

# PROJECT STATUS

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## Emergency Communication System Upgrade (ECSU)

C800 Project Leader: John Hartsock

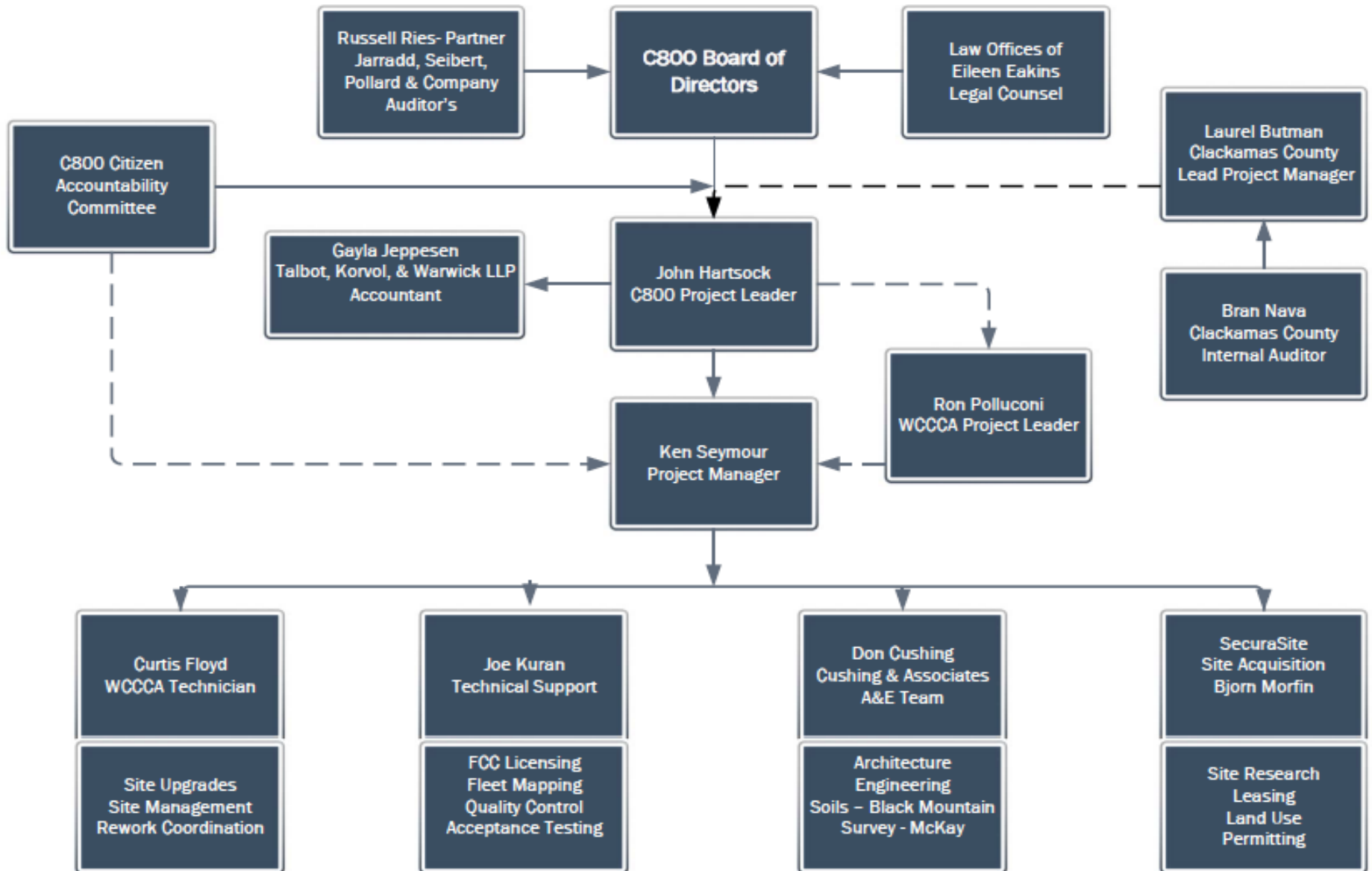
WCCCA Project Leader: Ron Polluconi

Project Manager: Ken Seymour – WCCCA/C800 Contractor

Date: May 17, 2017



# C800 ECSU Project Team



# Project Status Summary

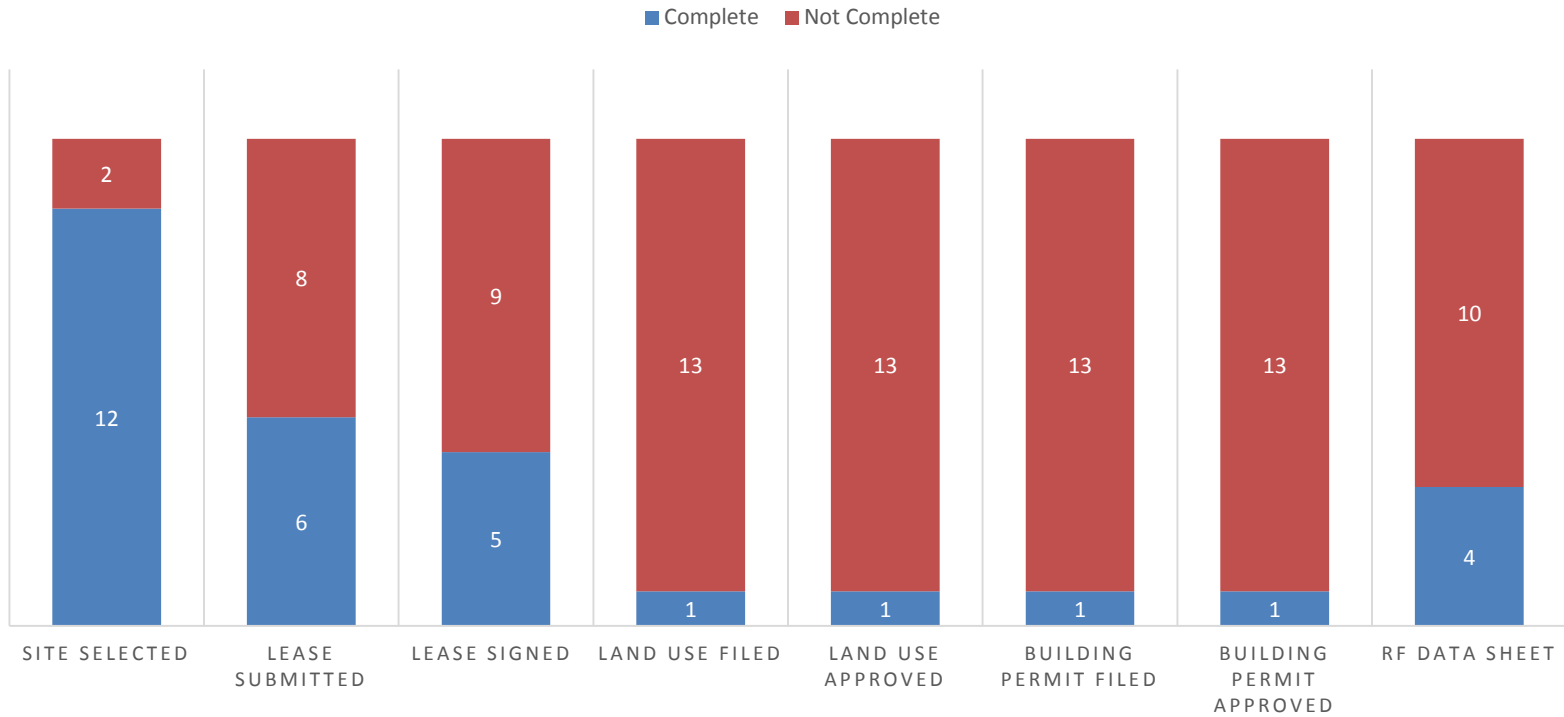
	<b>C800</b>
<ul style="list-style-type: none"> <li>Site Acquisition &amp; Design:</li> </ul>	<ul style="list-style-type: none"> <li><b>Barton (Carver):</b> Site Acquisition (SA) redirected to look at new candidate location near Barton, west of South Harding Road</li> <li><b>Skyland/Cooks Butte:</b> Pending recommendation from city on which site candidate to pursue</li> <li><b>Damascus:</b> A &amp; E firm working on site plan. Meeting with PGE for power delivery is scheduled 6/13. Geology survey completed</li> <li><b>Wilsonville:</b> Zoning drawings in review. SA is preparing land use application</li> <li><b>Sandy:</b> Preparation for building permit filing, tower design with vendor in progress</li> <li><b>Crutcher Bench (BLM):</b> Updated site drawings to show bullet proof propane tank enclosure. BLM doesn't allow underground tanks. A&amp;E working on final site plans</li> <li><b>Tom Dick &amp; Harry (USFS):</b> Still awaiting USFS review. FAA feasibility study and Oregon Department of Aviation (ODA) states no lighting is required</li> <li><b>Canby:</b> Finalizing LU application. Target date for submittal is 5/19</li> <li><b>Highland Butte (BLM):</b> Updated site drawings to show bullet proof propane tank enclosure. A&amp;E working on final site plans</li> </ul>

# Project Status Summary

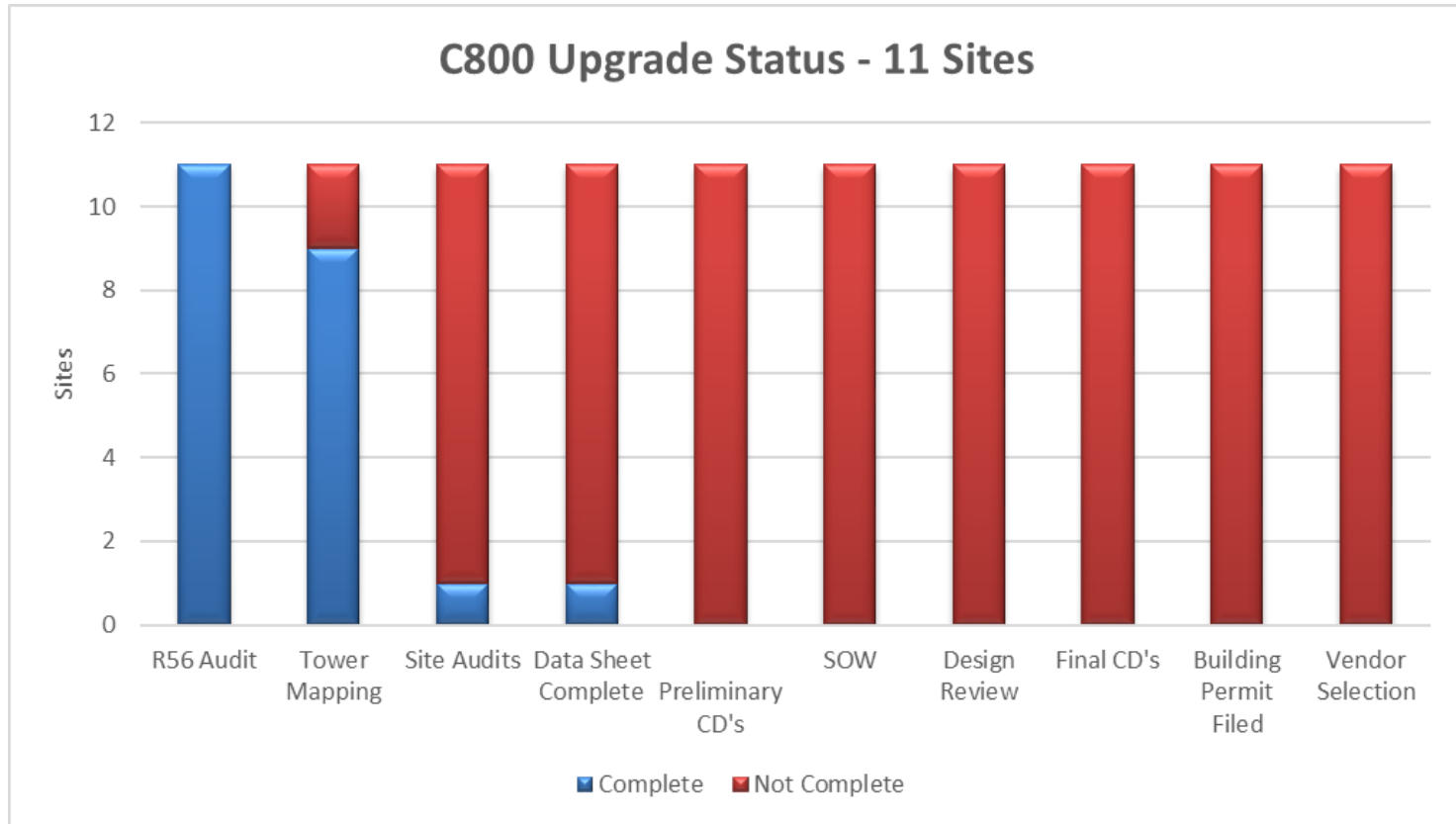
	<b>C800</b>
<ul style="list-style-type: none"> <li>Site Acquisition &amp; Design:</li> </ul>	<ul style="list-style-type: none"> <li><b>Angel Falls (USFS):</b> FAA feasibility study and ODA states no lighting is required. Still awaiting USFS review. Environmental Assessment (EA) pending</li> <li><b>Oak Grove Butte (USFS):</b> FAA feasibility study and ODA states no lighting is required. Still awaiting USFS review. Environmental Assessment (EA) pending</li> <li><b>Whale Head (USFS):</b> FAA feasibility study and ODA states no lighting is required. Still awaiting USFS review. Environmental Assessment (EA) pending</li> <li><b>Lake Oswego Tank (Kerr Parkway &amp; Tanglewood Dr):</b> Met with City Manager and Water Bureau. Positive initial feedback. City wants to see a site sketch to discuss with Mountain Park HOA.</li> </ul>
<ul style="list-style-type: none"> <li>LMR (Land Mobile Radio) System Procurement</li> </ul>	<ul style="list-style-type: none"> <li>C800, WCCCA, and Motorola project kickoff meeting occurred. Weekly project and planning meetings have begun</li> </ul>

# Site Acquisition Status – C800

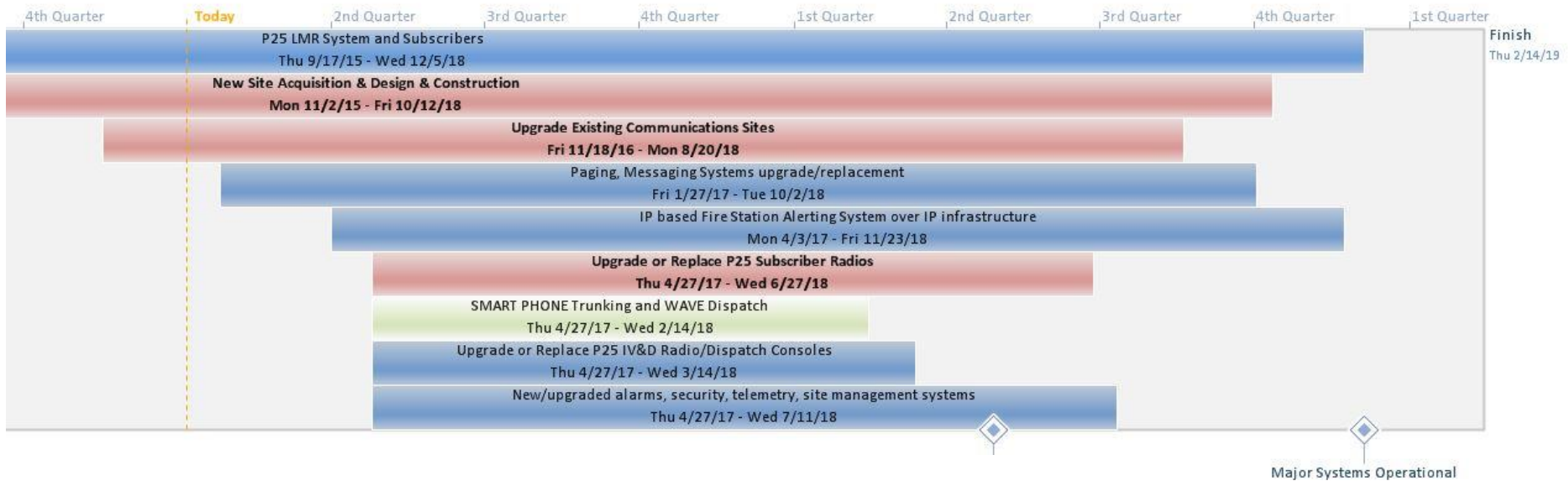
### C800 STATUS - 14 SITES



# Site Upgrade Status – C800



# Project Schedule



- New Site Design & Construction complete: August 2018
- Existing Sites Upgrade complete: June 2018
- System Operational Date: Late December 2018



# C800 Radio System Upgrade Budget <sup>(1)</sup>

Project: **C800 Radio System Upgrade**  
 Date Original: 10/1/2015 Date Updated: Apr 30, 2017  
 Project Manager: Ken Seymour

Item	Budget	Original Encumbrance	Additional Encumbrance / Change Order	Estimate to Complete	Percent Complete	Estimated Total	(Over) Under Budget	Expended
<b>Soft Cost</b>								
Site Acquisition Consulting - Quest	60,000	30,000	40,000	0	95.81%	70,000	(10,000)	67,069.81
Site Acquisition Consulting / Permits - Securasite	270,000	268,500		0	49.99%	268,500	1,500	134,230.03
Site Planning - Cushing	725,000	317,178	326,281	75,000	46.22%	718,459	6,541	332,076.26
Geotechnical / Environmental Consulting - Black Mtn	200,000	89,100	13,600	85,000	43.98%	187,700	12,300	82,550.00
Survey - McKay	75,000	50,160		20,000	47.63%	70,160	4,840	33,420.00
USFS Land Use Fees	10,000	10,000		0	0.00%	10,000	0	0.00
Land Use Fees	25,000	268		20,000	1.32%	20,268	4,732	268.00
Plan Check / Permit Cost	60,000	3,000		57,000	4.90%	60,000	0	2,937.56
Printing	2,500			2,500	0.00%	2,500	0	0.00
Bid Advertising	3,500	60		3,400	5.80%	3,460	40	200.81
Materials Testing & Inspection	40,000	1,200		38,000	2.87%	39,200	800	1,123.75
Project Management	300,000	279,000		20,000	14.72%	299,000	1,000	44,000.00
Legal Fees	30,000	12,000		18,000	31.18%	30,000	0	9,352.60
Licensing	20,000			20,000	0.00%	20,000	0	0.00
Miscellaneous	10,000	6,800		4,000	62.14%	10,800	(800)	6,710.88
<b>Sub-Total Soft Cost</b>	<b>1,831,000</b>	<b>1,067,266</b>	<b>379,881</b>	<b>362,900</b>	<b>39.44%</b>	<b>1,810,047</b>	<b>20,953</b>	<b>713,940</b>
<b>Construction Cost</b>								
Site Construction	8,981,000	362,439		8,618,561	3.17%	8,981,000	0	284,499.93
Buildings	1,350,000	986,718		363,282	2.04%	1,350,000	0	27,523.60
Towers	660,000	511,282		148,718	0.00%	660,000	0	0.00
Generator	414,000			414,000	0.00%	414,000	0	0.00
48VDC	1,065,000			1,065,000	5.99%	1,065,000	0	63,816.00
Lake Oswego Antenna	18,000	17,500	0	0	100.07%	17,500	500	17,511.75
Existing Sites	100,000	6,400		93,600	6.40%	100,000	0	6,400.00
<b>Sub-Total Construction Cost</b>	<b>12,588,000</b>	<b>1,884,339</b>	<b>0</b>	<b>10,703,161</b>	<b>3.18%</b>	<b>12,587,500</b>	<b>500</b>	<b>399,751.28</b>



# C800 Radio System Upgrade Budget (2)

Item	Budget	Original Encumbrance	Additional Encumbrance / Change Order	Estimate to Complete	Percent Complete	Estimated Total	(Over) Under Budget	Expended
<b>Equipment Costs</b>								
Simulcast Equipment	14,928,000			14,928,000	0.00%	14,928,000	0	0.00
Master Site Equipment	3,534,000			3,534,000	0.00%	3,534,000	0	0.00
Console	1,650,000			1,650,000	0.00%	1,650,000	0	0.00
Back up Dispatch	426,000			426,000	0.00%	426,000	0	0.00
Spares	1,200,000			1,200,000	0.00%	1,200,000	0	0.00
Paging	373,000			373,000	0.00%	373,000	0	0.00
Subscriber Radios	5,000,000	1,515,649		3,484,351	40.17%	5,000,000	0	2,008,749.49
Unified Push to Talk	188,000			188,000	0.00%	188,000	0	0.00
Asset Management	119,000			119,000	0.00%	119,000	0	0.00
Post Warranty	3,100,000			3,100,000	0.00%	3,100,000	0	0.00
System Refresh / Upgrade	2,700,000			2,700,000	0.00%	2,700,000	0	0.00
Test Equipment	100,000			100,000	0.00%	100,000	0	0.00
Microwave	3,368,000	406,169		2,961,831	11.59%	3,368,000	0	390,406.05
Security System	1,364,000			1,364,000	0.08%	1,364,000	0	1,079.96
<b>Subtotal Equipment Costs</b>	<b>38,050,000</b>	<b>1,921,818</b>	<b>0</b>	<b>36,128,182</b>	<b>6.31%</b>	<b>38,050,000</b>	<b>0</b>	<b>2,400,236</b>
Bond Cost	300,000	290,372		0	100.00%	290,372	9,628	290,372
<b>Subtotal Project Cost</b>	<b>52,769,000</b>	<b>5,163,795</b>	<b>379,881</b>	<b>47,194,243</b>	<b>7.21%</b>	<b>52,737,919</b>	<b>31,081</b>	<b>3,804,298</b>
<b>Contingency</b>	<b>6,231,913</b>			<b>6,231,913</b>	<b>0.00%</b>	<b>6,231,913</b>	<b>0</b>	
<b>Total Project Cost</b>	<b>59,000,913</b>	<b>5,163,795</b>	<b>379,881</b>	<b>53,426,156</b>	<b>6.45%</b>	<b>58,969,832</b>	<b>31,081</b>	<b>3,804,298.28</b>

Premium 7,165,794

Bond Proceeds	5,845,000	Taxable
	53,155,000	Non Taxable
	<b>59,000,000</b>	

# Q2'17 Quarterly Outlook

	<b>C800</b>
<ul style="list-style-type: none"> <li>• Procurement</li> </ul>	<ul style="list-style-type: none"> <li>• Order Tower and Equipment shelters for Sandy, Canby, and Wilsonville sites</li> </ul>
<ul style="list-style-type: none"> <li>• Leases &amp; Land Use Applications</li> </ul>	<ul style="list-style-type: none"> <li>• File Land Use applications for Canby and Wilsonville sites</li> <li>• Prepare Damascus application material</li> <li>• Apply for Building Permit on Sandy site</li> <li>• Expect approval of Highland Butte &amp; Crutcher's Bench BLM applications</li> </ul>
<ul style="list-style-type: none"> <li>• Existing Site &amp; Building Upgrades</li> </ul>	<ul style="list-style-type: none"> <li>• Develop intermediary tower and antenna configuration plans (drawings, RF data sheets) on existing sites</li> <li>• Proceed with upgrade plans for civil work relating to shelter/generator foundation upgrades, doors, Electrical, and related site compound renovations</li> </ul>

# Appendix A

## New Site Build (NSB) List

Site Name	Nearest City	Jurisdiction	Site Selected	Lease Submitted	Lease Signed	Land Use Filed	Land Use Approved	Building Permit Filed	Building Permit Approved	RF Data Sheet Complete
Barton (Carver)	Barton/Logan									
Skyland (or Cooks)	Lake Oswego			1	1					
Damascus	Damascus		1	1	1					
Wilsonville Tank	Wilsonville		1	1						1
Sandy	Sandy		1	1	1	N/A	N/A			1
Crutcher Bench	Zig Zag	BLM	1							
Tom Dick and Harry	Government Camp	USFS	1							
Canby	Canby		1	1	1					1
Highland Butte	Cedar Reservoir	BLM	1							1
Angel Falls	Angle Falls	USFS	1							
Oak Grove Butte	Frog Lake	USFS	1							
Whale Head	SE Clackamas	USFS	1							
Sawtel Fire Station	Molalla		1	1	1	1	1	1	1	
Lake Oswego Tank	Lake Oswego		1							

C800

- 14 Sites

# Appendix B

## Existing Sites - Upgrade List

Turf	Site Numb	Type	Site Name	Nearest City	R56 Audit	Tower Mappin	Site Audits	Intermediate Data Shee
C800	C-5	Existing	Mount Scott	Happy Valley	1	1		
C800	C-6	Existing	Mtn View	Oregon City	1	1		
C800	C-7	Existing	Pete's	West Linn	1	1		
C800	C-8	Existing	Polivka	Boring	1	1	1	1
C800	C-10	Existing	View Acres	Milwaukie	1	1		
C800	C-11	Existing	Brightwood	Brightwood	1			
C800	C-14	Existing	Lenhart	Sandy	1	1		
C800	C-15	Existing	Timberline	Timberline Lodge	1	1		
C800	C-17	Existing	Day Hill	Estacada	1	1		
C800	C-19	Existing	Redland Road	Redland	1	1		
C800	C-23	Existing	Goat Mountain	Colton	1			

C800
• 11 Sites



# Appendix C

## C800 Site Locations

**Radio Sites C800**

- Completed
- New
- Existing

