco	16-25953-130101-16820E	8980-A	Mech			
CH 3	HP-2	HP	Lenox	LHA120HN1G	5601A07731	Roof New Jail			
CH 3		HP		LHA120HN1G	5603C04991	Roof New Jail		2006	
CH 3	HP-1	Pump	Bell and Gosset		C017785-02 C60	Outside			

Courthouse Building 3

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 3	HP-2	Pump	Bell and Gosset		C017785-01 C60	Outside			
CH 3		Pump	Berkley	B1-1X21P16	G300702	Outside			
CH 3		Pump	Bermad	350	01925TU158	Outside		2001	
CH 3		Pump	Bermad	350	210020165	Outside		2001	
CH 3		Pump	Bermad	350	192510005	Outside		2001	
CH 3		Pump	Bermad	410-3NO	MIL800	Outside		2003	
CH 3		Roll Up Door				Sally Port			
CH 3		Trash Compactor	Marathon	RJ-250SC	4033080B	Outside		2002	
CH 3		Triple Valve	Bell and Gosset	3DX-1 1/2	132074 B60	Outside			
CH 3		Triple Valve	Bell and Gosset	3DX-1 1/2	132074 C60	Outside			
CH 3		UH				Reception			

Courthouse Building 4

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 4		Conv	OTIS		812452	BAS	Elev Mech		
CH 4		DHW	Bradford White	LD50533B050	WJ0823857	BAS	Mezz		
CH 4	HP-1-3	HP	Carrier	48TJD009---511--	3596G30168	Roof			
CH 4	HP-2-2	HP	Carrier	48TJD012---511--	3496G30981	Roof			
CH 4	HP-2-3	HP	Carrier	48TJD012---511--	3496G30974	Roof			
CH 4	HP-X-X	HP	Carrier	48TJD009---511--	3596G30171	Roof			
CH 4	HP-X-X	HP	Carrier	48TJD009---511--	3596G30170	Roof			
CH 4	HP-X-X	HP	Carrier	48TJCDD12A2A5A0A0G0	4515P87632	Roof			



Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
CH 5		AC Split	EMI	WHP30D020AA000 C	1-02-E-6403-18				
CH 5	AHU-1	AHU	Trane	YHD 150F3RHA0001BOA106 01020	123810309D			2012	
CH 5	AHU-2	AHU	Trane	YHC 047E3RMA0400BOA 10601000000C0000000	123811202L			2012	
CH 5	AHU-3	AHU	Trane	YHC047E3RMA0400BO A	123811462L			2012	
CH 5	AHU-4	AHU	Trane	YHC047E3RMA0400BO A 10601000000C0000000	123811482L			2012	
CH 5	AHU-5	AHU	Trane	YHC037E3RMA0400BO A 10601000000B0000000	123812002L			2012	
CH 5	AHU-6	AHU	Trane	YHC067E3RMA0400BO A 10601000000C0000000	123812027L			2012	
CH 5		DHW	Rheem	81MV52D B	R 0896C01016				
CH 5		Gen	Kohler	45 RZ82	366704				

## Coroner's Building

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Coroner	AHU-1	Air Handler	Trane	LPCAA03D1C0R700000 001DA3A0100000000	T02H63384	Attic			
Coroner	AHU-2	Air Handler	Trane	LPCAA03D1C0R700000 001DA3A0100000000	T02H63385	Attic			
Coroner	AHU-3	Air Handler	Trane	LPCAA03D1C0R700000 001DA3A0100000000	T02H63386	Attic			
Coroner		BFA	Febco	2"	3422	Outside	North		
Coroner	CU-1	Condensing Unit	Trane	TTB048D100A0	2205LYX5F	Outside	East	2002	
Coroner	CU-2	Condensing Unit	Trane	2TTA0072A3000AA	23418532F	Outside	East	2002	
Coroner	CU-3	Condensing Unit	Trane	TTB048D100A0	2205LUP5F	Outside	East	2002	
Coroner	CU-4	Condensing Unit	Trane	2TTA0072A3000AA	234GRR2F	Outside	East	2002	
Coroner		CP	Taco	008-FB7		1st	Janitor		
Coroner	CU Cooler	CU	Heatcraft	LHT025X6BFM	T15E03156	Outside	North	2015	
Coroner	CU Freezer	CU	Heatcraft	LZT045L6CF	T15C15353	Outside	North	2015	
Coroner	DH-1	Duct Heater	Reznor			Attic			No Tag
Coroner	DH-2	Duct Heater	Reznor			Attic			No Tag

## Coroner's Building

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Coroner	DH-3	Duct Heater	Reznor			Attic			No Tag
Coroner	DH-4	Duct Heater	Reznor			Attic			No Tag
Coroner		DWH	AO Smith	BTH150970	ME02-1724040-970	1st	Janitor		
Coroner	EF-1	Exhaust Fan	Greenheck			Attic			Not Accessible
Coroner	EF-2	Exhaust Fan	Greenheck			Attic			Not Accessible
Coroner	EF-3	Exhaust Fan	Greenheck			Attic			Not Accessible
Coroner		Gen	Kohler	30RE0ZJB	746814	Outside	East	2002	
Coroner	HRU-1	Heat Recovery	Greenheck	ERCH-20H-15-20-ES	02J01413	Attic			
Coroner	OHD-1	Roll Up Door	Overhead Door	SEL-171	934212-1000	1st	Garage		
Coroner	OHD-2	Roll Up Door	Overhead Door	SEL-171	934213-1000	1st	Garage		
Coroner	UH-1	UH	Reznor	UDAS45	BBG79X7N&3393X	1st	Garage		
Coroner		Winch	Dalton	5AA21		1st	Garage		

## Emergency Services

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ESC		ACR	General	E28171	LT425100A	1st	Fire Sprinkler Room		Dry System
ESC	AHU-1	AHU	Carrier	40RMQ016--B400YC	2098F42968	Bas	HVAC Room		
ESC	AHU-2	AHU	Carrier	40RMQ012--B400YC	2098F42995	Bas	HVAC Room		
ESC	AHU-3	AHU	Carrier	40RMQ012--B400YC	2098F43177	Bas	HVAC Room		
ESC	AHU-4	AHU	Carrier	40RMQ012--B500YC	2098F43279	Attic			
ESC	AHU-5	AHU	Carrier	40RMQ012--B500YC	2098F43197	Attic			
ESC	AHU-6	AHU	Carrier	40RMQ012--B500YC	2098F43195	Attic			
ESC		Conv	Otis		474891	Bas	Elev Room		25 HP
ESC		DHW	Rheem	EGSPO	599302251	Crawl			
ESC		DHW	AO Smith	Del 102	1251J014496	Crawl			
ESC		DWH	AO Smith	ELJF-50	MF98-0019537-918	Crawl			
ESC	EF-1	EF	Greenheck	BCF-106-3-X	98E18963	Bas	Elec		
ESC	EF-2	EF	Greenheck	BCF-207-4-X	98E18964	Bas	Elec		

## Emergency Services

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
ESC	Gate -1	Gate	Hy Security	222EX	21840	Outside	East	1998	
ESC	Gate-2	Gate	Hy Security	222EX	21840	Outside	East	1998	
ESC		Gen	Onan	250DFAC	F980753552	Outside	Rear		
ESC	HP-1	HP	Carrier	38AQS012---500--	4296F35391	Outside		1998	
ESC	HP-2	HP	Carrier	38AQS012---500--	1898F40233	Outside		1998	
ESC	HP-3	HP	Carrier	38AQS012---500--	1898F41867	Outside		1998	
ESC	HP-4	HP	Carrier	38AQS012---500--	1898F40205	Outside		1998	R22
ESC	HP-5	HP	Carrier	38AQS012---500--	189F40232	Outside		1998	R23
ESC	HP-6	HP	Carrier	38AQS012---500--	1898F40204	Outside		1998	R24
ESC	RF-1	RF	Greenheck	TAB-18L-5-X	98E18722	Bas	HVAC Room		
ESC		UPS	BEST Power Systems	FE7KVA	FE7K01132	Bas	Elec	1998	
ESC		UPS	Liebert	AP347	M10327F	Bas	Elec	1998	
ESC		UPS	BEST Power Systems	F5KVA-B	553901	Bas	Elec		

Evaluation and Treatment

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
E&T		AC Split	Mitsubishi			1st	Fire Control Room		No serial or tag accessible
E&T		AC Split	Mitsubishi			1st	Electrical Room		No serial or tag accessible
E&T	RTU-1	AHU	ENERGY LABS			Roof			Tag not legible
E&T	RTU-2	AHU	Energy Labs			Roof			Tag not legible
E&T	RTU-3	AHU	Energy Labs	010900xxxxx		Roof			Tag not legible
E&T		BFA	Wilkes	4"	19014	1st	Fire Room		
E&T		BFA	Wilkes	4"	15672	1st	Fire Room		
E&T	B-1	Boiler	Aerco	122660	AR-693276	2nd	Mech		
E&T	B-2	Boiler	Aerco	122660	AR-693277	2nd	Mech		
E&T		CP	Taco			2nd	Mech		Not Accessible
E&T		CU	Mitsubishi	PUG36AYB	WENM0788885	Roof	East		
E&T		CU	Mitsubishi	PUG24AYB	WONM051768	Roof			
E&T	DHW-1	DHW	AO Smith	BTR275A110	MF040005662	2nd	Mech		

Evaluation and Treatment

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
E&T	DHW-2	DHW	AO Smith	BTR275A110	MF040005661	2nd	Mech		
E&T	EF-1	EF	Cook	150C5B	0335787394-00/0000701	Roof		2004	
E&T	EF-2	EF	Cook	135C5B	0336787394-00/0C07301	Roof			
E&T		Generator	Kohler	350REOZD	2008800	Outside	North East		
E&T	HWP-1	HWP	Taco	F11511E2FAJ1L0B	EC07960/0	2nd	Mech	2004	
E&T	HWP-2	HWP	Taco	F11511E2FAJ1L0B	EC07960/8	2nd	Mech	2004	
E&T	CUH-054	UH				1st	East Vestibule		
E&T	UH-1	UH	Vulcan	HV-118A	H04489029001001	2nd	Mech	2004	
E&T		UPS	APC	SL30KF	WE0439110395	1st	Electrical Room		Battery Change 2011

Fairgrounds Expo Hall

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Expo	HVAC-1	AHU	Lenox	MVP-120		Attic			Residential Unit
Expo	HVAC-2	AHU	Lenox	MVP-120		Attic			Residential Unit
Expo	HVAC-3	AHU	Lenox	MVP-120		Attic			Residential Unit
Expo	HVAC-4	AHU	Lenox	MVP-120		Attic			Residential Unit
Expo	HVAC-5	AHU	Lenox	MVP-120		Attic			Residential Unit
Expo	CP-1	CP	Taco	007-BF5		Attic			
Expo	AC-1	CU	Lenox	HS26-048-4P	5802D70655	Outside			
Expo	AC-2	CU	Lenox	HS26-048-4P	5802D70654	Outside			
Expo	AC-3	CU	Lennox	HS26-048-4P	5802D45992	Outside			
Expo	AC-4	CU	Lennox	HS26-048-4P	5802D70653	Outside			
Expo	AC-5	CU	Lennox	HS26-048-4P	5802D70656	Outside			
Expo		DHW	AO Smith	FSG40248	GC02-0519005-248	Attic			40 Gal
Expo		DHW	AO Smith	FSG75250	GG02086236-280	Attic			75 Gal



Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Expo	EF-1	EF	Loren Cook	620		Attic			
Expo	EF-2	EF	Loren Cook	620		Attic			
Expo	EF-3	EF	Loren Cook	620		Attic			
Expo	EF-4	EF	Loren Cook	80SQN-B	033S6915000000007 010502	Attic			

Fairgrounds Heritage Hall

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Fairgrounds Site		Gate	Southgate Fence Inc.	SL-3000-UL-1		Outside	Main Entry		
Heritage		Boiler	Munchkin	399MASME	102L15445	Basement		2005	
Heritage		CP	Armstrong			Basement			No tag
Heritage		DHW	Armstrong	M-I-120R5D-3	XF2056916	Basement			120 Gal
Heritage		DHW	Bradford White	M150S6DS13	TB4601579	Workshop			50 Gal
Heritage		EF				Stage Room			
Heritage		HWP	Armstrong	ARMF10E8	180200-657	Basement			
Heritage		HWP	Armstrong	Astro230LL		Basement			Admin Pump
Heritage		UH	Sterling	HS-120	L05603479001002	Stage Room			
Heritage		UH	Sterling	HS-120	L05603479001001	Stage Room			
Heritage		UH	The Hot One			Workshop			Electric resistance hanging heater
Heritage		Wall AC	Sharp	AF-S125FX	5637474	Front Office			
Heritage		Wall AC Unit				Reception			No tag visible

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
FJC		AC Split	Mitsubishi			1st	111		CU on roof tag not accessible
FJC		AC Split	Mitsubishi			1st	UPS Room	2002	
FJC		ACR	Gast	5HCD-100TA-M550X	5Z675A	1st	Mech		Dry System
FJC	AHU-1	AHU	McQuay	RPS050CSA	37K0173602	Roof			
FJC	AHU-2	AHU	McQuay	RPS036CLA	37K0140300	Roof			
FJC	AHU-3	AHU	McQuay	RPS036CLA	37 K0140400	Roof			
FJC	AHU-4	AHU	McQuay	KPS018CSA	37K0140500	Roof			
FJC	AHU-5	AHU	McQuay	KPS018CSA	37K0173700	Roof			
FJC	AHU-6	AHU	McQuay	RPS018CSA	37K0140600	Roof			
FJC	AHU-7	AHU	McQuay	RPS018CSA	37K0140700	Roof			
FJC	B-1	Boiler	Bryan	AB120-w-FD-(BO)	80986	1st	Mech	1997	
FJC	B-2	Boiler	Bryan	AB120-w-FD-[BO]	80940	1st	Mech	1997	
FJC	B-3	Boiler	Bryan	AB120-w-FDG	95333	2nd	Mech	1997	

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
FJC	HWP-B1	Boiler Pump	Armstrong	281050-001	353694	1st	Mech	1997	
FJC	HWP-B2	Boiler Pump	Armstrong	281050-001	353694	1st	Mech	1997	
FJC	HWP-B3	Boiler Pump	Armstrong	281050-001	353694	1st	Mech	1997	
FJC	Conv 1	Conv	Otis	5620	474018	1st	71	1998	20 HP
FJC	Conv 2	Conv	Otis	5615	474019	1st	G119		15 HP
FJC	Conv 3	Conv	Otis	5615	474020	1st	71	1998	15 HP
FJC	Chair Lift	Conv Lift	Porchlift			1st	Control		No tag visible
FJC		CP	Taco	0010-RF7		1st	Mech	1997	
FJC		CP	Bell and Gosset	PL-368	1BL003	1st	Mech	1997	
FJC		CU	Mitsubishi	PUG36AYB	WKMM021158	Roof			
FJC		CU	Trane	WSC036E4RBA060 00A2B00000	722102592C	Roof			
FJC		CU	Mitsubishi	PU36EK	32E00991B	Outside	Gen Cage	2002	For UPS room AC Split
FJC	WH-1	DHW		750N600A-TP	89791960	1st	Mech	1997	

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
FJC	EF-1-1	EF	Penn Ven	DX14B		Roof			
FJC	EF-1-2	EF	Penn Ven	DX11B		Roof			
FJC	EF-1-3	EF	Penn Ven	DX08B		Roof			
FJC	EF-2-1	EF	Penn Ven	DX11B		Roof			
FJC	EF-2-2	EF	Penn Ven	DX11B		Roof			
FJC	EF-2-3	EF	Penn Ven	DX14B		Roof			
FJC	EF-4-1	EF	Penn Ven	DX16B		Roof			
FJC	EF-4-2	EF	Penn Ven	DX14B		Roof			
FJC	EF-4-3	EF	Penn Ven	FX18B		Roof			
FJC	EF-4-4	EF	Penn Ven	DX08B		Roof			
FJC	EF-5-1	EF	Penn Ven	DX16B		Roof			
FJC	EF-5-2	EF	Penn Ven	DX14B		Roof			
FJC	EF-5-3	EF	Penn Ven	FX18B		Roof			

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
FJC	EF-5-4	EF	Penn Ven	DX08B		Roof			
FJC	EF-6-1	EF	Penn Ven	DX16B		Roof			
FJC	EF-6-2	EF	Penn Ven	DX-14B		Roof			
FJC	EF-6-3	EF	Penn Ven	FX18B		Roof			
FJC	EF-6-4	EF	Penn Ven	DX08B		Roof			
FJC	EF-7-2	EF	Penn Ven	DX14B		Roof			
FJC	EF-7-3	EF	Penn Ven	FX18B		Roof			
FJC	EF-7-4	EF	Penn Ven	DX08B		Roof			
FJC		EF	Penn Ven	DX14B		Roof			
FJC		Gate	Trinity Gate	222CX	7086-6-7B-x-E	Sally Port			
FJC		Gen	Onan	350DFCC	J970655853	Outside	Gen Cage		350 KW
FJC	HWP-1	HWP	Taco	FE2010E2G1F2LOA		1st	Mech	1997	
FJC	HWP-2	HWP	Taco	F2010E2G1F2LOA		1st	Mech	1996	

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
FJC	Pump-3	Pump	Taco	F115E2FAJ1L0B	6C30072/1	1st	Mech	2007	
FJC	TU 1-4	TU	Tattle and Bailey			2nd	Low Voltage Room	1997	Serves Hallway
FJC		UH				1st	Stair Well		In wall unit
FJC		UH				1st	Entry		
FJC	UPS-01	UPS	EXIDE	130	EP194ZBA06	1st	UPS Room		

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Health		AC Split	Mitsubishi	PKA-A24KA4	1856	2nd	Equipment	2014	
Health	AHU-101	AHU	ICE			Attic		2001	
Health	AHU-102	AHU	ICE			Attic		2001	
Health	AHU-201	AHU	ICE			Attic		2001	
Health		BFA	Wilkins	3	37044	1st	Fire Sprinkler Room		
Health		Conv	Otis	SUB 140-46	6962 Y27	1st	Equipment		
Health	CP-6	CP	Bell and Gosset	HVABC10	102231	1st	Storage		
Health	AC-201	CU	Trane	RAUCC30EBU0300 D000000	C01047811	Outside	East	2001	
Health	CU-101	CU	Trane	TTA150E300AA	11135WCBYA	Outside	East	2011	
Health	CU-102	CU	Trane	TTA240B300DA	2093PGPAH	Outside	East	2001	
Health		CU	Mitsubishi	PUY-A24NHA4	22U11321B	Outside	South	2014	Serves IT Department
Health		DHW	Rheem	HE119-130N	060IT5104N	1st	Storage	2001	
Health	EF-101	EF	Cook			1st	Ceiling	2001	From original drawings



Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Health	EF-102	EF	Cook			1st	Ceiling	2001	From original drawings
Health	EF-103	EF	Cook			1st	Ceiling	2001	From original drawings
Health	EF-104	EF	Cook			1st	Ceiling	2001	From original drawings
Health	EF-105	EF	Cook			1st	Ceiling	2001	From original drawings
Health	EF-106	EF	Cook			1st	Ceiling	2001	From original drawings
Health	EF-201	EF	Cook			2nd	Ceiling	2001	From original drawings
Health	EF-202	EF	Cook			2nd	Ceiling	2001	From original drawings
Health		Generator	Kohler	CD40390E004	DD15352	Outside			John Deer Engine Model
Health	VAV-101	TU	Titus	DFCL					From original drawings
Health	VAV-102	TU	Titus	DFCL					From original drawings
Health	VAV-103	TU	Titus	DFCL					From original drawings
Health	VAV-104	TU	Titus	DESV					From original drawings
Health	VAV-105	TU	Titus	DTQS					From original drawings

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Health	VAV-106	TU	Titus	DESV					From original drawings
Health	VAV-107	TU	Titus	DESV					From original drawings
Health	VAV-108	TU	Titus	DESV					From original drawings
Health	VAV-109	TU	Titus	DESV					From original drawings
Health	VAV-110	TU	Titus	DESV					From original drawings
Health	VAV-111	TU	Titus	DTQS					From original drawings
Health	VAV-112	TU	Titus	DTQS					From original drawings
Health	VAV-113	TU	Titus	DESV					From original drawings
Health	VAV-114	TU	Titus	DESV					From original drawings
Health	VAV-115	TU	Titus	DTQS					From original drawings
Health	VAV-116	TU	Titus	DESV					From original drawings
Health	VAV-117	TU	Titus	DESV					From original drawings
Health	VAV-118	TU	Titus	DTQS					From original drawings

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Health	VAV-119	TU	Titus	DESV					From original drawings
Health	VAV-201	TU	Titus	DTQS					From original drawings
Health	VAV-202	TU	Titus	DTQS					From original drawings
Health	VAV-203	TU	Titus	DTQS					From original drawings
Health	VAV-204	TU	Titus	DESV					From original drawings
Health	VAV-205	TU	Titus	DTQS					From original drawings
Health	VAV-206	TU	Titus	DESV					From original drawings
Health	VAV-207	TU	Titus	DTQS					From original drawings
Health	VAV-208	TU	Titus	DESV					From original drawings
Health	VAV-209	TU	Titus	DESV					From original drawings
Health	VAV-210	TU	Titus	DTQS					From original drawings
Health	VAV-211	TU	Titus	DTQS					From original drawings

McLane Building and Annex

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Annex		Cooling Coil	Evcon	H30R48D	970655318	Annex	Attic	1997	
Annex		CU	Coleman Evcon	BRC80481BB	970592766	Annex			
Annex		DHW	AO Smith	FGR402240	GB95-2221126-S45	Annex	Attic	1995	Gas 40 Gal
Annex		Furnace	Lennox	Pulse 21		Annex	Attic		"Total Control" Damper control system
McLane		AC Wall	Hampton Bay	HBLG1203R		McLane	Kitchen		
McLane		Boiler	IBR	2BJ2	A505	McLane	Mech		Oil boiler abandoned in place
McLane		DHW	Rheem	42VR50-40F	RHLN1210V08783	McLane	Mech	2010	50 Gal
McLane	F-1	Furnace	Rheem			McLane	Attic		
McLane	F-2	Furnace	Rheem			McLane	Attic		
McLane		Heater	RE-VERBER-RAY			McLane	Engine Bay		
McLane		OHD	Liftmaster			McLane	Engine Bay		
McLane		OHD	Liftmaster			McLane	Engine Bay		

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley A	AC-A-1	AC Split	Mitsubishi	PKA-A12HA4	01A00726B	2nd	Data		
Tilley A	ACR- Dry	ACR	Gast	3LBA-32-14-200X		Truck Bay		1996	Dry System
Tilley A	CP-A-1	CP	Bell and Gosset	PL-30B	1BL011LF	1st	Drying Room		
Tilley A		Crane	FT Crane & Co	10 Ton		Truck Bay			
Tilley A	DF-1	DF				Truck Bay			Tag not accessible
Tilley A	DF-2	DF				Truck Bay			Tag not accessible
Tilley A	DF-3	DF				Truck Bay			Tag not accessible
Tilley A	DF-4	DF				Truck Bay			Tag not accessible
Tilley A	DF-7	DF				Car Bay			Tag not accessible
Tilley A	DF-8	DF				Car Bay			Tag not accessible
Tilley A	DH-A-1	DH	Neptronic	DFCI00H	102790027-001	Attic		2011	
Tilley A	DH-A-2	DH	Neptronic	DFCI00H	102790027-002	Attic		2011	
Tilley A	DH-A-3	DH	Neptronic	DFCI00H	102790027-003	Attic		2011	

Tilley Shop A

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley A	WH-A-1	DHW	Bradford White	120A-12-3-103J-AE	HM15989374	1st	Drying Room	2011	
Tilley A	EF-A-1	EF	Penn Barry	SX125BC	J11A059274	Attic		2011	
Tilley A	EF-A-3	EF	Penn Barry	SX115Q1C	J11AQ56272	1st	Parts Room		
Tilley A	EF-A-4	EF	Penn Barry	SX115Q1C	J11A059273	1st	Parts Room		
Tilley A	EF-A-5	EF	Penn Barry	SX12SBC	J11AQ59271	Attic		2011	
Tilley A	EF-A-7	EF	Penn Barry	WFX14B	J11AQ57886	Outside			On side of building
Tilley A	HP-106	HP	FHP	EP007-1HZC	3540-109-000001-T111M45291	Attic		2011	
Tilley A	HP-207	HP	FHP	ESO30-4HZC	3540-106-000001-T111M42699	Attic		2011	
Tilley A	HP-208	HP	FHP	ES018-4HZC	3540-109-000001-T111M45327	Attic		2011	
Tilley A	HP-A101	HP	FHP	APO71-4HZC	3540-109-000001-T111M45343	Attic		2011	
Tilley A	HP-A104	HP	FHP	ES018-4HZC	3540-109-000001-T111M37658	Attic		2011	
Tilley A	HP-A105	HP	FHP	ESO30-4HZC	3540-110-000001-T111M42699	Attic		2011	
Tilley A	HP-A107	HP	FHP	ESO30-3HZC	3540-109-000001-T111M38840	Attic		2011	

Tilley Shop A

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley A	HP-A108	HP	FHP	ES018-1HZC	3540-110-000001-T111M37654	Attic		2011	
Tilley A	HP-A109	HP	FHP	ES018-1HZC	3540-109-000003-T111M38840	Attic		2011	
Tilley A	HP-A201	HP	FHP	ES048-4HZC	3540-106-000001-T111M42689	Attic		2011	
Tilley A	HP-A202	HP	FHP	ES018-1HZC	3540-109-000002-T111M37658	Attic		2011	
Tilley A	HP-A204	HP	FHP	ES018-1HZC	3540-110-000003-T111M37657	Attic		2011	
Tilley A	HP-A205	HP	FHP	EP012-1HZC	3540-109-000001-T111M37679	Attic		2011	
Tilley A	HP-A206	HP	FHP	ES018-4HZC	3540-110-000002-T111M37657	Attic		2011	
Tilley A	HRU-A-1-1	HRU				Attic		2011	No information tag
Tilley A	OHD-1	OHD	Lift Master			Bay 1-4			Tag not accessible
Tilley A	OHD-2	OHD	Lift Master			Bay 1-4			Tag not accessible
Tilley A	OHD-3	OHD				Bay 1-4			Tag not accessible
Tilley A	OHD-4	OHD				Bay 1-4			Tag not accessible
Tilley A	OHD-5	OHD				Bay 1-4			Tag not accessible

Tilley Shop A

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley A	OHD-6	OHD				Bay 1-4			Tag not accessible
Tilley A	OHD-7	OHD				Bay 1-4			Tag not accessible
Tilley A	OHD-8	OHD				Bay 1-4			Tag not accessible
Tilley A	OHD-A	OHD				Car Bay	Bay A		Tag not accessible
Tilley A	OHD-B	OHD				Car Bay	Bay B		Tag not accessible
Tilley A	OHD-C	OHD				Car Bay	Bay C		Tag not accessible
Tilley A	OHD-D	OHD				Car Bay	Bay D		Tag not accessible
Tilley A	IRH-1	Radiant Heater	Modine			Truck Bay			Tag not accessible
Tilley A	IRH-10	Radiant Heater	Modine			Car Bay			Tag not accessible
Tilley A	IRH-11	Radiant Heater	Modine			Car Bay			Tag not accessible
Tilley A	IRH-12	Radiant Heater	Modine			Car Bay			Tag not accessible
Tilley A	IRH-2	Radiant Heater	Modine			Truck Bay			Tag not accessible
Tilley A	IRH-3	Radiant Heater	Modine			Truck Bay			Tag not accessible



Tilley Shop A

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley A	IRH-4	Radiant Heater	Modine			Truck Bay			Tag not accessible
Tilley A	IRH-5	Radiant Heater	Modine			Truck Bay			Tag not accessible
Tilley A	IRH-6	Radiant Heater	Modine			Truck Bay			Tag not accessible
Tilley A	IRH-7	Radiant Heater	Modine			Car Bay			Tag not accessible
Tilley A	IRH-8	Radiant Heater	Modine			Car Bay			Tag not accessible
Tilley A	IRH-9	Radiant Heater	Modine			Car Bay			Tag not accessible
Tilley A	UH-1	UH	Qmark			1st	Parts Room		
Tilley A	UH-2	UH	Qmark			1st	Parts Room		

Tilley Shop B

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley B	AHU-02	AHU	Trane	TWE060P13FB0	4073K6F1V	1st	Closet	2004	
Tilley B	AHU-03	AHU	Trane	TWE060P13FB0	4044AM02V	1st	Closet	2004	
Tilley B		CP	Taco	0041-BF4		1st	Elect		
Tilley B		CU	Mitsubishi	PUZ-A18NHA4	0XU00115A	Outside		2004	
Tilley B	DF-10	DF				Sign Shop			Not Accessible
Tilley B	DF-11	DF				Auto Shop			Not Accessible
Tilley B	DF-12	DF				Auto Shop			Not Accessible
Tilley B	DF-9	DF				Sign Shop			Not Accessible
Tilley B		DHW	AO Smith	DSE-120-A-200012000	J04R000013	1st	Elect		
Tilley B		HP	Trane	TWE036P13FB0	4086J871V	1st	Elect	2004	
Tilley B		HP	Trane	2TWA0036A3000A B	4204L3W4F	Outside		2004	
Tilley B		HP	Trane	2TWR2C0241A100 0AB	421WA14F	Outside		2004	
Tilley B		HP	Trane	2TWA0042A3000A B	4161W9X4F	Outside		2004	

Tilley Shop B

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley B		HP	Trane	2TWA0036A3000A B	4183WCF4F	Outside		2004	
Tilley B		HP	Trane	2TWA0036A3000A B	4082PUF4F	Outside		2004	
Tilley B		HP	Trane	2TWA006A3000AB	34838MT2F	Outside		2004	
Tilley B		HP	Trane	2TWA0030A3000A B	4054NJB4F	Outside		2004	
Tilley B	OHD-1	OHD	Liftmaster			Auto Shop			Not Accessible
Tilley B	OHD-2	OHD	Liftmaster			Auto Shop			Not Accessible
Tilley B	OHD-3	OHD	Liftmaster			Auto Shop			Not Accessible
Tilley B		OHD	Liftmaster			Sign Shop			Not Accessible
Tilley B		OHD	Liftmaster			Sign Shop			Not Accessible
Tilley B		UH	Taskmaster	F2F5107CA1L		Sign Shop			
Tilley B		UH	Taskmaster	F2F5107CA1L		Sign Shop			
Tilley B		UH	Taskmaster	F2F5107CA1L		Sign Shop			
Tilley B		UH	Taskmaster	F2F5107CA1L		Sign Shop			

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley B		UH	Taskmaster			Auto Shop			Not Accessible
Tilley B		UH	Taskmaster			Auto Shop			Not Accessible
Tilley B		UH	Taskmaster			Auto Shop			Not Accessible
Tilley B		UH	Taskmaster			Auto Shop			Not Accessible

Tilley Building C

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley C	AC-C-2	AC	Mitsubishi	PKA-A36KA4	11MC0246	1st	Construction		
Tilley C	AC-C-1	AC Split	Mitsubishi	PKA-A12HA4	01A00729B	Basement	Elevator Room		
Tilley C	Conv 1	Conv	Otis	ABA212\$1UA	235037	Basement	Elevator Room		
Tilley C	CP-C-1	CP	Bell and Gosset	PL-30B	1BL013F	Basement	Mech	2011	
Tilley C	EDH-C-3	DH				1st	Real Estate		No tag visible
Tilley C	WH-C-1	DHW	Bradford White	120A-12-3-100J-AA	HK15717884	Basement	Mech	2011	
Tilley C	EF-C-1	EF	Penn Barry	LF20BC	G11AK39932	Roof			
Tilley C	EF-C-2	EF	Penn Barry	LF12BC	G11AK39933	Roof			
Tilley C	EF-C-3	EF	Penn Barry	LF12BC	G11AK03002	Roof			
Tilley C	HP-C001	HP	FHP	ES061-4HZC	3540-106-000001-T111M42693	Basement	Storage		
Tilley C	HP-C002	HP	FHP	ES036-4HZC	3540-106-000002-T111M40131	Basement	Storage		
Tilley C	HP-C004	HP	FHP	ES030-4HZC	3540-106-000004-T111M42682	Basement	Storage		
Tilley C	HP-C005	HP	FHP	ES030-4HZC	3540-106-000001-T111M37658	Basement	Storage		

Tilley Building C

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley C	HP-C006	HP	FHP	ES042-4HZC	3540-110-000001-T111M42688	Basement	Storage		
Tilley C	HP-C007	HP	FHP	ES030-4HZC	3540-109-000001-T111M42674	Basement	Storage		
Tilley C	HP-C008	HP	FHP	ES018-1HZC	3540-106-000004-T111M42688	Basement	Storage		
Tilley C	HP-C101	HP	FHP	ES040-4HZC	3540-106-000002-T111M42687	1st	Lobby		
Tilley C	HP-C103	HP	FHP		3540-106-000002-T111M42699	1st	Construction		Model not accessible
Tilley C	HP-C107	HP	FHP		3540-106-000002-T111M42667	1st	Construction		Model not accessible
Tilley C	HP-C108	HP	FHP		3540-106-000002-T111M2673	1st	Construction		Model not accessible
Tilley C	HP-C109	HP	FHP	ES024-4HZC	3540-106-000001-T111M42673	1st	Real Estate		
Tilley C	HP-C110	HP	FHP	ES024-4HZC	3540-106-000001-T111M42673	1st	Real Estate		
Tilley C	HP-C111	HP	FHP	ES016-4HZC	3540-106-000001-T111M37657	1st	Real Estate		
Tilley C	HP-C112	HP	FHP	ES024-4HZC	3540-106-000004-T111M42666	1st	Real Estate		
Tilley C	HP-C201	HP	FHP	ES094-4HZC	3540-106-000003-T111M37658	2nd	Accounting		
Tilley C	HP-C204	HP	FHP	ES030-4HZC	3540-106-000001-T111M42667	2nd	Engineering		

Tilley Building C

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley C	HP-C205	HP	FHP	ES030-4HZC	3540-106-000001-T111M42688	2nd	Engineering		
Tilley C	HP-C206	HP	FHP	ES024-4HZC	3540-106-000005-T111M42666	2nd	Engineering		
Tilley C	HP-C207	HP	FHP	ES026-4HZC	3540-106-000003-T111M40131	2nd	Engineering		
Tilley C	HP-C208	HP	FHP	ES030-4HZC	3540-106-000003-T111M42667	2nd	Engineering		
Tilley C	HP-C209	HP	FHP	ES036-4HZC	3540-109-000001-T111M44946	2nd	Engineering		
Tilley C	HP-C210	HP	FHP	ES042-4HZC	3540-109-000001-T111M44959	2nd	Engineering		
Tilley C	HP-C213	HP	FHP	ES014-4HZC	3540-106-000002-T111M37638	2nd	Accounting		
Tilley C	HP-C214	HP	FHP	ES024-4HZC	3540-106-000003-T111M42673	2nd	Accounting		
Tilley C	HP-C215	HP	FHP	ES024-4HZC	3540-106-000001-T111M42672	2nd	Accounting		
Tilley C	CP-C-2A	Pump	Bell and Gosset	1510-BF	C131037-01F11	Basement	Mech		
Tilley C	CP-C-2B	Pump	Bell and Gosset	1510-BF	C131037-02E11	Basement	Mech		
Tilley C		UH		HW4407		Cistern Room			

Tilley Building D

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley D	Acomp-D-1	ACR	Champion	VR5-8	DM021762	Garage			
Tilley D		ACR	Gast	3LBA-465-M300AX		Garage			Dry System
Tilley D	CP-D-1	CP	Bell and Gosset	NBF-105/LW	103259LF	Garage			
Tilley D	WH-D-1	DHW	Bradford White	MII80A63CF07	HL15799713	Garage			
Tilley D		OHD	Micanan			Garage			Tag not accessible
Tilley D		OHD	Micanan			Truck Bay			Tag not accessible
Tilley D		OHD	Micanan			Truck Bay			Tag not accessible
Tilley D		OHD	Micanan			Truck Bay			Tag not accessible
Tilley D		OHD	Micanan			Truck Bay			Tag not accessible
Tilley D		PF				Garage			
Tilley D		PF				Truck Bay			Tag not accessible
Tilley D		PF				Truck Bay			Tag not accessible
Tilley D	UH-D-1	UH	Qmark			Garage			Tag not accessible



Tilley Building D

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley D	UH-D-10	UH	Qmark			Garage			Tag not accessible
Tilley D	UH-D-2	UH	Qmark			Garage			Tag not accessible
Tilley D	UH-D-3	UH	Qmark			Garage			Tag not accessible
Tilley D	UH-D-4	UH	Qmark			Garage			Tag not accessible
Tilley D	UH-D-5	UH	Qmark			Garage			Tag not accessible
Tilley D	UH-D-6	UH	Qmark			Garage			Tag not accessible
Tilley D	UH-D-7	UH	Qmark			Garage			Tag not accessible
Tilley D	UH-D-8	UH	Qmark			Garage			Tag not accessible
Tilley D	UH-D-9	UH	Qmark			Garage			Tag not accessible

## Tilley Building E

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley E	AC-E-1B	AC	Mitsubishi	PUY-A42NHAY	02U00550B	Outside			
Tilley E	AC-E-2B	AC	Mitsubishi	PUY-A42NHAY	02U00554B	Outside			
Tilley E	AC-E-3	AC	Mitsubishi			1st	Data		No tag visible
Tilley E	AC-E-3B	AC	Mitsubishi	PUY-A42NHAY	02U00553B	Outside			
Tilley E	AC-E-4	AC	Mitsubishi			1st	Data		No tag visible
Tilley E	AC-E-4B	AC	Mitsubishi	PUY-A42NHAY	02U00551B	Outside			
Tilley E	AC-E-5B	AC	Mitsubishi	PUY-A12NHAY	03U01701D	Outside			
Tilley E	AC-E-1	AC Split	Mitsubishi			3rd	Data		No tag visible
Tilley E	AC-E-2	AC Split	Mitsubishi			2nd	Data		No tag visible
Tilley E		ACR	Gast	1LAA-32-M100X		Sprinkler Room			Dry System
Tilley E	CP-E-2A	Chemical Pump	LMI	B921-D90HI	11063189149-2	Sprinkler Room			
Tilley E	CP-E-2B	Chemical Pump	LMI	B921-D90HI	11023110784-2	Sprinkler Room			
Tilley E	CP-E-1	CP	Bell and Gosset	PL-30B	1BL013LF	Sprinkler Room			

## Tilley Building E

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley E	WH-E-1	DHW	Bradford White	120A-12-3-103G-AA	HF15120629	Sprinkler Room			
Tilley E	EF-E-2	EF				Outdoor	Elec		No tag
Tilley E	EF-E-5	EF				1st	Storage		No tag
Tilley E	EF-E-6	EF				Sprinkler Room			No tag
Tilley E	EF-E-9	EF				1st	Data		No tag
Tilley E		Gen	Caterpillar			Outside			Not accessible
Tilley E	HP-E-1	HP	Trane	TWE120D300AA	11083TKTBA	Indoor	Mech Mezz		
Tilley E	HP-E-1B	HP	Trane	TWA090D30RAA	110344GDYA	Outside			
Tilley E	HP-E-2	HP	Trane	TWE090D300AA	1122RPRBA	Mech Mezz		2011	
Tilley E	HP-E-2B	HP	Trane	TWA090D30RAA	11145WPVYA	Outside			
Tilley E	HP-E-3	HP	Trane	TWE090D300AA	11122PTXBA	Mech Mezz		2011	
Tilley E	HP-E-3B	HP	Trane	TWA090D30RAA	11101WA6YA	Outside			
Tilley E	HP-E-4	HP	Trane	TWE120D300AA	11083UFFBA	Indoor	Mech Mezz		

## Tilley Building E

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley E	HP-E-4B	HP	Trane	TWA090D30RAA	110346KRYA	Outside			
Tilley E		PF	BIG ASS Fans			1st	Conference		Not accessible
Tilley E		PF	BIG ASS Fans			1st	Front Office		Not accessible
Tilley E		PF	BIG ASS Fans			1st	Front Office		Not accessible
Tilley E	SF-E-1	SF				1st	Data		
Tilley E	UH-E-1	UH	Taskmaster	F2F5107CA1L		1st	Storage		
Tilley E	UPS	UPS	Eaton	120	EE262CBB37	1st	Data		
Tilley E	VAV-E-10	VAV	Titus	DESV		Indoor	Mech Mezz		
Tilley E	VAV-E-11	VAV	Titus	DESV		Indoor	Mech Mezz		
Tilley E	VAV-E-12	VAV	Titus	DESV		Indoor	Mech Mezz		
Tilley E	VAV-E-16	VAV	Titus	DESV		Mech Mezz			
Tilley E	VAV-E-17	VAV	Titus	DESV		Mech Mezz			
Tilley E	VAV-E-4	VAV	Titus	DESV		Indoor	Mech Mezz		

Tilley Building E

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Tilley E	VAV-E-5	VAV	Titus	DESV		Indoor	Mech Mezz		
Tilley E	VAV-E-6	VAV	Titus	DESV		Indoor	Mech Mezz		
Tilley E	VAV-E-7	VAV	Titus	DESV		Indoor	Mech Mezz		
Tilley E	VAV-E-8	VAV	Titus	DESV		Indoor	Mech Mezz		
Tilley E	VAV-E-9	VAV	Titus	DESV		Indoor	Mech Mezz		

Tilley Site

Building	Asset Name	Asset Type	Manufacturer	Model #	Serial #	Floor/Space	Room	Install Date	Comments
Site	Main Entry	Gate	Hy Security	Slide Smart DC15	SL15-1143-379	Site		2011	1500lb
Site	Service Entry	Gate	Hy Security	Slide Smart DC15	SL15-1128-711	Site		2011	1500lb
Site	Service Exit Gate	Gate	Hy Security	Slide Smart DC15	SL15-1143-378	Site		2011	1500lb
Site	Service Gate	Gate	Hy Security	Slide Smart DC15	SL15-1141-306	Site		2011	1500lb
Site		Gate	Hy Security	Slide Smart DC15		Wash-down Gate		2011	1500lb
Site		Generator	Caterpillar	216-9349	39194	Site		2006	



ARC AC-4.jpg



ARC AC-1.jpg



ARC AC-2.jpg



ARC AC-3.jpg



ARC ACCU-1.jpg



ARC ACCU-2.jpg



ARC ACCU-3.jpg



ARC ACCU-4.jpg



ARC ACCU-5.jpg



ARC ACCU-6.jpg



ARC ACR.jpg



ARC AHU-1.jpg



ARC AHU-2.jpg



ARC AHU-3.jpg



ARC AHU-4.jpg



ARC AHU-5.jpg



ARC AHU-6.jpg



ARC BFA North Yard.jpg





ARC B-1.jpg



ARC B-2.jpg



ARC CU-1.jpg



ARC CU-2.jpg



ARC CU-3.jpg



ARC CU-5.jpg



ARC CU-4.jpg



ARC FREEZER CU.jpg



ARC FRIDGE CU.jpg



ARC EF-1.jpg



ARC EF-2.jpg



ARC EF-3.jpg



ARC EF-4.jpg



ARC EF-5.jpg



ARC EF-6.jpg



ARC EF-7.jpg



ARC EF-8.jpg



ARC EF-9.jpg





ARC EF-10.jpg



ARC EF-11.jpg



ARC Gate-1.jpg



ARC Generator.jpg



ARC GWH-1A-1C.jpg



ARC GWH-2A.jpg



ARC GWH-2B.jpg



ARC GWH-3A.jpg



ARC GWH-3B.jpg



ARC GWH-4A.jpg



ARC GWH-4B.jpg



ARC GWH-5A.jpg



ARC GWH-5B.jpg



ARC HRC-3.jpg



ARC HRP-1.jpg



ARC HRP-2.jpg



ARC HRP-4.jpg



ARC HWP-1.jpg





ARC HWP-2.jpg



ARC HWP-3.jpg



ARC HWP-5.jpg



ARC HWP-6.jpg



ARC HWP-7.jpg



ARC HWP-8.jpg



ARC MAU-1.jpg



ARC MAU-2.jpg



ARC RHWP-1.jpg



ARC RHWP-2.jpg



ARC RHWP-3.jpg



ARC RHWP-4.jpg



ARC RV-1.jpg



ARC RV-2.jpg



ARC RV-3.jpg



ARC RV-4.jpg



ARC RV-5.jpg



ARC RV-6.jpg





ARC Sump Pump.jpg



ARC TU-1-201-205.jpg



ARC TU-1-206-208.jpg



ARC TU-2-201-205.jpg



ARC TU-2-206-208.jpg



ARC TU-3-201.jpg



ARC TU-3-202.jpg



ARC TU-3-204.jpg



ARC TU-3-205.jpg



ARC TU-3-206.jpg



ARC TU-3-207.jpg



ARC TU-6-201.jpg



ARC RHWP-6.jpg



ARC UPS-1.jpg





Work Release AC-101.jpg



Work Release ACCU-201.jpg



Work Release EF-101.jpg



Work Release EF-102.jpg



Work Release GWH-1A.jpg



Work Release GWH-1B.jpg



Work Release RHWP-1.jpg



Work Release RPBA-1.jpg



Work Release RTU-101.jpg



Work Release UH-101.jpg



Work Release UPS-1.jpg



Work Release UPS-E.jpg





Coroner AHU-1.jpg



Coroner AHU-2.jpg



Coroner AHU-3.jpg



Coroner BFA.jpg



Coroner CP.jpg



Coroner CU-1.jpg



Coroner CU-2.jpg



Coroner CU-3.jpg



Coroner CU-4.jpg



Coroner CU-Cooler.jpg



Coroner CU-Freezer.jpg



Coroner DH-1.jpg



Coroner DH-2 .jpg



Coroner DH-3.jpg



Coroner DH-4.jpg



Coroner DHW.jpg



Coroner Generator.jpg



Coroner HRU-1.jpg





Coroner OHD-1.jpg



Coroner OHD-2.jpg



Coroner UH-1.jpg



Coroner Winch.jpg



CH1 AHU.jpg



CH1 AHU Bas.jpg



CH1 AHU Split.jpg



CH1 Condensor.jpg



CH1 EF-1.jpg



CH1 EF Roof.jpg



CH1 UPS.jpg



CH2 ACR.jpg



CH2 AHU-210.jpg



CH2 Circ.jpg



CH2 Conv 1.jpg



CH2 Conv 2.jpg



CH2 DHW.jpg



CH2 EF-211.jpg





CH3 AC CU.jpg



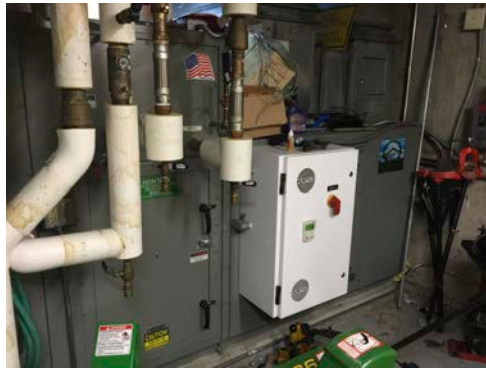
CH3 ACR Cooling .jpg



CH3 ACO 1&2.jpg



CH3 AHU Roof Penthouse.jpg



CH3 AHU-2.jpg



CH3 AHU-254.jpg



CH3 BFA 1.jpg



CH3 BFA 2&3.jpg



CH3 BFA Mech 2.jpg





CH3 BLRP.jpg



CH3 Boiler 1.jpg



CH3 Boiler 2.jpg



CH3 Boiler 3.jpg



CH3 CHCP.jpg



CH3 CHP.jpg



CH3 Compactor.jpg



CH3 Conv 1.jpg



CH3 Conv 2.jpg



CH3 Cooler.jpg



CH3 CP.jpg



CH3 CP Mech 2.jpg



CH3 CT-1.jpg



CH3 Pumps Cooling 1.jpg



CH3 Pumps Cooling 2.jpg



CH3 CWP.jpg



CH3 CWS.jpg



CH3 EF2.jpg





CH3 EF-3.jpg



CH3 EF-4.jpg



CH3 EF Roof.jpg



CH3 Generator.jpg



CH3 HPs.jpg



CH3 HWS.jpg



CH3 Triple Valve.jpg



CH3 WCH-1.jpg



CH3 WCH-2.jpg



CH3 WH1.jpg



CH3 WH-2.jpg



CH4 Conv .jpg



CH4 DHW.jpg





ESC ACR.jpg



ESC AHU-1.jpg



ESC AHU-2.jpg



ESC AHU-3.jpg



ESC AHU-4.jpg



ESC AHU-5.jpg



ESC AHU-6.jpg



ESC Conv.jpg



ESC EF-1.jpg





ESC EF-2.jpg



ESC Gate-1.jpg



ESC Gate-2 .jpg



ESC Generator.jpg



ESC HP-1.jpg



ESC HP-2.jpg



ESC HP-3.jpg



ESC HP-4.jpg



ESC HP-5.jpg



ESC HP-6.jpg



ESC RF-1.jpg



ESC UPS 1.jpg



ESC UPS 2.jpg



ESC UPS 3.jpg



ESC WH 1.jpg



ESC WH 2.jpg



ESC WH 3.jpg





Eval AC Split 1.jpg



Eval AC Split 2.jpg



Eval B-1 to B-2.jpg



Eval DHW-1 to DHW-2.jpg



Eval CP.jpg



Eval CU 1.jpg



Eval CU-2.jpg



Eval EF-2.jpg



Eval EF-1.jpg



**Eval HWP 1 to 2.jpg**



**Eval RTU-1.jpg**



**Eval RTU-2.jpg**



**Eval RTU-3.jpg**



**Eval UH-1.jpg**



**Eval UPS.jpg**





Fairgrounds Main Gate.jpg



Expo AC-1.jpg



Expo AC-2.jpg



Expo AC-3.jpg



Expo AC-4.jpg



Expo AC-5.jpg



Expo CP-1.jpg



Expo DHW 1.jpg



Expo DHW 2.jpg



Expo EF-1.jpg



Expo EF-2.jpg



Expo EF-3.jpg



Expo EF-4.jpg



Expo HVAC-1.jpg



Expo HVAC-2.jpg



Expo HVAC-3.jpg



Expo HVAC-4.jpg



Expo HVAC-5.jpg





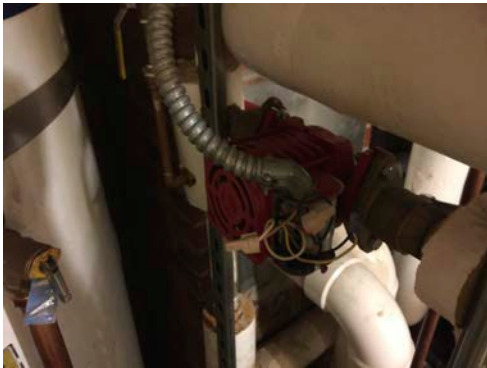
Heritage AC Wall 1.jpg



Heritage AC Wall 2.jpg



Heritage Boiler.jpg



Heritage CP.jpg



Heritage DHW 1.jpg



Heritage DHW 2.jpg



Heritage EF.jpg



Heritage HWP 1.jpg



Heritage HWP 2.jpg



Heritage UH 1.jpg



Heritage UH 2.jpg



Heritage UH 3.jpg



FJC AC Split 1.jpg



FJC AC Split 2.jpg



FJC ACR Dry System.jpg



FJC AHU-1.jpg



FJC AHU-2.jpg



FJC AHU-3.jpg



FJC AHU-4.jpg



FJC AHU-5.jpg



FJC AHU-6.jpg





FJC AHU-7.jpg



FJC B-1.jpg



FJC B-2.jpg



FJC B-3.jpg



FJC Chair Lift.jpg



FJC CP 1.jpg



FJC Conv 1.jpg



FJC Conv 2.jpg



FJC Conv 3.jpg





FJC CP-2.jpg



FJC CU 1.jpg



FJC CU 2.jpg



FJC CU 3.jpg



FJC EF.jpg



FJC EF-1-1.jpg



FJC EF-1-2.jpg



FJC EF-1-3.jpg



FJC EF-2-1.jpg



FJC EF-2-2.jpg



FJC EF-2-3.jpg



FJC EF-4-1.jpg



FJC EF-4-2.jpg



FJC EF-4-3.jpg



FJC EF-4-4.jpg



FJC EF-5-1.jpg



FJC EF-5-2.jpg



FJC EF-5-3.jpg





FJC EF-5-4.jpg



FJC EF-6-1.jpg



FJC EF-6-2.jpg



FJC EF-6-3.jpg



FJC EF-6-4.jpg



FJC EF-7-1.jpg



FJC EF-7-2.jpg



FJC EF-7-3.jpg



FJC EF-7-4.jpg



FJC Gate.jpg



FJC Generator.jpg



FJC HWP 1 through 3.jpg



FJC HWP-B3.jpg



FJC HWP-B2.jpg



FJC HWP-B1.jpg



FJC RH-1.jpg



FJC TU-1-4.jpg



FJC UPS.jpg



FJC UH 1.jpg



FJC UH 2.jpg



FJC WH-1.jpg





Health AC-101.jpg



Health AC-102.jpg



Health AC-201.jpg



Health AC Split.jpg



Health AHU-101.jpg



Health AHU 102.jpg



Health AHU-201.jpg



Health BFA.jpg



Health CU Split.jpg



Health Conv.jpg



Heatlh CP-6.jpg



Health DHW.jpg



Health Generator.jpg





Annex Cooling Coil.jpg



Annex CU.jpg



Annex DHW.jpg



Annex Furnace.jpg



McLane AC Wall.jpg



McLane Boiler (decommissioned).jpg



McLane DHW.jpg



McLane F-1.jpg



McLane F-2.jpg





McLane Heater.jpg



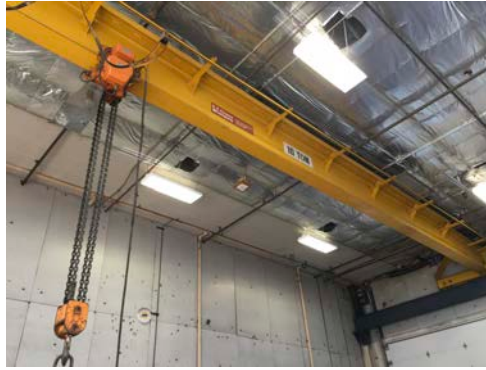
McLane OHD 1.jpg



McLane OHD 2.jpg



Tilley A CP-A-1.jpg



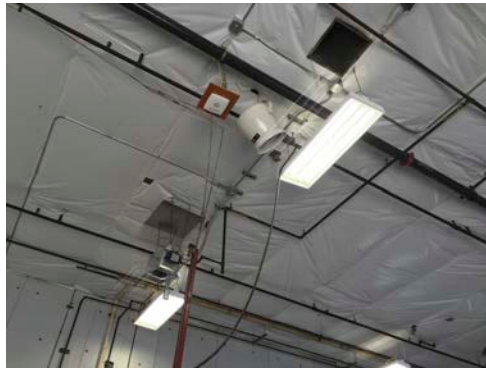
Tilley A Crane .jpg



Tilley A DF-1 to 2.jpg



Tilley A DF-3 to 4.jpg



Tilley A DF-7.jpg



Tilley A DF-8.jpg



Tilley A DH-A-1.jpg



Tilley A DH-A-2.jpg



Tilley A DH-A-3.jpg



Tilley A EF-A-1.jpg



Tilley A EF-A-3.jpg



Tilley A EF-A-4.jpg



Tilley A EF-A-5.jpg



Tilley A EF-A-7.jpg



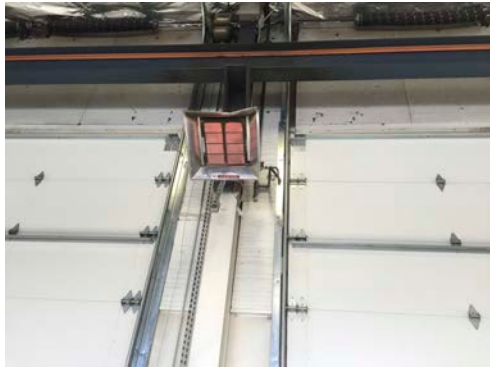
Tilley A IRH-1.jpg



Tilley A IRH-2.jpg



Tilley A IRH-3.jpg



Tilley A IRH-4.jpg

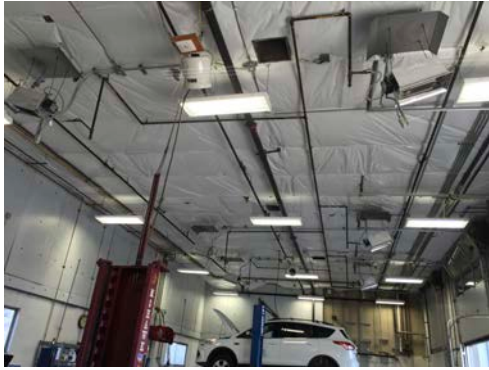




Tilley A IRH-5.jpg



Tilley A IRH-6.jpg



Tilley A IRH-7 to 12.jpg



Tilley A HP-A101.jpg



Tilley A HP-A104.jpg



Tilley A HP-A105.jpg



Tilley A HP-A106.jpg



Tilley A HP-A107.jpg



Tilley A HP-A108.jpg



Tilley A HP-A109.jpg



Tilley A HP-A201.jpg



Tilley A HP-A202.jpg



Tilley A HP-A206.jpg



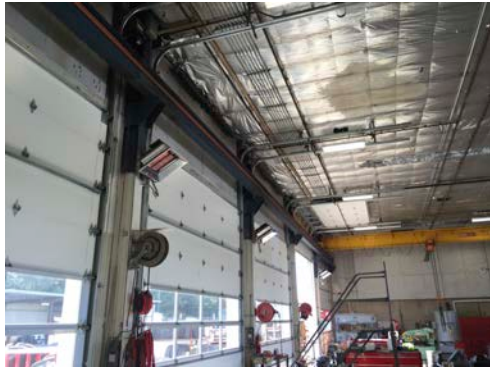
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Tilley A HP-208.jpg



Tilley A HRU-A-101.jpg



Tilley A OHD-1 to 8.jpg



Tilley A OHD-A to D.jpg





Tilley A UH-1.jpg



Tilley A UH-2.jpg



Tilley A WH-A-1.jpg



Tilley B AHU-03.jpg



Tilley B CP.jpg



Tilley B CU 1.jpg



Tilley B DF-9.jpg



Tilley B DF-11.jpg



Tilley B DHW.jpg



Tilley B HP 1.jpg



Tilley B HP 2.jpg



Tilley B HP 3.jpg





Tilley B HP 4.jpg



Tilley B HP 5.jpg



Tilley B HP 6.jpg



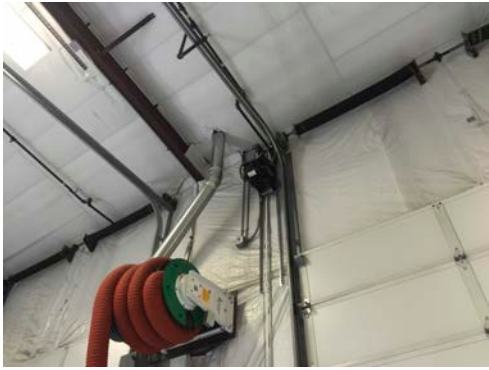
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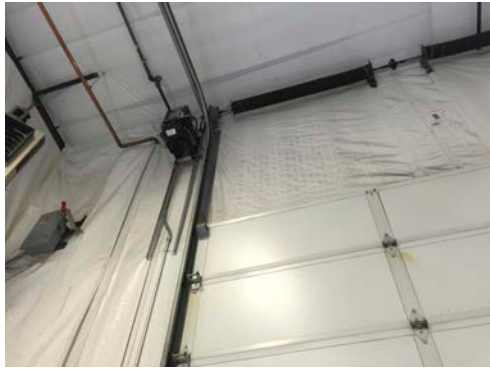
Tilley B HP 8.jpg



Tilley B OHD 1 and 2.jpg



Tilley B OHD-3.jpg



Tilley B OHD-4.jpg



Tilley B OHD-5.jpg





Tilley B UH 1.jpg



Tilley B UH 2.jpg



Tilley B UH 3.jpg



Tilley B UH 4.jpg



Tilley B UH 5.jpg



Tilley B UH 6.jpg



Tilley B UH 7.jpg



Tilley B UH 8.jpg



Tilley C AC-C-1.jpg



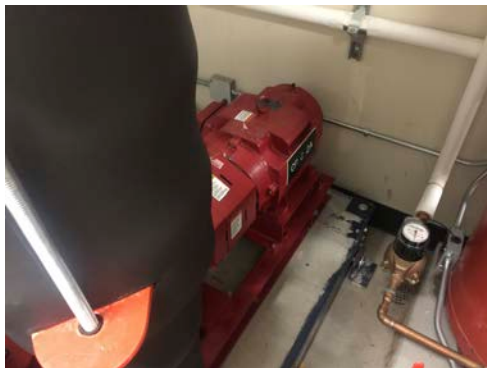
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Tilley C Conv 1.jpg



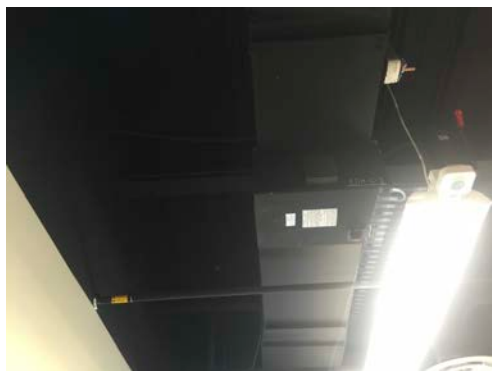
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Tilley C CP-C-2A.jpg



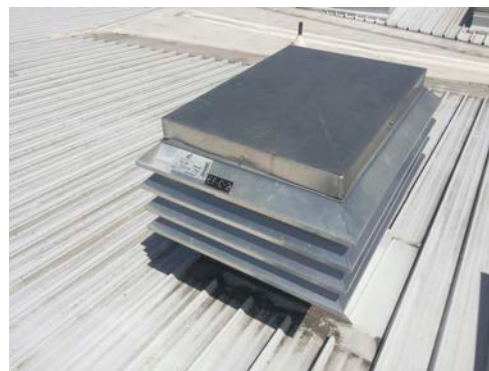
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Tilley C EDH-C-3.jpg



Tilley C EF-C-1.jpg



Tilley C EF-C-2.jpg



Tilley C EF-C-3.jpg



Tilley C HP-C001.jpg



Tilley C HP-C002.jpg



Tilley C HP-C003.jpg



Tilley C HP-C004.jpg



Tilley C HP-C005.jpg



Tilley C HP-C006.jpg



Tilley C HP-C007.jpg



Tilley C HP-C101.jpg





Tilley C HP-C103.jpg



Tilley C HP-C107.jpg



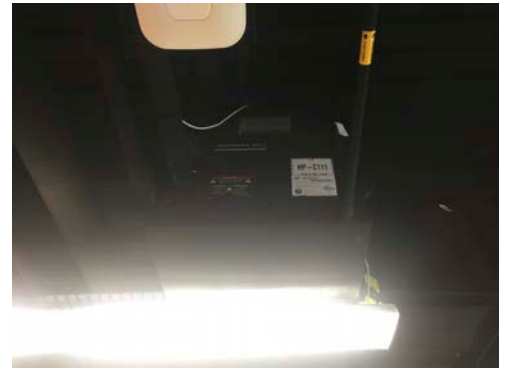
Tilley C HP-C108.jpg



Tilley C HP-C109.jpg



Tilley C HP-C110.jpg



Tilley C HP-C111.jpg



Tilley C HP-C112.jpg



Tilley C HP-C201.jpg



Tilley C HP-C204.jpg



Tilley C HP-C205.jpg



Tilley C HP-C206.jpg



Tilley C HP-C207.jpg



Tilley C HP-C208.jpg



Tilley C HP-C209.jpg



Tilley C HP-C210.jpg



Tilley C HP-C213.jpg



Tilley C HP-C214.jpg



Tilley C HP-C215.jpg



Tilley C UH 1.jpg



Tilley C WH-C-1.jpg



Tilley D ACOMP-D-1.jpg



Tilley D ACR Dry System.jpg



Tilley D CP-D-1.jpg



Tilley D OHD 1.jpg



Tilley D OHD 2.jpg



Tilley D OHD 3.jpg



Tilley D OHD 4.jpg



Tilley D OHD 5.jpg

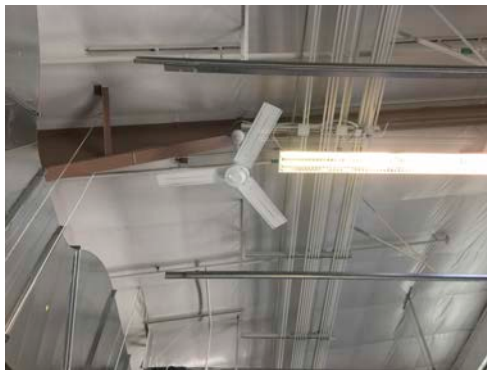


Tilley D OHD 6.jpg

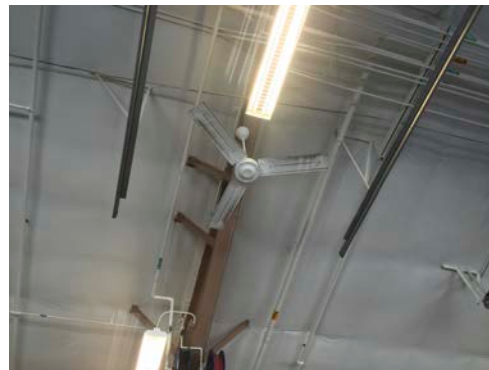




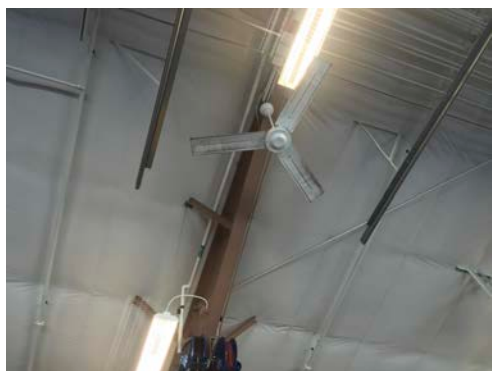
Tilley D OHD 7.jpg



Tilley D PF 1.jpg



Tilley D PF 2.jpg



Tilley D PF 3.jpg



Tilley D UH-D-1.jpg



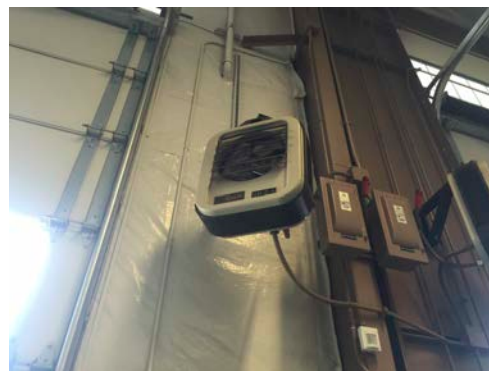
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Tilley D UH-D-3.jpg

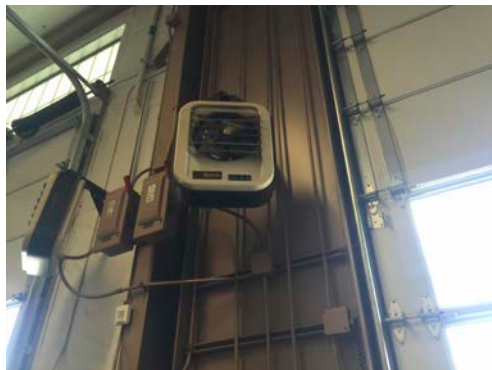


Tilley D UH-D-4.jpg



Tilley D UH-D-5.jpg





Tilley D UH-D-6.jpg



Tilley D UH-D-7.jpg



Tilley D UH-D-8.jpg



Tilley D UH-D-9.jpg



Tilley D UH-D-10.jpg



Tilley D WH-D-1.jpg



Tilley E AC-E-1.jpg



Tilley E AC-E-1B.jpg



Tilley E AC-E-2.jpg



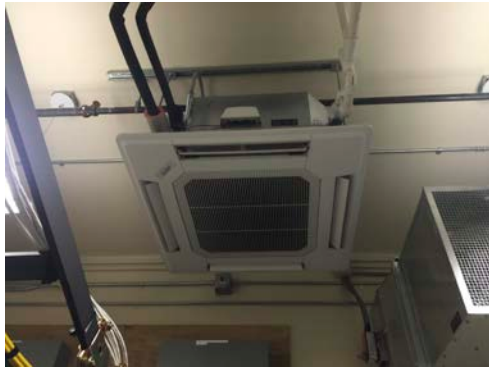
Tilley E AC-E-2B.jpg



Tilley E AC-E-3.jpg



Tilley E AC-E-3B.jpg



Tilley E AC-E-4.jpg



Tilley E AC-E-4B.jpg



Tilley E AC-E-5B.jpg





Tilley E ACR Dry System.jpg



Tilley E CP-E-1.jpg



Tilley E CP-E-2A and 2B.jpg



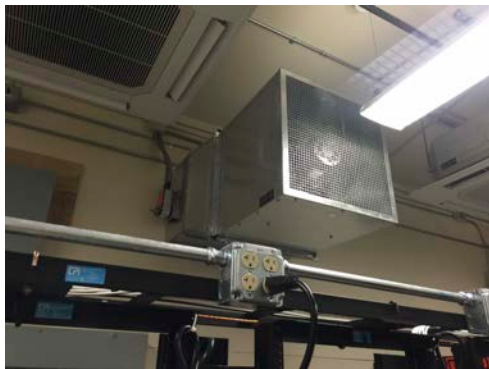
Tilley E EF-E-2.jpg



Tilley E EF-E-5.jpg



Tilley E EF-E-6.jpg



Tilley E EF-E-9.jpg



Tilley E Generator.jpg



Tilley E HP-E-1.jpg



Tilley E HP-E-1B.jpg



Tilley E HP-E-2.jpg



Tilley E HP-E-2B.jpg



Tilley E HP-E-3.jpg



Tilley E HP-E-3B.jpg



Tilley E HP-E-4.jpg



Tilley E HP-E-4B.jpg



Tilley E VAV-E-4.jpg



Tilley E VAV-E-5.jpg





Tilley E VAV-E-6.jpg



Tilley E VAV-E-7.jpg



Tilley E VAV-E-8.jpg



Tilley E VAV-E-9.jpg



Tilley E VAV-E-10.jpg



Tilley E VAV-E-11.jpg



Tilley E VAV-E-12.jpg



Tilley E VAV-E-16.jpg



Tilley E VAV-E-17.jpg



Tilley E SF-E-1.jpg



Tilley E PF 1.jpg



Tilley E PF 2 and 3.jpg



Tilley E UH-E-1.jpg



Tilley E UPS.jpg



Tilley E WH-E-1.jpg





Tilley Site Gate.jpg



Tilley Site Generator.jpg



Tilley Site Main Entry Gate.jpg



Tilley Site Service Entry.jpg



Tilley Site Service Exit Gate.jpg



Tilley Site Service Gate.jpg

## VI. APPENDIX

This appendix includes supporting documentation related to the FCA process.

### 6.1 Facility List

Facility	Address	City	Zip
Thurston County Courthouse Bldg. #1	2000 Lakeridge Dr. SW	Olympia	98502
Thurston County Courthouse Bldg. #2	2000 Lakeridge Dr. SW	Olympia	98502
Thurston County Courthouse Bldg. #3	2000 Lakeridge Dr. SW	Olympia	98502
Thurston County Courthouse Bldg. #4	929 Lakeridge Dr. SW	Olympia	98502
TwinStar Building #5	2400 Evergreen Park Dr. SW	Olympia	98502
Emergency Services Building	2703 Pacific Ave SE	Olympia	98502
County Health Building	412 Lilly Rd	Olympia	98506
McLane Building and Annex	5033 Harrison Ave NW	Olympia	98502
Evaluation and Treatment facility	3436 Mary Elder Rd NE	Olympia	98506
Tilley Complex Shop A	9605 Tilley Rd SW	Olympia	98512
Tilley Complex Shop B	9605 Tilley Rd SW	Olympia	98512
Tilley Complex Building C	9605 Tilley Rd SW	Olympia	98512
Tilley Complex Building D	9605 Tilley Rd SW	Olympia	98512
Tilley Complex Building E	9605 Tilley Rd SW	Olympia	98512
Family Justice Center	2801 32nd Ave	Tumwater	98502
Coroners Building	2925 37th Ave SW	Tumwater	98512
Accountability and Restitution Building	3491 Ferguson St SW	Tumwater	98512
ARC Work Release Building	3491 Ferguson St SW	Tumwater	98512
Heritage Hall	3054 Carpenter Rd	Lacey	98503
Expo Hall	3054 Carpenter Rd	Lacey	98503
G Lot Infrastructure	2000 Lakeridge Dr. SW	Olympia	98502
J Lot Infrastructure	910 24 <sup>th</sup> Way SW	Olympia	98502



## 6.2 FCA Project Team

### Thurston County

2000 Lakeridge Dr. SW  
Olympia, WA 98502

#### **Martin Casey**

Central Services Director  
[caseym@co.thurston.wa.us](mailto:caseym@co.thurston.wa.us)  
360-867-2944 (cell)  
360-867-2944 (desk)

#### **Julie DeRuwe**

Facility Services Manager  
[deruwej@co.thurston.wa.us](mailto:deruwej@co.thurston.wa.us)  
360-867-2944 (desk)

#### **Michael Carpenter**

Facilities Services Supervisor  
[carpenm@co.thurston.wa.us](mailto:carpenm@co.thurston.wa.us)  
360-870-9527 (desk)

### FCA PRIME-Consultant

#### **MENG Analysis -**

[www.menganalysis.com](http://www.menganalysis.com)



2001 Western Ave, Suite 200  
Seattle, WA 98121  
Phone: (206) 587-3797

#### **Joel Davis**, Project Principal

[jdavis@menganalysis.com](mailto:jdavis@menganalysis.com)

#### **John Boatman**, Team Leader/ Cost Analysis

[john@menganalysis.com](mailto:john@menganalysis.com)

#### **Doug Smith**, Mechanical/ Electrical/ Plumbing Assessments

[doug@menganalysis.com](mailto:doug@menganalysis.com)

#### **Jeff Mitchell**, Engineering Technician

[jeff@menganalysis.com](mailto:jeff@menganalysis.com)

#### **Sarah Partap**, Project Manager

[sarah@menganalysis.com](mailto:sarah@menganalysis.com)

#### **Adrianne Larsen**, Data Entry and Report Production

[Adrianne@menganalysis.com](mailto:Adrianne@menganalysis.com)

#### **Eric Meng**, Database Design, Analysis, and Reporting

[emeng@mengnet.com](mailto:emeng@mengnet.com)

### MENG Analysis FCA Sub-Consultant

#### **John Hunt** – Hunt Engineering Services Mechanical/Electrical/Plumbing Assessments

[johnhunt@hunteng.com](mailto:johnhunt@hunteng.com)

### 6.3. FCA Terminology & Abbreviations

**Facility Condition Assessment (FCA):** A structured process to document the conditions of site infrastructure and building systems. FCAs are typically performed by a multi-disciplinary team of architects, engineers, construction, and cost specialists. Facility information and condition data should be maintained in a database for ease of updating and reporting. The data should be renewed over time.

**Facility Condition Index (FCI):** A benchmark used to compare relative condition of facilities within a portfolio of assets; derived by the following formula:

$$\text{FCI} = \frac{\text{Backlog of Maintenance and Repair (BMAR)}}{\text{Current Replacement Value (CRV)}}$$

There are a number of different methods used by various organizations to calculate that backlog. For this reason, using FCIs to compare a County's facilities to other organizations is not always appropriate.

This study uses a parametric method that calculates BMAR based on the assessed condition scores. The statistical basis is a study conducted by NASA on over 10,000 surveyed facilities that evaluated the backlog of repair items relative to qualitative condition scores 1 through 5. The parametric backlog for each system is calculated based on a statistical theoretical percentage of that system that would need repair or replacement for each of the qualitative condition scores. The costs of those systems are the facility use cost models customized for Thurston County.

**Life Cycle Renewal Model:** A theoretical forecast of when building systems will exceed their typical lifespan and funding will be required for renewals.

**Parametric Costs:** Parametric cost estimating is a technique that uses statistical relationships between historical cost data and other program variables such as system condition or age. Historical cost data is typically used at a high level (e.g., cost per square foot) and often represent conceptual, order-of-magnitude costs for initial planning or discussion purposes.

**Remaining Useful Life:** An estimate of the years that a facility system may remain serviceable or in operation before failure; which would then require system renewal or replacement.

**Subsystem:** The term "subsystem" in this report refers to a Uniformat Level 3 building systems category (e.g., B3010 - Roof Coverings; or B3020 - Roof Opening; or B3030 - Projections).

**System:** The term "system" in this report refers to a Uniformat Level 2 building system category (e.g., B3000 - Roofing)

The following terms are used in the MENG Analysis FCA Database:  
(See also the database user's manual for more specific definitions.)

**Last Major System Renewal:** The year in which a system was last renewed (substantially repaired or replaced).

**Original System Date:** The year a system was originally constructed/installed.

**Subsystem Assessed Condition Score:** The field surveyors' assessment of condition assigned to each facility subsystem. The rating uses a scale of 1 through 5, where 1=excellent, 2=good, 3=fair, 4=poor, 5=unacceptable. Different subsystem % of CRV's are included in the database for each of the different facility use types (e.g. Maintenance shops vs. police station Vs fire station, etc.)

**BMAR (backlog of maintenance and repair):** This is an estimated amount that would need to be spent to bring the facility up to good condition.

**Subsystem Normal Life:** Industry standard subsystem life between renewals or replacement cycles.

**System Coverage:** The amount of area in a facility containing a specific system, expressed as percent of building or site size.

Certain FCA terms are also expressed as formulas in the MENG Analysis FCA Database, as follows:

**Adjusted Current Replacement Value (CRV) (\$/SF)** = Base CRV \* Geographic Adjustment Factor \* Construction Type Adjustment Factor \* Gross Square Footage Adjustment Factor

Base CRV: is the current replacement cost of the facility, including construction and project cost markups. It is contained in the CRV models for each facility use type. That base CRV is factored by geographic, size, and type of construction specific to each facility to attain the facility specific CRV.

**Current Replacement Value (CRV)** = Adjusted CRV \* Gross Square Footage

**Renewal Budget** (for Infrastructure) = [Site Area]\*[System Coverage]\*[Infrastructure Unit Cost]\*[Subsystem Renewal Factor]

**Renewal Budget** (for Building) = ([Facility Size Gross]\*[System Coverage]\*[Subsystem Unit Cost]\*[Subsystem Renewal Factor])

**Subsystem Age** = Age of system in years since last major system renewal = Year of Survey – Year of Last Major System Renewal

**List of Commonly Used Abbreviations**

AC = Asphalt Concrete

A/V = Audio/video

AHU = Air handling unit

ASHRAE = American Society of Heating, Refrigeration, & Air Conditioning Engineers

BacNET = Building automation & control network (an ASHRAE standard for DDC systems)

CCTV = Closed circuit television

CFH = Cubic feet per hour (of natural gas)

CFL = Compact fluorescent

CI = Cast iron

CO<sub>2</sub> = Carbon dioxide

CU = Condensing unit

Cx = Commissioning

DDC = Direct digital control

DHW = Domestic hot water

DW&V = Drain, waste, & vent

Dx = Direct expansion

EA = Each (measurable unit)

EF = Exhaust fan

EMT = Electrical metallic tubing (conduit)

FDC = Fire department connection

FSD = Fire smoke damper

GFCI = Ground fault circuit interrupter

GI = Grease interceptor

GRD = Grills, Registers, & Diffusers

HID = High intensity discharge (lamps)

HVAC = Heating, ventilating, and air conditioning

IDF = Intermediate distribution frame

IDP = Integrated Data Processing

IES = Illuminating Engineering Society

IT = Information technology

Kva = (kilovolt-amp)

LF = Linear feet (measurable unit)

LED = Light emitting diode

LS = Lump sum (measurable unit)

MAU = Make-up air unit

MDF = Main distribution frame

Min = Minimum

NEC= National electric code

ORD = Overflow roof drain

OWS = Oil/water separator

PA = Public address

POU = Point of use

PRV = Pressure regulating valve

Psig = Pounds per square inch (pressure)

PVC = Polyvinyl chloride

R-22 = Refrigerant No. 22 (generic refrigerant type)

RBPB = Reduce pressure backflow preventer

RD = Roof drain (occasionally Resident Director)

RTU = Roof top unit

SF = Square feet (measurable unit)

SOG = Slab on grade

TAB = Test, adjust, & balance

Ton = One ton of air conditioning = 12,000 Btu/hr (British thermal units per hour)

TU = Terminal unit

UH = Unit heater

UPS = Uninterruptible power supply

VAV = Variable air volume

VFD = Variable frequency drive

VOIP = Voice over internet protocol

WAP = Wireless access point

WiFi = Wireless fidelity

#### 6.4 FCA O&M Workshop Sheets

Site:		Site Size (acres):	
Facility (Bldg.):	County Courthouse Bldg. 1	Bldg. Size (sf):	43588
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr.):	Major Renovation (yr.):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	78		Most problems in buildings 1,2, and 3
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			<i>some chords cracked</i>
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			<i>Pac- Center floor cracked and broken. Carpet needed in several areas. Soffit metal flaking off. Bad floors. Second floor needs to be releveled. Some timber sagging.</i>
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			<i>Brick Veneer. Single pane windows</i>
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			<i>Soffit is compromised- pulling away from building/ needs paint. Membrane at flat areas. Bad roofs.</i>
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			<i>Many door locks worn out.</i>
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			<i>Steelpan with concrete fill except #2 which is wood</i>
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			<i>All three- many offices need paint and carpet. Ugly wall coverings. Needs new wall coverings.</i>
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			<i>old. Elevator needs to be upgraded per manufacturers rep to bring up to code.</i>
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			<i>needs domestic water pipe replaced - some fixtures replaced. Galvanized, cast iron, - starting to fail. Bathroom remodel.</i>
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			<i>Air handler is very old. Pneumatic controls obsolete. One exhaust fan for building which runs 24/7. Partial zone DDC. Hydronic, PVC Piping. Gas fired boilers, chillers, and cooling tower in building 3. Old HVAC. Building data center cooling may not be sufficient. Economizer on air handler does not work. Supply needs balancing.</i>
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			<i>Upgraded panels in last few years. Upgraded approximately 2006.</i>
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm., security & safety). D5090 - Other.			<i>old - maxed out capacity T-8 few years ago. Duress system obsolete. CAT 6 rewired recently. Overloaded outlets. No security in building .electronic door controls are minimal and need expansion.</i>
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			<i>Old. Carpet replacements</i>
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			<i>Sidewalks are trip hazards in some areas/needs shed for tools by mech room. Trees need evaluating. Dead. IRR dead. Paving poor. Walks poor. Roadways need repair</i>
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			<i>lift station. Steel water lines PRUs all need work. Some water lines replaced with some galvanized in place. Pipping needs replacement, can not heat building with PVC.</i>
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			<i>3 separate meters (1 = IRR). Needs more lighting controls and occupancy sensors.</i>
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors), G9090 - Other site systems (outbuildings, yard racks, etc.).			<i>Breezeway roof drains are leaking. Needs paint.</i>

Site:		Site Size (acres):	
Facility (Bldg):	County Courthouse Bldg 2	Bldg Size (sf):	41250
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).			
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			Tunnel from #3 to #2. Soffit paint.
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			Previous structural collapse in law library. Bad floors - roof leaks. Glulam replaced.
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			single pane windows. Soffits need repair.
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			roofing at end of life.
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			Old locksets and hardware.
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			Needs paint and carpet. Needs new wall finishings.
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			Old
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Needs repiping for domestic water. 1st floor womens floor drain plugged. Bathroom remodel. One collapsed drain line in restroom.
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			air handler at end of life . Previous condensate adjusted to elevator room. Poor balancing, long recovery time makes it hard for night set backs and create comfort.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm., security & safety). D5090 - Other.			Need more capacity. No real lighting controls. Need more electrical outlets.
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Need to remove trees.
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			water lines.
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			



Site:		Site Size (acres):	
Facility (Bldg):	County Courthouse Bldg 3	Bldg Size (sf):	77248
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	70		
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			(2) basement areas. Soffit paint. Exterior wall of new jail leaks.
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			Bad floors. Bathroom floors leak
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Single pane windows. Soffits need repair. Needs cleaning, waterproofing and painting.
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			At end of life. Roof leaks around skylights
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			Paint and carpet. Old lockset and hardware. Most Jail doors and locks are worn out. Old jail needs to be torn down. Everything in it needs replacing.
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			Needs paint and carpet. Jail showers need new tile.
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			OLD
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Needs domestic water lines replaced. Bathroom remodel. Cracked cast iron
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			7 AHU 2 heat pumps and kit AHU. At end of life. New air compressor. Poor balancing and PVC pipe allows only low temp heating loops. Main jail AHU needs outside air dampers replaced. Dishwasher exhaust fan is bad. Dryer vents rotted out. HP-2 return fan leaks.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm., security & safety). D5090 - Other.			Overloaded outlets. Camera cabling old/ DUTEL installed
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			Jail dryers at end of life. Laundry not used. Kitchen equipment abandoned.
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			Old
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			Jail. Touchscreen
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			Water lines. No hot water system - running on boiler backup heat exchanger (2 years now). Lift station pumps need rebuild. Some drain lines failing.
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	County Courthouse Bldg 4	Bldg Size (sf):	16219
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	70s		
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			Previous insulation problem - still dry rot. 2nd floor bouncy.
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Brick/wood . Windows flashed wrong - dry rot. South wall wood needs replacement.
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			membrane old but functional.
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			New Rubber Covering. New stair treads.
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			Fair/poor. Need paint and carpet
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			poor/ Cantilevered hydraulics.
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Poor galvanized. Old solder joints. Floor drain in basement plugged
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			6 AHU end of life but newer controls. Not on county system. 1 new air handler. No DDC System. Honeywell thermostat. Heat pumps/AHUs and disconnects need replacing.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			Not sprinklered. Needs new FACP
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			Fire panel board. Cross circuit/panels. Pigtail lights- T-12 some upgraded T-8. No generator.
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Parking lot sealed 2014
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			Sump at low point adjusted to exterior wall. Waste pipe prev. Broken, not repaired correctly.
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			Storm drain at rear lot. Probably with heavy Raw
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors), G9090 - Other site systems (outbuildings, yard racks, etc.).			Parking lot drain obstructed.

Site:		Site Size (acres):	
Facility (Bldg):	Twinstar Credit Union Bldg 5	Bldg Size (sf):	19916
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).			
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.		12 to 13	New roof/ entry breezeway leaks. Glass awning at front in poor condition.
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			recent remodel
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			Older elevator. Small.
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			Has new airhandlers (all). Split cooling unit in telecom is broken. VAV front building 0 heat pump for rest, controls large zone.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			No sprinkler system.
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			Generator - natural gas. Generator small and old.
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Parking lot crumbling needs to be repaved.
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	Emergency Services	Bldg Size (sf):	17997
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).		99?	
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Brick and metal siding. Back door wearing out.
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			Gutter and downspouts are rusted out. Roof is old but good. Needs roof hatch.
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			Bathroom walls bad formica.
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			Wearing
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			yes
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Copper piping.
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			AHU in poor condition. Variety of issues. Needs backup cooling for data. Frequent problems. Basement radio equipment room needs backup cooling. Risk of failure of all equip and emergency services.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			Yes. Dry and wet.
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Gates needed to be updated.
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	County Health	Bldg Size (sf):	24226
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	2001	2001	
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Brick
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			pitched metal roof. Need tie off anchors - related to gutter reach.
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			Good
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			One
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Unknown cleanout locations
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			AHU loud above managers office - harmonic intake adjustment to general exhaust. Obsolete antiquated control. Building not connected to system. New Delta EMS needs to be installed,
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			Yes.
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			T-8 50% of service to LED. Emergency generator powers coolers with load shedding 25-30 kv
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			tight drive approach
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Sewer discharge issue? Maybe natural spring - drainage issues?
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			water supply pipe repaired 2016
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	two facilities on one site
Facility (Bldg):	Mclane Building & Annex	Bldg Size (sf):	11428
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	67		<i>annex in good shape. Degraded.</i>
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			<i>Tower on fire building needs removed. Very poor</i>
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			<i>Old locks</i>
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			<i>New. Fire building needs roof.</i>
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			<i>Hap-hazard</i>
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			<i>Weak.</i>
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			<i>Bad floors and carpet. Looks bad everywhere.</i>
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			<i>Septic tank system</i>
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			<i>One natural gas meter. FS small boiler, gas furnace? Annex heat pumps. Old boiler?</i>
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			<i>no. Obsolete? Needs to be replaced.</i>
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			<i>one electrical meter. At capacities - mix/match not code compliant. Some smoke/heat detectors. Sub-standard.</i>
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			<i>three septic tanks. Septic system failing</i>
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			<i>electrical wiring bad. Fixtures wearing out.</i>
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	Evaluation & Treatment Facility	Bldg Size (sf):	20050
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	2003/04		Concrete hardly ever dry.
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			Site drainage east side flooding and runoff
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			Flooring bubbling - coming up.
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			Membrane.
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			Needs new flooring throughout. Walls and floors need constant repair.
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			ok
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			boiler aging.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			Yes
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			Electrical Access. Analog cameras. Generator and site - whole building. LED Lighting. Camera system should be upgraded in next 5 years.
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			Laundry and kitchen equipment some replacement refers, washers, and dryers.
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			Carpet
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Potential copper contamination from lumber yard.
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			French drain failed.
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	Tilley Shop A	Bldg Size (sf):	22695
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

*two stories and mezz*

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).			<i>New construction on 1/2 of building.</i>
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			<i>Pest infiltration through roof areas.</i>
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			<i>metal. Remodeled. Some doors and cases are original and rusting.</i>
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			<i>gutters damaged on several building on Tilley property. Metal</i>
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			<i>steel</i>
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			<i>no</i>
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			<i>shop radiant. Heat and cooling at office.</i>
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			<i>yes</i>
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			<i>issue with electrical.</i>
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			<i>various</i>
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			<i>Septic. Original well water supply system needs updating. Sewer pump rebuild within next 5 years. Domestic water needs maintenance.</i>
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			



Site:		Site Size (acres):	
Facility (Bldg):	Tilley Shop B	Bldg Size (sf):	12979
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	12 or 13		Original/ vehicle shop remodeled.
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			Open areas in siding allows pest infiltration .
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			worn roofing leaks in places.
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			Metal roofing leaks at vent openings. Needs snow stops on roof.
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			dated and worn
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			worn carpet/ needs paint.
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Original water heater
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			HVAC needs upgrading - fly infestation
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			7 heat pumps, dated/ original.
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			dated/ original
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			dated/ original
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			original/ dated
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors), G9090 - Other site systems (outbuildings, yard racks, etc.).			suspended walk - good

Site:		Site Size (acres):	
Facility (Bldg):	Tilley Building C	Bldg Size (sf):	24070
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	2012		
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			<i>external wall water infiltration</i>
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			<i>Front doors a constant expense.</i>
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			yes
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			<i>reclaimed domestic water system. Water distribution/supply and volume and pressure due to well. System undersized for structures on site. Well system original. Well - high copper readings.</i>
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			<i>geo thermal primary heat. Relief dampers not sealed, insect entry.</i>
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			yes
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			<i>PV panels on roof</i>
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			<i>Generators need maintenance/rebuild</i>
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			<i>Electric heated sidewalk.</i>
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			<i>Water supply lacking. Domestic tank pumped to other buildings.</i>
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors), G9090 - Other site systems (outbuildings, yard racks, etc.).			<i>Gates require frequent repairs</i>

Site:		Site Size (acres):	
Facility (Bldg):	Tilley Building D	Bldg Size (sf):	8786
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).			Vehicle storage
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			Radiant heaters BAF
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			oil/ water separator.
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	Tilley Building E	Bldg Size (sf):	11619
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	2012		
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Need awning on south doors. Front doors and locks have frequent issues.
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Original well system needs upgrading. Water reclaim doesn't work right. Backflows upstairs/no drains
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			BAFs. HP -1 needs a reverse flow damper installed.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			New panel 2016
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			PV system.
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	Family Justice Center	Bldg Size (sf):	83225
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	97		Settlement?
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			Need prep and paint of CMU walls
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Window leaks. CMU not well sealed. Remediated mold.
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			Membrane roof
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			CMU = det.
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			Need painting in high use areas. Need carpeting replaced in high use areas.
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			2 public/staff 1 detainee
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			HWH- piping corrosion? Need exterior landscape irrigation repair or replaced.
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			Hydronic heat. Delta controls. RTUs - older need backflush. Boilers near 20 years old. Check exhaust at roof /mech room. Heating system needs upgrade. Boilers need to be checked and domestic water heaters needs replacement. Compressor for AHU for 2nd floor problem.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			improved annunciator is required.
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			Analog cameras over 18 years old. Annunciator panel working? Smoke detection per code? Need security camera upgrade. Old DOS lighting controls. Overloaded.
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			Laundry equipment. Food supplied by jail w/ reach in
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			AC Ground water issue at ADA parking.
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Ground water seeps into parking lot. Some sidewalks are spalling. Irrigation system needs major work.
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			Storm water ponds need cleaned out.
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			The entire complex needs new cameras. Some cameras are 20 years old.
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	Coroner's Building	Bldg Size (sf):	6950
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	199?		
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Masonry
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			Pitched metal, some panels slide out, no snow stop. Metal roofing not secured properly. Dormers faced with wood should be metal.
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			Floor finishes need updating
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Sanitary sewer has low spot near morgue
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			Gas packs Nat gas. Condensation issue. Moved units out of attic. Condensate drain lines plugged. Heating needs updating. Reznor gas heaters not reliable. Issues with heating and cooling in old units.
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			Generator fuel tanks need the top to be repaired.
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			Generator 250Kv. Installed condensing units outside for Body Freezer /cooler 7/2016. Autopsy equipment
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			Laundry, dated
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Parking lot sealed 2015
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:	(detention facility)	Site Size (acres):	
Facility (Bldg):	Accountability and Restituion Facility	Bldg Size (sf):	100000
Number of Buildings	1	Number of Portables	N/A
Site I.D. #		Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE	INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
<b>Foundations</b> A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).	2010		No drainage. Sat vacant for several years. Minimal op. min 2 years.
<b>Basements</b> A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
<b>Super-structure</b> B10	B1010 - Floor construction. B1020 - Roof construction.			stress cracks - a lot! Phase 1 of 3
<b>Exterior Closure</b> B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Swipes and closures - tilt-up
<b>Roofing</b> B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			Membrane, two levels. Need scuppers on upper roof. Outfalls to lower roof. Needs washing
<b>Interior Construction</b> C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			Residential grade - CMU, some frame. Some doors on cells will need replacing as well as some light fixtures in yard.
<b>Staircases</b> C20	C2010 - Stair construction. C2020 - Stair finishes.			Mechanical mezz. One area is two-story
<b>Interior Finishes</b> C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			Inmate abuse. FRP DT dish pit area. All showers will need paint and floor coating in next 2 years. Kitchen recoat 5 years.
<b>Vertical Transport</b> D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			None
<b>Plumbing</b> D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			Acorn fixtures. Trap primers not working. Inadequate. 11 HWH. Some with storage tanks. Pumps replaced. SS-ace to one 4" line.
<b>HVAC</b> D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			Issue. East air handler water pulled with 100% OSA. 100% DX cooling. Boilers not good, space, quality. Hot water 2-pipe system. Fulton boilers. Ducts will need contracted cleaning in the next 5 years. Some circ pumps will need rebuild or replacement. Some reheat building pumps replaced. Air intake adjusted to SE vent System oversized.
<b>Fire Protection</b> D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection. Full with some dry			4 AHU-HR, six total. Fill with some dry
<b>Electrical</b> D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			Cell lights causing apparent damage. UPS starting to age, 30 and 80 KVA. Analog cameras and cabling. Need to replace with digital cameras. 600 W generator 2 ATS - good. Announce panel not working. No communication
<b>Equipment</b> E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			Specialized. Full kitchen. Kitchen and laundry equipment needs constant attention. Makeup air/compost air project on going.
<b>Furnishings</b> E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
<b>Special Construction</b> F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			Padded cell needs regular paint. Security controls good - new PCS coming
<b>Site Improvements</b> G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Flooding on back parking lot. Sally port. Drainage due to seal at front. Drain needed. Recycle glass for IRR piping - not tumbled.
<b>Site Wet Utilities</b> G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			Muffin Monster below grade, flood. Holding pond/drainage. Will need rebuild in next 5 years and permanent sump
<b>Site Dry Utilities</b> G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
<b>Other Site Construction</b> G90	G9010 - Service & pedestrian tunnels (including utilidors). G9090 - Other site systems (outbuildings, yard racks, etc.).			

Site:		Site Size (acres):	
Facility (Bldg):	ARC Work Release Building	Bldg Size (sf):	10700
Number of Buildings	1	Number of Portables	N/A
Site I.D. #	verify on site with ARC	Building I.D. #	
Today's Date:		Original Construction (yr):	Major Renovation (yr):

LEVEL II UNIFORMAT SYSTEM NAME & CODE		INCLUDES	YEAR OF ORIGINAL CONSTRUCTION	YEAR OF LAST MAJOR RENEWAL	O&M Workshop Pre-survey Input - major work recently completed (last 5 years), current major issues, significant near future (next 5 years) concerns
Foundations	A10	A1010 - Standard foundations. A1020 - Special foundations. A1030 - Slab-on-grade (SOG).		2015/14	
Basements	A20	A2020 - Structural walls, water proofing, drainage, exterior surfaces.			
Super-structure	B10	B1010 - Floor construction. B1020 - Roof construction.			
Exterior Closure	B20	B2010 - Exterior walls. B2020 - Exterior windows. B2030 - Exterior doors.			Concrete tilt up with panels. Storefront
Roofing	B30	B3010 - Roof coverings. B3020 - Roof openings. B3030 - Roof projections.			membrane flat
Interior Construction	C10	C1010 - Partitions (fixed & moveable). C1020 - Interior doors. C1030 - Fittings (specialties).			
Staircases	C20	C2010 - Stair construction. C2020 - Stair finishes.			mezz
Interior Finishes	C30	C3010 - Wall finishes. C3020 - Floor finishes. C3030 - Ceiling finishes.			
Vertical Transport	D10	D1010 - Elevators & lifts. D1090 - Other conveying systems.			
Plumbing	D20	D2010 - Fixtures. D2020 - Water distribution. D2030 - Sanitary waste. D2040 Rain water drainage. D2090 - Other (special).			back of building drainage - low spots
HVAC	D30	D3010 - Energy supply. D3020 - Heating. D3030 - Cooling. D3040 - Dist. D3050 - Terminal & pkgd. D3060 - Controls. D3090 - Other HVAC.			VAV and natural gas
Fire Protection	D40	D4010 - Fire protection sprinkler. D4020 - Stand-pipe & hose systems. D4030 - Fire protection specialties. D4090 - Special fire protection.			Sprinklers
Electrical	D50	D5010 - Electrical service & dist. D5020 - Lighting & branch wiring. D5030 - Low voltage (comm, security & safety). D5090 - Other.			T-8
Equipment	E10	E1010 - Commercial (laundry, office). E1020 - Institutional (lab, AV). E1030 - Vehicular (lifts, parking, dock). E1090 - Other.			Will need new washer and dryer in next 5 years. 5 set. Residential type
Furnishings	E20	E2010 - Fixed furnishings (art, casework, window treatments, floor mats, seating). E2020 - Moveable furnishings (tables, chairs, shelves).			
Special Construction	F10	F1010 Special structures. F1020 Integrated const. F1030 Special const. F1040 Special facilities. F1050 Special controls & inst.			
Site Improvements	G20	G2010 - Roadways. G2020 - Parking lots. G2030 - Pedestrian paving. G2040 - Site development. G2050 - Landscaping.			Small shed for welding on site - older
Site Wet Utilities	G30	G3010 Water supply. G3020 Sanitary sewer. G3030 Storm sewer. G3040 Heating distribution. G3050 Cooling distribution. G3060 Fuel dist.			
Site Dry Utilities	G40	G4010 - Site electrical distribution. G4020 - Site lighting. G4030 - Site communications & security.			
Other Site Construction	G90	G9010 - Service & pedestrian tunnels (including utilidors), G9090 - Other site systems (outbuildings, yard racks, etc.).			Shed west hall panel needs attention.



## 6.5. FCA Survey Forms & Methodology

### 6.5.a Condition Survey Form Development

Survey forms were developed for the facility condition assessments based on the Unifomat Level 3. All Level 3 subsystems are described with evaluation criteria. The evaluation criteria descriptions clearly explain what elements were included and excluded from each Level 3 subsystem.

Each survey form is accompanied by a deficiency report form that is completed when Observed Deficiencies (ODs) are noted. This Observed Deficiency form notes the problem and the recommended action to correct the deficiency. Raw construction costs (i.e., labor and materials) for facility component replacements or repairs are estimated.

### 6.5.b Sample Condition Scoring Criteria

The following section provides six examples of the condition scoring definitions that were used during the condition surveys.

<b>Roof Construction</b>  <b>B1020</b>	Roof structural frame, structural interior walls supporting roof, roof decks, slabs and sheathing, canopies. Excludes insulation and roofing. <b>1- Excellent:</b> New; Structure is sound and stable; no evidence of cracking, deflection or separation of framing members. Preventative inspection. <b>2 - Good:</b> Structure is sound and stable; no evidence of cracking, deflection or separation of framing members. Minor preventative maintenance: rust proofing and / or sealants and tightening of connections. <b>3 - Fair:</b> Minor surface cracking or separation of framing members. Preventative maintenance and minor restorative repairs of isolated items. <b>4 - Poor:</b> Structural damage evident; Twisting, cracking, or separation of structural members affecting surrounding finishes or moisture intrusion. Restorative repairs. <b>5 - Unsatisfactory:</b> Structurally deficient or damaged beyond repair; major damage to surrounding finishes; jeopardizing occupancy. Replacement.
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<b>Exterior Windows</b>  <b>B2020</b>	Screens, storm windows, exterior louvers, frame, trim, sills, caulking, flashing. Excludes window shades and treatments. <b>1 -Excellent:</b> New; doors operating smoothly; no finish degradation. Preventative inspection. <b>2 - Good:</b> Functioning smoothly; no finish degradation. Secure hardware and emergency exiting. Minor preventative maintenance. <b>3 - Fair:</b> Worn but functional; requires paint or resealing; glass or hardware damage only in isolated doors. Preventative maintenance and minor restorative repairs of isolated items. <b>4 - Poor:</b> Damaged or deficient hardware, glass, trim or seals; water intrusion. Restorative repairs. <b>5 - Unsatisfactory:</b> Extensive damage, deficient beyond repair; Hardware not operating, moisture intrusion. Replacement.
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<b>Exterior Wall Finishes</b>  <b>B2040</b>	Exterior wall - exterior applied finishes <b>1 - Excellent:</b> New; no finish degradation. Preventative inspection. <b>2 - Good:</b> no cracking or moisture intrusion. Minor finish degradation. Minor preventative maintenance. Cleaning. <b>3 - Fair:</b> Minor undamaged but requires sealing. Preventative maintenance and minor restorative repairs of isolated items. <b>4 - Poor:</b> Restorative repairs. <b>5 - Unsatisfactory:</b> Damaged beyond repair, Replacement.
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<b>Plumbing Fixtures</b>  <b>D2010</b>	Water closets, urinals, lavatories, sink, showers, bathtubs, drinking fountains. Excludes hot water heaters. <b>1 – Excellent:</b> New; All fixtures operating well. Preventative inspection. <b>2 – Good:</b> system components operational, free of defect, and of adequate utility service and capacity for intended use. Includes water saving features. Minor preventative maintenance. <b>3 – Fair:</b> Some components worn, fixtures stained. Preventative maintenance and minor restorative repairs of isolated items. <b>4 – Poor:</b> Many components damaged; limited parts; leaking valves, rust and corrosion. Operating parts > 30 years old. Restoration repairs. <b>5 – Unsatisfactory:</b> Many fixtures not operational. Rust, corrosion, and mineral deposits. Leaks causing damage to other finishes and components. Replacement.
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<b>Heat Generating Systems</b>  <b>D3020</b>	Boilers, piping and fittings adjacent to boilers, primary pumps, auxiliary equipment, equipment and piping insulation. <b>1 - Excellent:</b> New. Preventative inspection. <b>2 - Good:</b> System is fully operational, suitable capacity, efficient utility utilization, integrated energy management controls. Minor preventative maintenance. <b>3 - Fair:</b> Equipment worn but reliable, older energy controls; Preventative maintenance and minor restorative repairs of isolated items. <b>4 - Poor:</b> Equipment marginal/hard to obtain parts, insulated ext. ductwork, no energy controls. > 40 years old. Restorative repairs. <b>5 - Unsatisfactory:</b> System non-functional or seriously deficient, not delivering supply to required spaces. Replacement.
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<b>Distribution Systems</b>  <b>D3040</b>	Supply & return air systems, ventilation & exhaust systems, steam, hot water & chilled water distribution, terminal devices, heat recovery equipment, auxiliary equipment such as secondary pumps, and heat exchangers, piping, duct & equipment insulation. <b>1 - Excellent:</b> New. Preventative inspection. <b>2 - Good:</b> System is fully operational, suitable capacity, efficient utility utilization, integrated energy management controls. Good insulation. Minor preventative maintenance. <b>3 - Fair:</b> Equipment worn but reliable, older energy controls; Insulation. Some joints/ sealants loose. Preventative maintenance and minor restorative repairs of isolated items. <b>4 - Poor:</b> Equipment marginal/hard to obtain parts, no energy controls; Many grilles missing or loose. Air leaks and unbalance. Restorative repair <b>5 - Unsatisfactory:</b> Non-functional or seriously deficient. Grilles corroded, missing. Replacement.
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### 6.5.c Facility Survey Methodology

The general methodology for recording the Thurston County FCA surveys started with an initial familiarization tour of the facilities for an initial scope assessment. Site and floor plan drawings were reviewed in advance of the FCA surveys. Information was gathered during the O&M workshop. This was followed by on-site field surveys of architectural, site/civil, mechanical and electrical systems for each facility building and site infrastructure. The facility surveys were facilitated by an FCA Team Leader to maintain consistency in evaluation and on-going training with survey forms, condition ratings and system categorization. Following each facility walk-through, the FCA Team completed condition survey and observed deficiency forms.

Each team member used survey forms to document the apparent facility conditions including:

- i. Describing the nature of facility systems per UNIFORMAT
- ii. Determining the overall condition score and useful remaining life of each system
- iii. Identifying major maintenance deficiencies greater than \$5,000 (direct cost) that are likely to be required for immediate major maintenance repairs (i.e., 2016), plus the next 5-year period (i.e., 2016-2021)
- iv. Documenting specific deficiencies of systems with narrative as well as budgetary level cost estimates to repair or replace deficiencies

## **6.6 Cost Model and Cost Estimating**

### **6.6.1 Cost Models**

The cost models developed for Thurston County identify general facility use types that were included in the facility condition assessment scope of work. Therefore, the application of the cost model's facility use types to other new types of facilities is not recommended.

### **6.6.2 Cost Estimating**

This report section discusses the basis of cost estimating that was utilized both to develop conceptual cost estimates for Observed Deficiencies during the facility condition surveys as well as the replacement costs that are used as factors in the Predicted Renewals.

#### **6.6.2.a Estimating Methodology**

The MENG Analysis team uses the Uniformat II system to organize cost estimates. Depending upon the condition and type of system, cost estimates are based upon square foot area (SF), linear feet (LF), and lump-sum (LS) quantity factors.

For the cost estimating of Observed Deficiencies of building systems, the FCA survey team estimated costs for system repairs or replacements. A proprietary cost model was used for the cost estimating that is used to support the PR costs of building systems. This model is updated on a yearly basis and adjusted to the specific geographical region. It uses a Uniformat II systems categorization for buildings and site infrastructure. The model also provides an overall building cost per square foot (\$/SF) for various building types. The team refined SF costs for structural, mechanical, plumbing and electrical sub-systems to reflect the systems typically found in Thurston County facilities. Specific analysis of similar projects that have been estimated and managed by the team were also referenced against the modeled costs for additional verification of recent costs. Once the basic cost model was established to represent a strong correlation with Thurston County facilities, the team went through several iterations of independent peer reviews by local cost estimating professionals.

### 6.6.2.b Estimating Accuracy

Cost estimates made using square foot costs can anticipate 20% to 30% accuracy.<sup>1</sup> Cost estimates that were developed for ODs do consider impacts to related building systems. For example, costs for the demolition and replacement/refinishing of interior walls are considered and included when replacing water piping. Therefore, these cost estimates also include, but do not delineate contingency costs to address reasonable, unforeseen conditions.

### 6.6.2.c Estimating Limitations

The cost estimating for the Observed Deficiencies and the cost model used for Predicted Renewals should both be considered useful for Thurston County project planning purposes. These costs provide planners with a good order-of-magnitude understanding of potential costs. Moving to the next level of accuracy for budgeting actual projects, additional analysis of each specific system deficiency and related systems is recommended. Costs are developed to reflect each system replacement or repair and as such do not make any assumptions relative to project packaging. For example, one should assume that aggregating multiple system deficiencies into a single project, either within a given facility or system-wide, would result in lower costs due to economy of scale.

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<sup>1</sup> *Successful Estimating Methods: From Concept to Bid* by John D. Bledsoe

**6.7     Renewal Budget by Facility by Year**

Budget Year																				
Facility	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total
ARC Work Release Building			4,257		25,357				19,417			329,153	128,461	222,879	156,480		441,268		48,283	1,375,556
Accountability and Restitution Building			235,757		3,545		717,583		1,330,548		1,294,161	4,082,884	757,987	3,523,662			3,038,741	173,313	464,293	15,622,475
Accountability and Restitution Infrastructure												9,653		66,058			1,217,315			1,293,026
Evaluation and Treatment Building			40,830			166,982	633,146		650,543		767,052	414,064		362,160				30,016	135,705	3,200,497
Evaluation and Treatment Facility Infrastructure				14,492		6,319			17,277		19,120	2,004	3,047	38,530			108,570			209,359
Expo Hall	38,811				5,093	53,748	82,060	190	204,645		47,491	8,118	4,367	133,297	163		21,949		14,676	614,607
Fairgrounds and Event Center Infrastructure			26,174						136,226		1,238	607								164,245
Heritage Hall	182,953		103,371	48,119	168	97,637	254,939		424,499		221,865		39,653					32,003		1,405,206
McLane Annex	38,103		166		10,114	44,181	32,875		100,986		136,481	69,567	11,124	59,192	43,305		12,208	122	20,323	578,746
McLane Building	53,360	127,790	486,320		9,844	291,876	48,790		129,469		115,815	103,447	96,386		85,161			118		1,548,377
McLane Building Site Infrastructure			64,546				17,930		110,887		117,373	2,498	2,432							315,665
Thurston County Coroners Building			20,874			95,277	375,880		238,588		169,988	32,987	46,320	9,957			52,004	15,346	79,680	1,136,901
Thurston County Coroners Site Infrastructure							18,797		71,924			11,337				128,352	5,210			235,620
Thurston County Courthouse 4	99,486	396,845	1,044,818	289,296	16,554	99,390	457,861		47,354	0	655,295	79,064	105,273	118,093	254,271			538		3,664,139
Thurston County Courthouse 4 Infrastructure			6,431	11,214		652	290		29,972		9,863	1,034					326			59,782
Thurston County Courthouse Building #1	5,349	1,993,298	2,807,387	1,014,138	104,930	195,266	797,551		1,035,484		1,320,432	230,632	380,042	260,097	393,892	3,932	31,996			10,574,425
Thurston County Courthouse Building #2		1,577,923	2,437,028	812,487	145,677	146,217	277,864		1,406,243	11,548	1,047,845	90,527	298,437	803,445	459,599					9,514,839
Thurston County Courthouse Building #3	1,922,911	3,403,042	2,629,149	203,128	180,504	1,182,052	1,172,766		3,913,733	0	3,762,289	1,290,502	714,272		1,131,267			6,464		21,512,077
Thurston County Courthouse Campus			448,924			29,260	208,080		1,773,261		1,179,944	380,454	70,549		38,625					4,129,096
Thurston County Emergency Services Building			771,309			1,396,193	694,402		778,247	0	1,424,203	1,308,843	84,371		325,360			87,017		6,869,946
Thurston County Emergency Services						7,340	260,986		1,292,006		97,704	72,164					419,556			2,149,757
Thurston County Family Justice Center			195,479		14,470		2,646,098		4,334,375	251,359	3,793,333	3,497,352			1,160,760		121,139	143,703		16,158,068
Thurston County Health Building		217,894	49,334			41,954	321,652		616,907	0	480,686	431,725	177,121	602,085			142,250	36,267	163,970	3,281,844
Tilley Building C					58,856					17,996		258,962	313,041	761,508			619,606		302,592	2,332,560
Tilley Building D					9,609							249,933	81,615	171,931			105,601		83,341	702,030
Tilley Building E					73,537							803,158	150,639	714,020			339,319		80,841	2,161,515
Tilley Maintenance Site Infrastructure												16,944		289,886			2,152,212			2,459,042
Tilley Shop A					14,714		196,074			0		314,087	153,830	643,864	184,115		449,722		153,108	2,109,514
Tilley Shop B					8,523	207,351	142,710		13,153		92,874		54,444	353,071			220,079		90,063	1,182,268
TwinStar Credit Union Building #5	73,298		19,821				197,532		602,271	253,937	740,497	449,221	100,656	526,191	281,008		203,414	14,571		3,462,417
TwinStar Site Infrastructure						943	33,514		139,146		26,805	10,761	2,272							213,441
Grand Total	2,414,271	7,716,791	11,391,974	2,392,875	681,495	4,062,639	9,589,381	190	19,417,162	534,840	17,522,354	14,551,681	3,776,335	9,659,928	4,514,004	132,284	9,702,486	539,477	1,636,874	120,237,041

**6.8     Renewal Budget by Facility by Subsystem by Year**



6.8 Renewal Budget by Facility by Subsystem by Year

		Budget Year																			
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total
Accountability and Restitution Building	Ceiling Finishes																			438,712	438,712
	Controls and Instrumentation												1,041,479								1,041,479
	Cooling Generating Systems																	633,560			633,560
	Fire Protection Specialties																	20,704			20,704
	Fittings																	148,383			148,383
	Fixed Furnishings																	212,222			212,222
	Floor Finishes							717,583													717,583
	Heat Generating Systems									1,330,548											1,330,548
	HVAC Distribution Systems											865,801									865,801
	Institutional Equipment														2,335,996						2,335,996
	Lighting and Branch Wiring																	2,023,872			2,023,872
	Low Voltage Communication														563,271						563,271
	Low Voltage Data			235,757								202,138							173,313		611,209
	Low Voltage Fire Alarm														374,345						374,345
	Low Voltage Security					3,545								3,039							6,584
	Other Electrical Systems												1,092,136								1,092,136
	Other Equipment																		25,581		25,581
	Rain Water Drainage											92,384									92,384
	Roof Coverings														250,050						250,050
	Sanitary Waste											133,838									133,838
	Special Controls and Instrumentation												231,595								231,595
	Terminal and Package Units												1,717,674								1,717,674
	Vehicular Equipment														0						0
	Wall Finishes													754,948							754,948
ARC Work Release Building	Ceiling Finishes																			48,283	48,283
	Commercial Equipment														1,883						1,883
	Controls and Instrumentation												114,623								114,623
	Cooling Generating Systems																	69,728			69,728
	Exterior Doors													23,632							23,632
	Exterior Walls															156,480					156,480
	Fire Protection Specialties																	2,279			2,279
	Fittings									19,417											19,417
	Fixed Furnishings																	23,357			23,357
	Floor Finishes														90,284						90,284
	Heat Generating Systems																	123,163			123,163
	Lighting and Branch Wiring																	222,742			222,742
	Low Voltage Communication														61,992						61,992
	Low Voltage Data					24,968								21,407							46,375
	Low Voltage Fire Alarm														41,200						41,200
	Low Voltage Security					390								334							724
	Projections			4,257																	4,257
	Roof Coverings														27,520						27,520
	Special Controls and Instrumentation												25,488								25,488
	Terminal and Package Units												189,042								189,042
	Wall Finishes													83,087							83,087

		Budget Year																			
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total
Evaluation and Treatment Building	Ceiling Finishes																			135,705	135,705
	Commercial Equipment							59,467													59,467
	Controls and Instrumentation						166,982														166,982
	Cooling Generating Systems									90,196											90,196
	Domestic Water Distribution												56,759								56,759
	Electrical Service and Distribution											241,643									241,643
	Energy Supply											1,423									1,423
	Fire Protection Specialties									2,168											2,168
	Fire Protection Sprinkler Systems											106,001									106,001
	Fittings									63,580											63,580
	Fixed Furnishings									76,395											76,395
	Floor Finishes							158,782													158,782
	Heat Generating Systems									155,501											155,501
	HVAC Distribution Systems											228,363									228,363
	Institutional Equipment							63,461													63,461
	Lighting and Branch Wiring									262,701											262,701
	Low Voltage Communication							112,479													112,479
	Low Voltage Data			40,196								34,464							29,549		104,209
	Low Voltage Fire Alarm							74,439													74,439
	Low Voltage Security			634								544							466		1,644
	Plumbing Fixtures											106,001									106,001
	Rain Water Drainage											15,177									15,177
	Roof Coverings														362,160						362,160
	Sanitary Waste											33,437									33,437
	Terminal and Package Units												357,305								357,305
	Wall Finishes							164,518													164,518
Expo Hall	Ceiling Finishes																			14,676	14,676
	Commercial Equipment														2,235						2,235
	Controls and Instrumentation						53,748														53,748
	Cooling Generating Systems									24,837											24,837
	Domestic Water Distribution												8,118								8,118
	Fire Protection Sprinkler Systems	38,811																			38,811
	Fittings																	12,484			12,484
	Fixed Furnishings																	9,465			9,465
	Floor Finishes							40,095													40,095
	Heat Generating Systems									74,431											74,431
	Lighting and Branch Wiring									105,377											105,377
	Low Voltage Communication														34,807						34,807
	Low Voltage Data					5,093															9,459
	Low Voltage Fire Alarm							21,049							4,367						21,049
	Low Voltage Security								190								163				352
	Plumbing Fixtures											38,286									38,286
	Rain Water Drainage											2,862									2,862
	Roof Coverings														96,256						96,256
	Sanitary Waste											6,342									6,342
	Wall Finishes							20,916													20,916
Heritage Hall	Ceiling Finishes									90,767											90,767
	Controls and Instrumentation						75,447														75,447
	Cooling Generating Systems									3,479											3,479
	Exterior Doors				48,119																48,119
	Exterior Windows	121,878																			121,878
	Fire Protection Sprinkler Systems	61,075																			61,075
	Fittings									11,637											11,637
	Fixed Furnishings			10,644																	10,644
	Floor Finishes							118,513													118,513
	Heat Generating Systems									104,498											104,498
	HVAC Distribution Systems											111,193									111,193
	Interior Doors			49,193																	49,193
	Lighting and Branch Wiring									214,118											214,118
	Low Voltage Communication							18,139													18,139
	Low Voltage Data			43,534								37,326							32,003		112,863
	Low Voltage Fire Alarm							20,155													20,155
	Low Voltage Security					168								144							311
	Partitions													39,509							39,509
	Plumbing Fixtures											66,067									66,067
	Projections			0																	0
	Rain Water Drainage											7,279									7,279
	Roof Coverings							68,527													68,527
	Roof Openings			0																	0
	Stair Finishes					0															0
	Terminal and Package Units						22,190														22,190
	Wall Finishes							29,604													29,604

		Budget Year																				
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total	
McLane Annex	Ceiling Finishes																			20,323	20,323	
	Controls and Instrumentation						44,181														44,181	
	Cooling Generating Systems									47,404											47,404	
	Domestic Water Distribution												7,984								7,984	
	Electrical Service and Distribution											49,260									49,260	
	Energy Supply											20,172									20,172	
	Exterior Doors													2,452							2,452	
	Exterior Walls														43,305						43,305	
	Exterior Windows													61,583							61,583	
	Fire Protection Sprinkler Systems	16,256																			16,256	
	Fittings																	5,465			5,465	
	Fixed Furnishings																	6,743			6,743	
	Floor Finishes								17,618													17,618
	Heat Generating Systems										5,443											5,443
	HVAC Distribution Systems												43,528									43,528
	Lighting and Branch Wiring										48,140											48,140
	Low Voltage Communication															25,244						25,244
	Low Voltage Data					10,114									8,672							18,786
	Low Voltage Fire Alarm	21,847																				21,847
	Low Voltage Security				166															122		429
	Other Electrical Systems							0					142									0
	Plumbing Fixtures												4,176									4,176
	Rain Water Drainage												4,424									4,424
	Roof Coverings															33,948						33,948
	Roof Openings												6,322									6,322
	Sanitary Waste												8,458									8,458
	Wall Finishes								15,257													15,257
McLane Building	Ceiling Finishes			120,257																	120,257	
	Controls and Instrumentation						44,523														44,523	
	Cooling Generating Systems									0											0	
	Domestic Water Distribution												25,912								25,912	
	Electrical Service and Distribution			85,577																	85,577	
	Energy Supply											809									809	
	Exterior Doors													40,552							40,552	
	Exterior Walls															85,161					85,161	
	Exterior Windows													77,536							77,536	
	Fire Protection Sprinkler Systems	53,360																			53,360	
	Fittings			14,165																	14,165	
	Fixed Furnishings			34,231																	34,231	
	Floor Finishes			89,000																	89,000	
	Heat Generating Systems										7,678										7,678	
	HVAC Distribution Systems												30,362								30,362	
	Interior Doors			52,172																	52,172	
	Lighting and Branch Wiring										121,791										121,791	
	Low Voltage Communication								28,461												28,461	
	Low Voltage Data					9,844									8,440						18,284	
	Low Voltage Fire Alarm								18,800												18,800	
	Low Voltage Security			161									138							118		417
	Other Electrical Systems		33,451																			33,451
	Other Plumbing Systems								1,530													1,530
	Partitions														47,394							47,394
	Plumbing Fixtures												55,764									55,764
	Projections			4,308																		4,308
	Rain Water Drainage												9,007									9,007
	Roof Coverings				85,301																	85,301
	Roof Openings			1,149																		1,149
	Sanitary Waste												19,735									19,735
	Stair Construction								0													0
	Terminal and Package Units							247,352														247,352
	Wall Finishes			94,338																		94,338

	Budget Year																					
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total	
Thurston County Coroners Building	Ceiling Finishes																			79,680	79,680	
	Commercial Equipment														9,957						9,957	
	Controls and Instrumentation						76,561														76,561	
	Cooling Generating Systems									52,507											52,507	
	Domestic Water Distribution												32,987								32,987	
	Energy Supply											9,559									9,559	
	Fire Protection Specialties																	5,729			5,729	
	Fittings																	17,257			17,257	
	Fixed Furnishings																	29,018			29,018	
	Floor Finishes							96,596													96,596	
	Heat Generating Systems									64,747											64,747	
	HVAC Distribution Systems												78,435								78,435	
	Lighting and Branch Wiring									121,334												121,334
	Low Voltage Communication								57,496													57,496
	Low Voltage Data			20,551									17,621							15,108		53,280
	Low Voltage Fire Alarm								38,058													38,058
	Low Voltage Security			323									277							238		838
	Other Equipment								0													0
	Other HVAC Systems and Equipment								11,429													11,429
	Plumbing Fixtures												47,283									47,283
	Rain Water Drainage												16,814									16,814
	Roof Coverings								172,301													172,301
	Terminal and Package Units							18,717														18,717
	Wall Finishes														46,320							46,320
Thurston County Courthouse 4	Ceiling Finishes			293,900																	293,900	
	Commercial Equipment			0																	0	
	Controls and Instrumentation		100,057																		100,057	
	Domestic Water Distribution												79,064								79,064	
	Electrical Service and Distribution											209,004									209,004	
	Elevators and Lifts			262,888																	262,888	
	Energy Supply			41,242																	41,242	
	Exterior Doors													31,707							31,707	
	Exterior Walls																					
	Exterior Windows				289,296												254,271				254,271	
	Fire Protection Sprinkler Systems	99,486																			99,486	
	Fittings									37,911											37,911	
	Fixed Furnishings									9,443											9,443	
	Floor Finishes			149,531																	149,531	
	HVAC Distribution Systems												163,173								163,173	
	Interior Doors												108,255								108,255	
	Lighting and Branch Wiring			296,527																	296,527	
	Low Voltage Communication															118,093					118,093	
	Low Voltage Data					16,554									14,194						30,748	
	Low Voltage Fire Alarm								72,252												72,252	
	Low Voltage Security			731									627							538		1,896
	Other Electrical Systems							99,390													99,390	
	Partitions														59,372						59,372	
	Plumbing Fixtures												66,968								66,968	
	Rain Water Drainage												40,299								40,299	
	Roof Coverings								345,330												345,330	
	Sanitary Waste												66,968								66,968	
	Stair Finishes											0									0	
	Terminal and Package Units		296,788																		296,788	
	Wall Finishes								40,279												40,279	

		Budget Year																			
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total
Thurston County Courthouse Building #1	Ceiling Finishes			759,858																	759,858
	Commercial Equipment							6,013													6,013
	Controls and Instrumentation		357,514																		357,514
	Domestic Water Distribution												230,632								230,632
	Electrical Service and Distribution											733,172									733,172
	Elevators and Lifts			251,362																	251,362
	Energy Supply			29,466																	29,466
	Exterior Doors				170,596																170,596
	Exterior Walls																				393,892
	Exterior Windows				843,542																843,542
	Fire Protection Sprinkler Systems											397,006									397,006
	Fittings									100,732											100,732
	Floor Finishes			571,277																	571,277
	HVAC Distribution Systems			181,606																	181,606
	Institutional Equipment							6,013													6,013
	Interior Doors			348,780																	348,780
	Lighting and Branch Wiring									930,166											930,166
	Low Voltage Communication														260,097						260,097
	Low Voltage Data					104,930								89,967							194,896
	Low Voltage Fire Alarm							201,198													201,198
	Low Voltage Security	5,349								4,586							3,932				13,867
	Other Electrical Systems						195,266														195,266
	Other Equipment	0																			0
	Other Fire Protection Systems																	4,056			4,056
	Other HVAC Systems and Equipment							8,909													8,909
	Other Plumbing Systems							41,761													41,761
	Partitions													290,075							290,075
	Plumbing Fixtures			449,805																	449,805
	Projections			25,257																	25,257
	Rain Water Drainage											54,137									54,137
	Roof Coverings			189,977																	189,977
	Sanitary Waste											136,116									136,116
	Stair Finishes		38,007															27,940			65,947
	Terminal and Package Units		1,597,777																		1,597,777
	Vehicular Equipment							0													0
	Wall Finishes							533,656													533,656
Thurston County Courthouse Building #2	Ceiling Finishes			649,216																	649,216
	Commercial Equipment							3,797													3,797
	Controls and Instrumentation		360,170																		360,170
	Domestic Water Distribution												90,527								90,527
	Electrical Service and Distribution											580,075									580,075
	Elevators and Lifts			335,428																	335,428
	Energy Supply			3,417																	3,417
	Exterior Doors				28,156																28,156
	Exterior Walls																	459,599			459,599
	Exterior Windows				784,331																784,331
	Fire Protection Sprinkler Systems											173,827									173,827
	Fittings									19,959											19,959
	Fixed Furnishings									482,053											482,053
	Floor Finishes														456,647						456,647
	HVAC Distribution Systems			1,099,680																	1,099,680
	Integrated Construction										9,557										9,557
	Interior Doors			209,192																	209,192
	Lighting and Branch Wiring									904,231											904,231
	Low Voltage Communication														346,798						346,798
	Low Voltage Data					139,119								119,280							258,399
	Low Voltage Fire Alarm							267,739													267,739
	Low Voltage Security					6,559								5,623							12,182
	Other Electrical Systems						146,217														146,217
	Other Plumbing Systems							6,328													6,328
	Partitions													173,533							173,533
	Plumbing Fixtures											193,847									193,847
	Projections			13,668																	13,668
	Rain Water Drainage											31,250									31,250
	Roof Coverings			126,427																	126,427
	Sanitary Waste											68,847									68,847
	Stair Finishes										1,991										1,991
	Terminal and Package Units		941,877																		941,877
	Wall Finishes		275,875																		275,875



		Budget Year																			
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total
Thurston County Courthouse Building #3	Ceiling Finishes			484,048																	484,048
	Commercial Equipment							15,876													15,876
	Controls and Instrumentation		1,004,375																		1,004,375
	Cooling Generating Systems									599,351											599,351
	Domestic Water Distribution												159,926								159,926
	Electrical Service and Distribution											1,382,469									1,382,469
	Elevators and Lifts			258,291																	258,291
	Exterior Doors				203,128																203,128
	Exterior Walls																				1,131,267
	Exterior Windows												1,130,576			1,131,267					1,130,576
	Fire Protection Sprinkler Systems											518,308									518,308
	Fittings									140,371											140,371
	Fixed Furnishings									200,763											200,763
	Floor Finishes			616,602																	616,602
	Heat Generating Systems									1,058,656											1,058,656
	HVAC Distribution Systems			803,451																	803,451
	Institutional Equipment	1,824,681																			1,824,681
	Integrated Construction			21,982																	21,982
	Interior Doors											1,056,720									1,056,720
	Lighting and Branch Wiring									1,914,592											1,914,592
	Low Voltage Communication							522,707													522,707
	Low Voltage Data					180,504															335,267
	Low Voltage Fire Alarm							347,386							154,764						347,386
	Low Voltage Security			8,793								7,539							6,464		22,797
	Other Electrical Systems						975,245														975,245
	Other Equipment							261,354													261,354
	Other Fire Protection Systems	69,675																			69,675
	Other HVAC Systems and Equipment	28,555																			28,555
	Other Plumbing Systems							25,443													25,443
	Partitions													559,508							559,508
	Plumbing Fixtures											690,763									690,763
	Projections			30,775																	30,775
	Rain Water Drainage			85,730																	85,730
	Roof Coverings			250,598																	250,598
	Roof Openings			68,878																	68,878
	Sanitary Waste											106,489									106,489
	Special Controls and Instrumentation						206,808														206,808
	Stand-Pipe and Hose Systems										0										0
	Terminal and Package Units		1,656,478																		1,656,478
	Wall Finishes		742,189																		742,189
Thurston County Emergency Services Building	Ceiling Finishes									154,717											154,717
	Controls and Instrumentation						163,327														163,327
	Cooling Generating Systems									0											0
	Domestic Water Distribution												31,608								31,608
	Electrical Service and Distribution											260,407									260,407
	Elevators and Lifts										0										0
	Energy Supply											1,315									1,315
	Exterior Walls																				325,360
	Exterior Windows												1,277,235								1,277,235
	Fire Protection Specialties									2,187											2,187
	Fire Protection Sprinkler Systems											104,119									104,119
	Fittings									27,031											27,031
	Fixed Furnishings									33,258											33,258
	Floor Finishes			197,365																	197,365
	Heat Generating Systems									150,799											150,799
	HVAC Distribution Systems											775,084									775,084
	Interior Doors											79,642									79,642
	Lighting and Branch Wiring									410,256											410,256
	Low Voltage Communication							326,039													326,039
	Low Voltage Data			116,537								99,919							85,671		302,127
	Low Voltage Fire Alarm							215,818													215,818
	Low Voltage Security			1,831								1,570							1,346		4,747
	Other Electrical Systems						200,780														200,780
	Other HVAC Systems and Equipment							284													284
	Partitions													84,371							84,371
	Plumbing Fixtures											67,293									67,293
	Rain Water Drainage											10,960									10,960
	Roof Coverings			455,576																	455,576
	Sanitary Waste											23,893									23,893
	Stair Finishes										0										0
	Terminal and Package Units						1,032,086														1,032,086
	Wall Finishes							152,262													152,262

		Budget Year																			
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total
Thurston County Family Justice Center	Ceiling Finishes									442,542											442,542
	Commercial Equipment							16,291													16,291
	Controls and Instrumentation												850,261								850,261
	Cooling Generating Systems									614,976											614,976
	Domestic Water Distribution												164,095								164,095
	Electrical Service and Distribution											1,418,511									1,418,511
	Elevators and Lifts										231,645										231,645
	Energy Supply											14,504									14,504
	Exterior Walls																1,160,760				1,160,760
	Fire Protection Specialties									20,097											20,097
	Fire Protection Sprinkler Systems											531,821									531,821
	Fittings																		121,139		121,139
	Fixed Furnishings										205,997										205,997
	Floor Finishes								781,110												781,110
	Heat Generating Systems										1,086,256										1,086,256
	HVAC Distribution Systems												706,838								706,838
	Integrated Construction											19,715									19,715
	Lighting and Branch Wiring										1,964,506										1,964,506
	Low Voltage Communication								536,334												536,334
	Low Voltage Data				192,472								165,025							141,493	498,990
	Low Voltage Fire Alarm								356,443												356,443
	Low Voltage Security				3,007								2,578							2,211	7,796
	Other Electrical Systems													891,617							891,617
	Other HVAC Systems and Equipment								26,107												26,107
	Plumbing Fixtures												708,772								708,772
	Rain Water Drainage												75,422								75,422
	Roof Coverings								238,092												238,092
	Roof Openings												60,596								60,596
	Sanitary Waste												109,265								109,265
	Special Controls and Instrumentation													189,073							189,073
	Stair Finishes						14,470														14,470
	Terminal and Package Units													1,402,305							1,402,305
	Wall Finishes								691,721												691,721
Thurston County Health Building	Ceiling Finishes																			163,970	163,970
	Commercial Equipment							95,802													95,802
	Controls and Instrumentation		217,894																		217,894
	Cooling Generating Systems									108,982											108,982
	Electrical Service and Distribution											291,972									291,972
	Fire Protection Specialties									2,620											2,620
	Fire Protection Sprinkler Systems											128,078									128,078
	Fittings																	64,613			64,613
	Fixed Furnishings																		77,636		77,636
	Floor Finishes															164,494					164,494
	Heat Generating Systems									187,889											187,889
	Lighting and Branch Wiring									317,416											317,416
	Low Voltage Communication							135,906													135,906
	Low Voltage Data			48,568									41,642						35,704		125,913
	Low Voltage Fire Alarm								89,944												89,944
	Low Voltage Security			766									657						563		1,986
	Other Electrical Systems						41,954														41,954
	Rain Water Drainage											18,338									18,338
	Roof Coverings															437,591					437,591
	Stair Finishes											0									0
	Terminal and Package Units													431,725							431,725
	Wall Finishes														177,121						177,121

		Budget Year																				
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total	
Tilley Building C	Ceiling Finishes																			302,592	302,592	
	Controls and Instrumentation												162,885								162,885	
	Cooling Generating Systems																	0			0	
	Fire Protection Specialties																	3,185			3,185	
	Fittings																	46,786			46,786	
	Fixed Furnishings																	43,052			43,052	
	Floor Finishes															250,455					250,455	
	Heat Generating Systems																	94,566			94,566	
	Lighting and Branch Wiring																	432,017			432,017	
	Low Voltage Communication															143,630					143,630	
	Low Voltage Data					57,944								49,681							107,625	
	Low Voltage Fire Alarm															95,261					95,261	
	Low Voltage Security					912								782							1,694	
	Other Electrical Systems													96,078							96,078	
	Other Plumbing Systems															19,773					19,773	
	Roof Coverings															252,389					252,389	
	Stair Finishes											17,996										17,996
Wall Finishes														262,578							262,578	
Tilley Building D	Ceiling Finishes																			83,341	83,341	
	Controls and Instrumentation												38,125								38,125	
	Fire Protection Specialties																	952			952	
	Floor Finishes															67,905					67,905	
	Heat Generating Systems																	6,206			6,206	
	Lighting and Branch Wiring																	98,443			98,443	
	Low Voltage Communication															23,452					23,452	
	Low Voltage Data					9,461								8,111							17,572	
	Low Voltage Fire Alarm															15,490					15,490	
	Low Voltage Security					148								127							275	
	Roof Coverings															65,083					65,083	
	Terminal and Package Units												211,808								211,808	
	Wall Finishes													73,376							73,376	
Tilley Building E	Ceiling Finishes																			80,841	80,841	
	Controls and Instrumentation												93,954								93,954	
	Cooling Generating Systems																	0			0	
	Fire Protection Specialties																	1,188			1,188	
	Fittings																	14,678			14,678	
	Fixed Furnishings																	18,059			18,059	
	Floor Finishes															101,161					101,161	
	Heat Generating Systems																	81,884			81,884	
	Lighting and Branch Wiring																	222,768			222,768	
	Low Voltage Communication															180,477					180,477	
	Low Voltage Data					72,399								62,075							134,474	
	Low Voltage Fire Alarm															119,464					119,464	
	Low Voltage Security					1,138								976							2,114	
	Other Electrical Systems												115,498								115,498	
	Other Fire Protection Systems																	742			742	
	Other Plumbing Systems															1,572					1,572	
	Roof Coverings															311,346					311,346	
	Terminal and Package Units												593,706								593,706	
Wall Finishes													87,588							87,588		
Tilley Shop A	Ceiling Finishes																			153,108	153,108	
	Controls and Instrumentation												97,519								97,519	
	Cooling Generating Systems																	0			0	
	Exterior Doors													80,132							80,132	
	Exterior Walls															184,115					184,115	
	Fire Protection Specialties																	2,257			2,257	
	Fittings																	12,538			12,538	
	Fixed Furnishings																	113,551			113,551	
	Floor Finishes							128,683													128,683	
	Heat Generating Systems																	18,808			18,808	
	Lighting and Branch Wiring																	302,567			302,567	
	Low Voltage Communication															36,163					36,163	
	Low Voltage Data					14,489								12,423							26,913	
	Low Voltage Fire Alarm															23,910					23,910	
	Low Voltage Security					225								193							418	
	Other Equipment															0					0	
	Other HVAC Systems and Equipment															3,736					3,736	
	Other Plumbing Systems															3,736					3,736	
	Partitions														61,082						61,082	
	Roof Coverings															464,244					464,244	
	Stair Finishes											0									0	
	Terminal and Package Units													216,568							216,568	
	Vehicular Equipment																				112,076	
	Wall Finishes								67,391													67,391



		Budget Year																				
Facility	Subsystem	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2030	2031	2032	2033	2034	2035	Grand Total	
Tilley Shop B	Ceiling Finishes																			90,063	90,063	
	Controls and Instrumentation						64,379														64,379	
	Cooling Generating Systems																	0			0	
	Energy Supply											1,266									1,266	
	Exterior Doors													47,136							47,136	
	Fire Protection Specialties																	1,328			1,328	
	Fire Protection Sprinkler Systems											89,235									89,235	
	Fittings																	7,376			7,376	
	Fixed Furnishings																		33,397		33,397	
	Floor Finishes								75,695												75,695	
	Heat Generating Systems										13,153										13,153	
	Lighting and Branch Wiring																		177,978		177,978	
	Low Voltage Communication								24,810												24,810	
	Low Voltage Data					8,523									7,308						15,831	
	Low Voltage Fire Alarm														14,065						14,065	
	Other HVAC Systems and Equipment								2,563												2,563	
	Projections												2,374								2,374	
	Roof Coverings															273,081					273,081	
	Terminal and Package Units							142,972													142,972	
	Vehicular Equipment															65,926					65,926	
	Wall Finishes								39,641												39,641	
TwinStar Credit Union Building #5	Ceiling Finishes									289,406											289,406	
	Controls and Instrumentation													91,232							91,232	
	Cooling Generating Systems																	101,707			101,707	
	Domestic Water Distribution													87,377							87,377	
	Electrical Service and Distribution											230,980									230,980	
	Elevators and Lifts										253,937										253,937	
	Exterior Doors														35,041						35,041	
	Exterior Walls																281,008				281,008	
	Fire Protection Sprinkler Systems	73,298																			73,298	
	Fixed Furnishings									20,873											20,873	
	Floor Finishes							153,018													153,018	
	Heat Generating Systems																	101,707			101,707	
	HVAC Distribution Systems											180,330									180,330	
	Interior Doors											119,638									119,638	
	Lighting and Branch Wiring									291,993											291,993	
	Low Voltage Communication															130,510					130,510	
	Low Voltage Data			19,012								16,301								13,977		49,291
	Low Voltage Fire Alarm														68,462						68,462	
	Low Voltage Security			808								693								594		2,096
	Partitions														65,615						65,615	
	Plumbing Fixtures											74,009										74,009
	Projections			0																		0
	Rain Water Drainage												44,537									44,537
	Roof Coverings															327,219					327,219	
	Roof Openings											0										0
	Sanitary Waste												74,009									74,009
	Stair Finishes											0										0
	Terminal and Package Units													270,612								270,612
	Wall Finishes								44,514													44,514
Grand Total		2,414,271	7,716,791	10,845,900	2,367,169	681,495	4,018,125	9,049,785	190	15,846,462	534,840	16,070,306	14,044,226	3,698,035	9,265,455	4,475,380	3,932	5,799,296	539,477	1,636,874	109,008,009	