

QLife Network

QualityLife Intergovernmental Agency

AGENDA

QLife Regular Board Meeting

Thursday, February 25, 2016 6:30 pm
The Dalles City Hall, 313 Court Street
2nd Floor Conference Room

1. Call to Order
2. Roll Call
3. Approval of Agenda
4. Approval of the January 21, 2016 and February 9, 2016 Meeting minutes
5. Financial Reports
 - a. January Financial Reports
 - b. List of Disbursements since Last Meeting
6. Discussion Items
 - a. Capital Improvement Plan
7. Action Items
 - a. Approve Administration Plan
 - b. Appoint Budget Officer
8. Executive Session (as necessary) In accordance with:

An executive session may, in the discretion of the presiding officer, be called based on one or more of the following:
ORS 192.660(2)(a) Consider employment issues; (2)(e) Real property; (2)(f) Consider exempt records or information;
(2)(g) Competitive trade or commerce negotiations; (2)(h) Consult with counsel re litigation; (2)(m)(D) & (E) Discuss
information regarding security of telecom systems and data transmission.
9. Reports
 - a. Maupin Project Update
 - b. Administrator Report – Nolan Young
 - c. Aristo Operational Management Report – John Amery
10. Next Meeting Dates:
 - a. Budget Work Session with Budget Committee _____.
 - b. Regular Board Meeting March _____.
11. Adjourn

QLife Network

QualityLife Intergovernmental Agency

MINUTES

QLife Regular Board Meeting

Thursday, January 21, 2016 Noon
The Dalles City Hall, 313 Court Street
2nd Floor Conference Room

Call to Order

President Larson called the meeting to order at 12:01 pm

Roll Call

In attendance: Erick Larson, Scott Hege, Taner Elliott, Brian Ahier, Dan Spatz

Staff in attendance: Administrator Nolan Young, Secretary Izetta Grossman, Finance Director Kate Mast, Technical Manager John Amery, Attorney Keith Mobley

Approval of Agenda

It was moved by Spatz and seconded by Ahier to approve the agenda as submitted. The motion carried.

Approval of the January 7, 2016 Meeting minutes

It was moved by Spatz and seconded by Hege to approve the minutes of the January 7, 2016 Board meeting. The motion carried unanimously.

Financial Reports

Finance Director Mast reviewed the report, noting that the Google grant funds had been received.

Public Hearing Adoption of Supplemental Budget for fiscal year 2015-16

Larson opened the Public Hearing on the Supplemental budget. Mast reviewed the staff report. Young noted that the Maupin project budget was still fluid.

Hege asked if operating funds for the next three years were included in the Google grant. Young said approximately \$42,000 would go into operation during the next budget process. Gorge.net would be operating the system.

There was no public testimony; Larson closed the public hearing at 12:11pm.

It was moved by Ahier and seconded by Hege to adopt Resolution 16-001 ADOPTING A SUPPLEMENTAL BUDGET FOR FISCAL YEAR 2015/2016, CREATING A NEW FUND, MAKING APPROPRIATIONS AND AUTHORIZING EXPENDITURES FROM AND WITHIN VARIOUS FUNDS OF THE QUALITYLIFE INTERGOVERNMENTAL AGENCY ADOPTED BUDGETS. The motion carried unanimously.

It was moved by Ahier and seconded by Elliott to adopt Resolution 16-002 AUTHORIZING TRANSFERS OF BUDGETED AMOUNTS BETWEEN CATEGORIES OF THE QLIFE OPERATING FUND OF THE QUALITYLIFE INTERGOVERNMENTAL AGENCY (QLIFE) BUDGET, MAKING APPROPRIATIONS AND AUTHORIZING EXPENDITURES FOR THE FISCAL YEAR ENDING JUNE 30, 2016. The motion carried unanimously.

Larson recessed the meeting to Executive Session at 12:16 pm

Larson reconvened the regular board meeting at 12:33 pm.

Action Items:

Young reviewed the staff report for the Strategic Plan.

It was moved by Ahier and seconded by Spatz to adopt the Strategic Plan as submitted. The motion carried unanimously.

Young reviewed Resolution 16-003 Rates and Resolution 16-004 Line Extensions.

It was moved by Ahier and seconded by Spatz to adopt Resolution 16-004 A RESOLUTION AMENDING RESOLUTION No. 11-002 ESTABLISHING SERVICE RATES AND FEES FOR THE QUALITYLIFE INTERGOVERNMENTAL AGENCY, and Resolution 16-004 A RESOLUTION AMENDING THE QUALITYLIFE INTERGOVERNMENTAL AGENCY'S POLICY FOR LINE EXTENSIONS.

In response to a question Young said that the new line extension rates were revenue neutral for the first year and would increase after that.

In response to a question Amery said that the ability to monitor could vary with type of equipment. Larson asked if QLife had a right to monitor and Amery said they did.

IT was moved by Spatz and seconded by Ahier to amend and then adopt amended Resolution 16-004 to add under Section 7 – allow QLife the right to monitor and access to equipment. The motion and the motion carried unanimously.

It was moved by Ahier and second by Spatz to amend and then adopt Resolution 16-003, amending to reflect the same prices in both A 1 and A 2. The motion carried unanimously.

It was the consensus of the board to hold over QLife Administration Options to a meeting on February 2, 6:30 pm.

Elliott and Spatz retired from the meeting at 1:05 pm

Reports

Administrator Report - Young reviewed the report on the Maupin Project. Hege asked that the word "wireless unreliable" line be removed from the Business Plan.

Hege asked if under discretionary right of way charges could only be given if the system was profitable.

Aristo Operational Management Report – Amery reported nothing had come up since last meeting.

Next Meeting Dates:

Special Meeting February 9, 6:30 pm; Regular Board Meeting February 25, 6:30 pm.

Adjourn

Being no further business the meeting was adjourned at approximately 1:35 pm.

Respectfully submitted
Izetta Grossman
Recording Secretary

Signed: _____
Brian Ahier, Sec/Treasurer

QLife Network

QualityLife Intergovernmental Agency

MINUTES

QLife Special Board Meeting

Tuesday, February 9, 2016 6:30 p.m.
The Dalles City Hall, 313 Court Street
2nd Floor Conference Room

Call to Order

The Meeting was called to order by President Larson at 6:30 pm

Roll Call

In attendance: Erick Larson, Taner Elliott, Brian Ahier, Scott Hege
Via Telephone: Dan Spatz

Staff: Keith Mobley, John Amery, Izetta Grossman, Nolan Young

Guest: City Manager Julie Krueger

Approval of Agenda

It was moved by Ahier and seconded by Hege to approve the agenda as presented. The motion carried unanimously.

Options for Administrative Services

Young reviewed the staff report.

The following options were identified:

1. MCMC – Erick Larson and his secretary would take on Administration. This would require Larson to step down from the board.
2. Amery voiced interested in Aristo taking on Administration. Aristo would have to hire staff.
3. City/County combination; City handling financials, County administration and secretarial.
4. Send out an RFP to hire outside firm
5. City handle administration and financials
6. County handle administration and financials

After some discussion it was decided the City Manager, Taner Elliott, Scott Hege and the County Administrator would meet before the next Board meeting to discuss the best option to present to the Board for approval.

Next Meeting - February 25 at 6:30 p.m.

The meeting was adjourned at 7:15 p.m.

Respectfully submitted

Izetta Grossman, Secretary

Signed: _____

Brian Ahier, Sec/Tres

TO: QLife Board
 Nolan Young, QLife Administrator

FR: Kate Mast, Finance Director

RE: Financial Report for QLIFE – January 2016

BANKING:

QLife monies are deposited into a separate bank checking account. QLife also has a Local Government Investment Pool (LGIP) account where funds excess funds are maintained in order to earn some interest..

The information below is a comparison of budget to actual revenues and expenditures for the month just ended by fund. This information is not audited, but is reviewed by the Finance Department for clarity and budget compliance.

58% of the year has passed.

Each fund exceptions narrative has four possible paragraphs; 1 - is the beginning balance, 2 - is new revenues, 3 - is expenditures and 4 - if present, is budget changes.

OPERATIONS (600):

BUDGET COMPARISONS

	July 1, 2015 to January 31, 2016			
	Budget	Actual	Percentage	
Beginning Balance	\$ 218,563	\$ 231,823	106.0%	* see below
Revenues	\$ 701,219	\$ 383,955	55.0%	
Expenditures	\$ 415,642	\$ 148,280	35.7%	
Transfers to Capital/Debt Fund	\$ 504,140	\$ 320,816	63.6%	
Revenues Less Expenses	\$ 0	\$ 146,682		
Cash at Month End	\$ 98,599.44			

Exceptions:

- 1) Beginning Balance: * *The Beginning Balance figures used here have been audited. The Beginning Balance is \$13,260 more than budgeted.*
- 2) Revenues:
 - a) At 58% of the year, we have received 57.9% of the budgeted charges for services revenue.

b) Miscellaneous revenue in the amount of \$956.67 was received in October from Transgroup Worldwide as payment for a QLife invoice for services when a transformer was moved through town.

3) Expenditures:

a) The Liability Insurance Line Item has been over-expended by \$1,300.00. I believe only the Special Districts Liability insurance was budgeted in this line item, but the \$1,600 Pole Attachment Bond was appropriately also posted to this line item. This should not require any budget adjustments, as the category should not be over-expended at the end of the year.

4) Budget Changes: No budget changes have been made to this fund this fiscal year. Budget changes will be considered at the next Board meeting.

CAPITAL (601):

BUDGET COMPARISONS

	<u>July 1, 2015 to January 31, 2016</u>		
	<u>Budget</u>	<u>Actual</u>	<u>Percentage</u>
Beginning Balance	\$ 400,590	\$ 377,826	94.3% * see below
Transfers In	\$ 504,140	\$ 320,816	63.6%
Revenues	\$ 30,000	\$ 6,004	20.0%
M&S / Capital Outlay / Other	\$ 934,730	\$ 12,538	1.3%
Debt Expenditures	\$ 00	\$ 0	0.0%
Revenues Less Expenses	\$ 0	\$ 692,108	

Cash at Month End \$ 690,908.69

Exceptions:

1) Beginning Balance: * *The Beginning Balance figures used here have been audited.* Beginning Balance is \$22,764 less than budgeted. With an additional \$13,260 in the General Operating Fund, the combined negative amount is just \$9,504. This is not a concern as we have budgeted for a \$331,717 increase in reserves this year.

2) Revenues: .

3) Expenditures:

4) Budget Changes: No budget changes have been made to this fund this fiscal year. Budget changes will be considered at the next Board meeting.

MAUPIN (602):

BUDGET COMPARISONS

	<u>July 1, 2015 to January 31, 2016</u>		
	Budget	Actual	Percentage
Beginning Balance	\$ 00	\$ 00	00.0%
Revenues	\$ 550,830	\$ 87,880	100.0%
Expenditures	\$ 550,830	\$ 00	00.0%
Revenues Less Expenses	\$ 0	\$ 87,880	
Cash at Month End	\$ 87,880.00		

Exceptions:

- 1) Beginning Balance:
- 2) Revenues: A \$87,880 grant has been received from Google for the Maupin Project.
- 3) Expenditures:
- 4) Budget Changes: This fund was created in January 2016.

City of The Dalles

FUND 600 QUALITYLIFE AGENCY FUND									
ACCOUNT	ACCOUNT DESCRIPTION	***** ESTIMATED	CURRENT ACTUAL	***** %REV	***** ESTIMATED	YEAR-TO-DATE ACTUAL	***** %REV	ANNUAL ESTIMATE	UNREALIZED BALANCE
300	BEGINNING BALANCE								
300									
00 00		18,213	.00		127,491	231,823.49	182	218,563	13,260.49-
300	**	18,213	.00		127,491	231,823.49	182	218,563	13,260.49-
300	*** BEGINNING BALANCE	18,213	.00		127,491	231,823.49		218,563	13,260.49-
340	CHARGES FOR SERVICES								
344	UTILITY SERVICES								
10 00	UTILITY SERVICE CHARGES	54,005	54,390.00	101	378,035	375,505.00	99	648,069	272,564.00
15 00	LSN CREDITS	0	.00		0	.00		0	.00
20 00	CONNECT CHARGES	187	900.00	481	1,309	4,000.00	306	2,250	1,750.00-
344	** UTILITY SERVICES	54,192	55,290.00	102	379,344	379,505.00	100	650,319	270,814.00
340	*** CHARGES FOR SERVICES	54,192	55,290.00		379,344	379,505.00		650,319	270,814.00
360	OTHER REVENUES								
361	INTEREST REVENUES								
00 00	INTEREST REVENUES	58	412.68	712	406	2,116.44	521	700	1,416.44-
361	** INTEREST REVENUES	58	412.68	712	406	2,116.44	521	700	1,416.44-
369	OTHER MISC REVENUES								
00 00	OTHER MISC REVENUES	16	.00		112	956.67	854	200	756.67-
20 00	E-RATE REIMBURSEMENT	4,166	.00		29,162	11,376.00	39	50,000	38,624.00
369	** OTHER MISC REVENUES	4,182	.00		29,274	12,332.67	42	50,200	37,867.33
360	*** OTHER REVENUES	4,240	412.68		29,680	14,449.11		50,900	36,450.89
390	OTHER FINANCING SOURCES								
392	SALE OF FIXED ASSETS								
00 00	SALE OF FIXED ASSETS	0	.00		0	.00		0	.00
392	** SALE OF FIXED ASSETS	0	.00		0	.00		0	.00
390	*** OTHER FINANCING SOURCES	0	.00		0	.00		0	.00
FUND TOTAL QUALITYLIFE AGENCY FUND		76,645	55,702.68		536,515	625,777.60		919,782	294,004.40

City of The Dalles

FUND 601 QLIFE CAPITAL FUND										
ACCOUNT	ACCOUNT DESCRIPTION	***** ESTIMATED	CURRENT ACTUAL	***** %REV	***** ESTIMATED	YEAR-TO-DATE ACTUAL	***** %REV	ANNUAL ESTIMATE	UNREALIZED BALANCE	

300	BEGINNING BALANCE									
300										
00 00		33,382	.00		233,674	377,826.07	162	400,590	22,763.93	
300	**	33,382	.00		233,674	377,826.07	162	400,590	22,763.93	
300	*** BEGINNING BALANCE	33,382	.00		233,674	377,826.07		400,590	22,763.93	
330	INTERGOVERNMENTAL REVENUE									
331	FEDERAL REVENUES									
90 00	FEDERAL GRANTS-MISC	0	.00		0	.00		0	.00	
331	** FEDERAL REVENUES	0	.00		0	.00		0	.00	
330	*** INTERGOVERNMENTAL REVENUE	0	.00		0	.00		0	.00	
340	CHARGES FOR SERVICES									
344	UTILITY SERVICES									
20 00	CONNECT CHARGES	2,500	1,222.25	49	17,500	6,004.01	34	30,000	23,995.99	
344	** UTILITY SERVICES	2,500	1,222.25	49	17,500	6,004.01	34	30,000	23,995.99	
340	*** CHARGES FOR SERVICES	2,500	1,222.25		17,500	6,004.01		30,000	23,995.99	
360	OTHER REVENUES									
369	OTHER MISC REVENUES									
00 00	OTHER MISC REVENUES	0	87,880.00-		0	.00		0	.00	
10 00	ENTERPRISE ZONE PAYMENT	0	.00		0	.00		0	.00	
369	** OTHER MISC REVENUES	0	87,880.00-		0	.00		0	.00	
360	*** OTHER REVENUES	0	87,880.00-		0	.00		0	.00	
390	OTHER FINANCING SOURCES									
391	OPERATING TRANSFERS IN									
40 00	IF PMT FROM OTHER FUNDS	0	.00		0	.00		0	.00	
90 01	QLIFE OPERATING FUND	42,011	45,830.91	109	294,077	320,816.37	109	504,140	183,323.63	
391	** OPERATING TRANSFERS IN	42,011	45,830.91	109	294,077	320,816.37	109	504,140	183,323.63	
393	PROCEEDS- LT LIABILITIES									
10 00	LOAN/BOND PROCEEDS	0	.00		0	.00		0	.00	
393	** PROCEEDS- LT LIABILITIES	0	.00		0	.00		0	.00	
390	*** OTHER FINANCING SOURCES	42,011	45,830.91		294,077	320,816.37		504,140	183,323.63	
FUND TOTAL QLIFE CAPITAL FUND		77,893	40,826.84-		545,251	704,646.45		934,730	230,083.55	

City of The Dalles

FUND 602 QLIFE MAUPIN FUND		*****	CURRENT	*****	*****	YEAR-TO-DATE	*****	ANNUAL	UNREALIZED
ACCOUNT	ACCOUNT DESCRIPTION	ESTIMATED	ACTUAL	%REV	ESTIMATED	ACTUAL	%REV	ESTIMATE	BALANCE
300	BEGINNING BALANCE								
300									
00 00		0	.00		0	.00		0	.00
300	**	0	.00		0	.00		0	.00
300	*** BEGINNING BALANCE	0	.00		0	.00		0	.00
330	INTERGOVERNMENTAL REVENUE								
334	STATE GRANTS								
90 00	STATE GRANTS, OTHER	8,825	.00		8,825	.00		52,950	52,950.00
334	** STATE GRANTS	8,825	.00		8,825	.00		52,950	52,950.00
336	PRIVATE SECTOR GRANTS								
10 00	PRIVATE SECTOR GRANTS	14,647	87,880.00	600	14,647	87,880.00	600	87,880	.00
336	** PRIVATE SECTOR GRANTS	14,647	87,880.00	600	14,647	87,880.00	600	87,880	.00
330	*** INTERGOVERNMENTAL REVENUE	23,472	87,880.00		23,472	87,880.00		140,830	52,950.00
340	CHARGES FOR SERVICES								
344	UTILITY SERVICES								
20 00	CONNECT CHARGES	0	.00		0	.00		0	.00
344	** UTILITY SERVICES	0	.00		0	.00		0	.00
340	*** CHARGES FOR SERVICES	0	.00		0	.00		0	.00
360	OTHER REVENUES								
369	OTHER MISC REVENUES								
00 00	OTHER MISC REVENUES	0	.00		0	.00		0	.00
20 00	E-RATE REIMBURSEMENT	0	.00		0	.00		0	.00
369	** OTHER MISC REVENUES	0	.00		0	.00		0	.00
360	*** OTHER REVENUES	0	.00		0	.00		0	.00
390	OTHER FINANCING SOURCES								
393	PROCEEDS- LT LIABILITIES								
10 00	LOAN/BOND PROCEEDS	68,333	.00		68,333	.00		410,000	410,000.00
393	** PROCEEDS- LT LIABILITIES	68,333	.00		68,333	.00		410,000	410,000.00
390	*** OTHER FINANCING SOURCES	68,333	.00		68,333	.00		410,000	410,000.00
FUND TOTAL QLIFE MAUPIN FUND		91,805	87,880.00		91,805	87,880.00		550,830	462,950.00

FUND 602 QLIFE MAUPIN FUND			DEPT/DIV 9500 OTHER USES/						ANNUAL	UNENCUMB.	%	
BA	ELE	OBJ	ACCOUNT	*****CURRENT*****	*****YEAR-TO-DATE*****				BUDGET	BALANCE	BDGT	
SUB	SUB		DESCRIPTION	BUDGET	ACTUAL	%EXP	BUDGET	ACTUAL	%EXP	ENCUMBR.		
60			QLIFE FUND									
600			OTHER USES									
	06		CONTINGENCY / UAFB									
	88	00	CONTINGENCY	15128	.00	0	15128	.00	0	.00	90767	90767.00 0
	06	**	CONTINGENCY / UAFB	15128	.00	0	15128	.00	0	.00	90767	90767.00 0
600	**	**	OTHER USES	15128	.00	0	15128	.00	0	.00	90767	90767.00 0
60	**	**	QLIFE FUND	15128	.00	0	15128	.00	0	.00	90767	90767.00 0
DIV	9500		TOTAL *****	15128	.00	0	15128	.00	0	.00	90767	90767.00 0
DEPT	95		TOTAL *****	15128	.00	0	15128	.00	0	.00	90767	90767.00 0
			OTHER USES	15128	.00	0	15128	.00	0	.00	90767	90767.00 0
FUND	602		TOTAL *****	91806	.00	0	91806	.00	0	.00	550830	550830.00 0
			QLIFE MAUPIN FUND	91806	.00	0	91806	.00	0	.00	550830	550830.00 0
GRAND			TOTAL *****	246329	70415.61	29	1173467	481633.88	41	.00	2405342	1923708.12 20

AGENDA STAFF REPORT
QUALITYLIFE INTERGOVERNMENTAL AGENCY

TO: QLife Board of Directors
FROM: Nolan K. Young, Administrative Staff
DATE: February 18, 2016
ISSUE: Capital Improvement Plan Discussion

Related Board Goals:

- 5) Develop a capital improvement plan that looks at equipment replacement, system weaknesses and opportunities for expansion (Goal #3).
- 4) Develop options for additional collocation space and pursue selected option (Goal #3).
- 6) Consider policy regarding balance between system reserves and potential distribution to partners (Goal #4).

BACKGROUND: QLife's Technical manager and Engineer have prepared a report address the Boards third goal and 5th objective; a review of our infrastructure needs. Attached is a copy of that report.

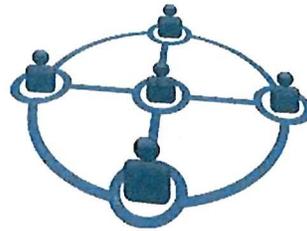
We have used that report to develop a five (5) year capital improvement plan that is also attached. You will note that the Central Business District project is budgeted over the next two Fiscal Years. The timing of that project needs to be coordinated this some development and infrastructure projects the city has been considering on 2nd and 1st streets in the Downtown.

BUDGET IMPLICATIONS: This proposed capital improvement plan will be used in the preparation of this year's budget. It will also be considered as we make recommendations for Goal Objective #6 listed above.

BOARD ALTERNATIVES: This is a discussion item for the board to give staff direction in finalizing the plan to include in our budget preparation



2016 CIP
Capital Improvement Plan



Joint Recommendation

By John Amery and Erik Orton
Version 2.1
February 8, 2016

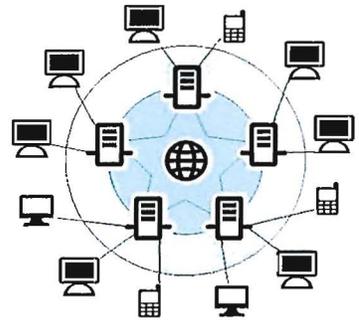
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Background

Qlife's vendors (Aristo Networks and Commstructure Consulting) have been asked to provide a joint written recommendation for benefit of development of Qlife's 2016 CII

Scope



Scope for this analysis has been removed. We are considering all aspects of Qlife that we see as potential value adding capital improvement projects that might take place over the next 5 years.

Summary

There are three primary categories where Capital Improvements may add value to Qlife.

- Outside Plant: Increasing Qlife's fiber footprint.
- Co-location: Improvements to (or possible relocation of) Qlife's Central Office (City Hall), or expanding additional remote Co-Location sites.
- Electronics: Investments in Qlife's electronics which provide lit services to customers.

Looking at different projects within these categories we have provided descriptions of these projects along with our opinions of the project's potential value to Qlife.

We have also categorized and prioritized these projects based upon our opinions of their potential value to Qlife. These recommendations may change depending upon priorities the board defines as some projects are logical predecessors to other projects. Re-prioritization of some projects may affect the order or priority of other associated projects.

Outside Plant

Outside Plant Summary

There are three general projects as well as three expansion zones we have identified as potentially adding value towards Qlife outside plant.

The General Projects identified are:

- **Downtown Bypass Project**

The Downtown Bypass Project develops an express lane through the downtown region of The Dalles freeing up fiber capacity for other projects.

- **East Bisector Project**

The East Bisector Project cuts Qlife's East ring in half allowing for better segmentation of Qlife's long haul regen (signal regeneration) customers as well as adding capacity to the East side of The Dalles.

- **Central Business District Project**

The Central Business District Project develops new plug and play multi-port service terminals and fiber infrastructure encompassing multiple blocks currently not serviced in the downtown region of The Dalles.

The potential expansion zones identified are:

- Water's Edge / The Dalles Dam / OSP & ODOT Offices zone
- Hwy. 30 / W 6th Street Commercial Business District – Cherry Heights Road to River Road (car dealerships, Coastal Farm and Equipment, Home Depot, etc.)
- Crates Way in Port of The Dalles and Chenoweth Business Park Connection

General Projects

Downtown Bypass Project

This project was originally a portion of both the Central Business District project as well as the East Bisector project. The Downtown Bypass was recently broken out as a separate project because it is a prerequisite to support multiple projects and phases of deployment discussed in this report.

The Downtown Bypass project would greatly improve fiber availability throughout the Qlife network while increasing potential capacities to all areas. The downtown backbone routes become increasingly congested as the cables enter the core and reach closer to City Hall. It is essential to move forward with this project (or similar project) to avoid Qlife reaching maximum fiber capacity within some sectors, hence inhibiting future growth capacity.

The Downtown Bypass Project would overbuild two new backbone fiber cables along existing fiber paths on each side (East and West) of the downtown corridor into the Central Office (City Hall). These express fiber paths would bypass existing customer drop off locations within the downtown region and their primary purpose would be to augment the existing capacity. These paths would be utilized for servicing customers or future expansion outside the downtown region. The current backbone is presently servicing both transport around the ring and also local distribution. The Downtown Bypass would allow the existing backbone cables to remain designated for local traffic with capacity for growth while creating additional paths to points further out on the network.

Overview map of Downtown Bypass Project



Budgetary Cost estimates for Downtown Bypass Project

Underground:	\$ 1,400.00
Aerial:	\$ 18,300.00
Cable Splicing & Termination:	\$ 31,868.00
Design, Permitting & Oversight:	\$ 12,892.00
Sub-Total:	\$ 64,460.00
15% Contingency:	\$ 9,669.00
Total Project:	\$ 74,129.00

East Bisector Project

The East side of The Dalles could be improved by developing a bisector that splits the east side of the backbone ring similar to the existing City Hall to St. Marys bisector that splits the west side backbone ring.

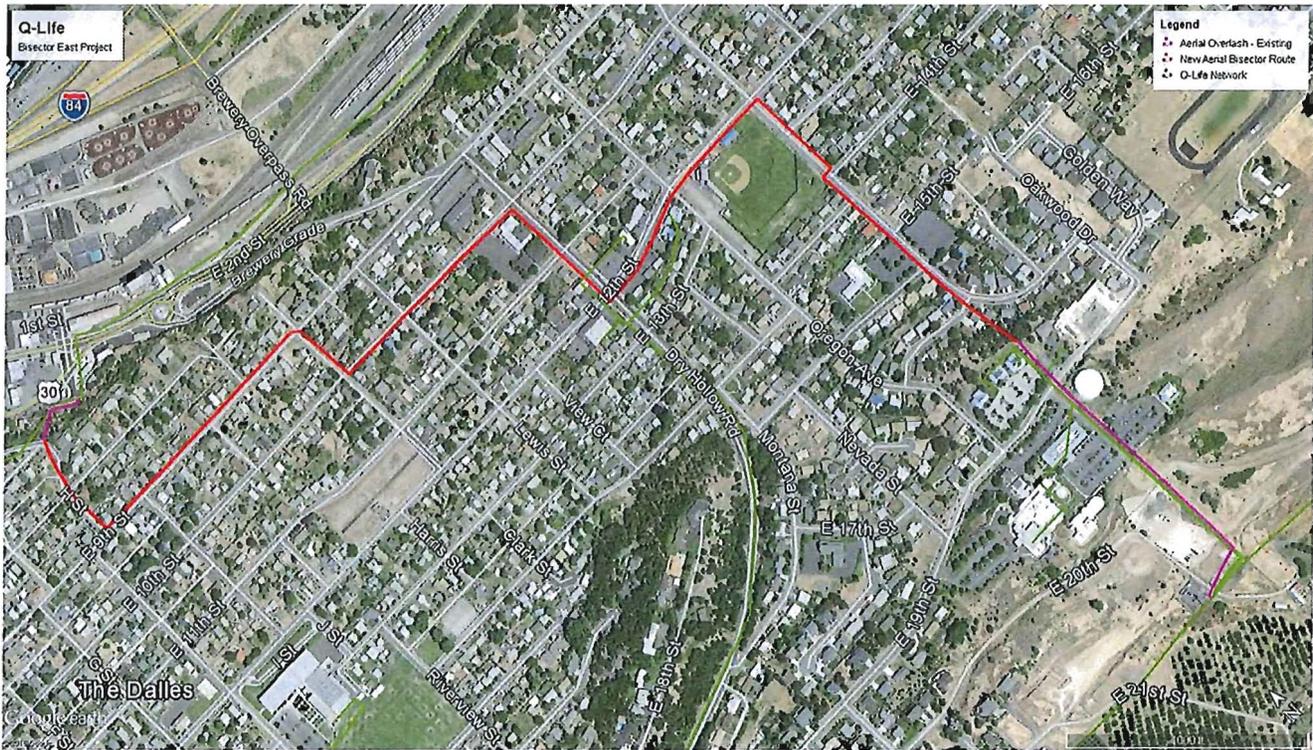
Advantages include:

1. Allows for the routing of local customer dark fiber or lit traffic through this bisector rather than routing local traffic all the way around through Big Eddy. This would improve capacities in the backbone in the middle-mile segment between City Hall and Big Eddy.
2. In the event a remote Co-Location site is chosen close to Big Eddy this bisector would improve functionality of the East side of the ring and shorten middle mile connections between City Hall and Big Eddy.
3. In the event a drop-off point is established towards Hwy 197 bridge this bisector would improve overall functionality.
4. This bisector would improve diversity and redundancy to MCMC.

This bisector should interconnect with Qlife's backbone ring South and East above MCMC and follow a path north and west until it intersects Qlife's backbone ring again near East 3rd Street and Taylor Street (near Brewery Grade round-a-bout).

A potential challenge for this project would be locating a site to install cross-connect cabinets to house the outdoor patch panels at the connection point above MCMC as there does not appear to be public ROW access in the area required to interconnect with existing QLIFE fiber. It may be possible for MCMC to grant an easement to Q-Life near the existing splice point for MCMC and create a remote cross-connect site comparable to St. Marys. A similar cross-connect site may also be required in the connection point near East 3rd Street and Taylor by Brewery Grade however it appears sufficient public ROW is available at this location.

Overview map of East Bisector Project



Budgetary Cost estimates for East Bisector Project

Underground:	\$ 25,300.00
Aerial:	\$ 52,625.00
Cable Splicing & Termination:	\$ 51,252.00
Design, Permitting & Oversight:	\$ 32,295.00
Sub-Total:	\$161,472.00
15% Contingency:	\$ 24,220.00
Total Project:	\$ 185,692.00

Central Business District Project

The Central Business District Project was originally known as the downtown project and would develop new plug and play multi-port service terminals (MST) and OSP fiber infrastructure expansion in the downtown core. Zones within the downtown region with a perceived higher take rate have been identified. New infrastructure would be built throughout these zones which would allow for easier new customer hook-ups. Deployment techniques utilizing MST's could be utilized that present minimal risk

to existing fiber customers by utilizing pre-terminated distribution nodes and thus would not require costly and time restricting maintenance notifications. New customer build-outs could be performed by technicians with a different skill-set with the ability to plug and play service drops into the terminal end and the customer equipment end. Potentially local ISPs or even electricians would have the in-house skills to perform an entire build-out to a new customer site within these zones without having to deploy fiber construction and splicing crews to the area

It is believed that the Central Business District Project may be the needed kick-start that will incentivize ISPs to consider Qlife's "Alternative Wholesale Pricing" option as this project should considerably reduce NRC charges to the areas where the network currently does not reach.

Overview map of Central Business District Project



Budgetary Cost estimates for Central Business District Project

Underground:	\$ 0.00
Aerial:	\$ 43,850.00
Cable Splicing & Termination:	\$ 39,420.00
Design, Permitting & Oversight:	\$ 20,817.50
Sub-Total:	\$104,087.50
15% Contingency:	\$ 15,613.00
Total Project:	119,700.50

Secondary zones with high build out costs

Qlife has had requests for service in the following areas however was unable to fulfill these requests due in part to large NRC build-out costs:

1. Water's Edge / The Dalles Dam / OSP & ODOT Offices zone

2. Hwy. 30 / W 6th Street Commercial Business District – Cherry Heights Road to River Road (car dealerships, Coastal Farm and Equipment, Home Depot, etc.)
3. Crates Way in Port of The Dalles and Chenoweth Business Park Connection

Awareness of these zones as potential Qlife expansion zones could be beneficial towards their fulfillment upon future requests. While the field of dreams approach does not guarantee these zones would generate future revenue, perhaps the consideration of a special funding allocation might be considered. As future opportunities arise this special fund might be a valuable tool for shared risk ventures with potential customers.

Co-Location

Co-Location Overview

There are two customer profiles utilizing Co-Location space from Qlife:

1. Long Haul customers who are interested in a regen (regeneration of signal) site for their fiber passing through (or interconnecting with) BPA infrastructure.
2. Local service providers utilizing Qlife fiber or lit services to service their local customers.

It is difficult to predict future CoLo (Co-Location) space growth requirements. There is some risk that if another entity built a CoLo hut by Big Eddy then Qlife could be at risk of losing some of its Long Haul customers. Also, the telecom industry is currently in a consolidation phase. Larger entities are buying out smaller entities and the cost of entry into the market is becoming cost prohibitive. On the other hand, as additional fiber and data centers are built throughout the region there will be an increased need for regen sites as well as space to house the additional electronics required to service local customers. Qlife will likely experience both increased competition as well as increased opportunities in the near future.

Consideration for improving, adding, or moving Co-Location space is driven by a number of factors:

1. Current Co-Location space is located in City Hall (Qlife's CO) and exhibits the following challenges:
 - City Hall CoLo space is in the basement and thus susceptible to flooding.
 - City Hall generator is at capacity.
 - City Hall house power expandability is unknown however likely nearing capacities before major enhancements are required.
 - City Hall available CoLo space is near capacity.
 - City Hall CoLo space has been expanded on an “as needed basis” without a master plan. Effects of this method have resulted in dis-jointed CoLo space located in multiple separate rooms.
2. A potential new customer has expressed interest in a CoLo site for their fiber expansion to Big Eddy.

It should also be noted that any plans to relocate Qlife's CO would require a major redesign of Qlife fiber as well as considerable challenges in moving Qlife's existing customers (most of whom operate in a live 24 hour environment and many of whom likely operate on a "five nines" uptime requirement (5.26 minutes of downtime per year)). However, the introduction of additional Co-Location options might provide benefits to new customers while existing customers could make their own internal cost/benefit decisions regarding whether to relocate.

Potential Co-Location (CoLo) options

City Hall

City Hall is currently the Central Office (CO) for Qlife. Nearly all Qlife fiber is designed to have a path that terminates in the CO.

There are potential options for addressing most of the challenges currently exhibited at City Hall:

- A new generator (along with associated increase in feeder power capacity) could be installed at City Hall. It should be noted that ongoing maintenance costs are required upon installation of a new generator.
- Additional space could be allocated to Qlife by the City for future CoLo expansion. This additional space might possibly include redesign of the entire CoLo space currently utilized by existing Qlife customers.
- Sump pumps could be pre-installed at City Hall along with an emergency preparation plan that addresses how and who would be responsible for building sandbag retaining walls in the event of flooding. It should be noted that depending upon the level of flooding even sump pumps and sand bagging may not be adequate to mitigate flooding.

New Co-Location site by Big Eddy

Qlife's contract engineering has analyzed a site close to Big Eddy for the purpose of building a remote telecom fabricated pre-cast concrete shelter.

Currently Qlife fiber capacities are limited at this site however completion of the Downtown Bypass Project should provide sufficient fiber capacity to service this location. Also, completion of the East Bisector Project would add increased capacity and redundancy options to this site.

This site would likely be a favorable site for Co-Location of Long Haul customers for the purpose of signal regeneration and in line amplifiers.

This site may also be of value to any future providers choosing to cross the Columbia River at The Dalles bridge.

This site could service local service providers although may not be preferable due to it's location at the far edge of the Qlife network.

Co-Location site by Big Eddy cost estimate

Estimates for POP, backbone and BPA connectivity for this site are \$231,488.10.

New Co-Location site at Columbia Gorge Community College (CGCC)

Qlife's contract Technical Management has analyzed a site at CGCC for the purpose of remote Co-Location.

Currently Qlife fiber capacities are limited at this location however completion of the Downtown Bypass Project should provide sufficient fiber capacity to service this location. Also, completion of the East Bisector Project would add increased capacity and redundancy options to this location.

This site could service Long Haul regen customers although they might prefer a closer location to Big Eddy.

This site would be a better option for local service providers than Big Eddy however still would not be optimal due to its distant proximity to City Hall and the Century Link CO.

This site would require an ongoing rental agreement with CGCC which would likely include annual recurring costs to Qlife. Benefits of this rental agreement should include utilization of CGCC's existing facilities infrastructure which includes 24/7 maintenance back-up of a large capacity generator as well as secure access to a well designed telecom facility.

Co-Location site at CGCC cost estimate

Estimates for backbone connectivity and Co-Location room enhancements for this site are \$107,571.00.

New Co-Location site at Sign Museum.

It has recently come to our attention there may be rental options available on the 3rd floor of the Sign Museum (former Elks building on 3rd street).

If Qlife was to start new today this location would likely be the recommended location as a Central Office (CO). It's proximity to Century Link could provide advantages to Qlife customers making Co-Location and fiber leasing from Qlife even more advantageous.

This site may not be preferable to Long Haul regen customers (in comparison to a remote site by BPA) however would likely be the site of choice for local service providers.

This site would require an ongoing rental agreement with the building's owners which would likely include annual recurring costs to Qlife. Also, it is likely that considerable upfront non-recurring costs would be required for development of a new generator and upgrade to other facilities to make this site usable and adequate for telecom collocation application.

Co-Location site at Sign Museum cost estimate

There are still a lot of unknowns about this site and currently no cost estimates have been developed.

New Co-Location site at Wasco County IT room.

Qlife's contract Technical Management has performed preliminary analysis for utilizing Wasco County's IT room as a potential overflow Co-Location site.

This site would probably not be a preferred Co-Location site for Qlife due to it's location and growth limitations however could be an excellent option as an overflow site considering there is currently fiber (in limited capacities) to this location coupled with the fact that Wasco County (a Qlife partner) has developed a quality IT room with some excess capacity availability.

This site would require an ongoing rental agreement with Wasco County which may require recurring costs to Qlife.

Primary advantages for this site are that nearly all required facilities already exist. In the event Qlife runs out of space at City Hall this site would be the recommended short term solution.

Co-Location site at Wasco County cost estimate

Rough estimates for Co-Location at this site are \$5k - \$30k depending upon customer and facility owner requirements.

Electronics

Background

Qlife provides Layer 2 ethernet connectivity throughout its fiber network. Qlife does not compete with Internet Service Providers, rather Qlife provides an open access Layer 2 network that ISPs may utilize to better service their customers. Currently the bulk of Qlife's customers utilize dark fiber however recent pricing changes may provide new incentives for providers to reconsider Qlife's lit ethernet options in some situations.

Switching Equipment

Qlife has completely replaced all electronics at least once since inception. Currently Qlife is utilizing Edgecore as their vendor. Edgecore is owned by SMC networks. More information can be found here: <http://www.edge-core.com>

All current Qlife equipment in use is capable of at minimum 1 gigabit up-link speeds. All core equipment has at minimum some gigabit ports with primary core switches utilizing 10 gig links as well. Most customer premises equipment has four (4) gigabit ports and twenty-four (24) 100 mb/s ports. Two (2) of the four (4) gigabit ports are allocated to Qlife for up-link ports. The other two ports can be utilized for customer hand-offs.

Advantages of the Edgecore line is the command line is similar to Cisco at a very reasonable price. Other advantages are that support and maintenance upgrades are available for free for the lifetime of the electronics.

Disadvantages of the Edgecore line are that their support issue escalation process is weak if not non-existent. At times we have had to work directly with technicians in Taiwan or from the parent company SMC. Support was provided however appeared more as a favor rather than a requirement from the entity.

Other disadvantages of the Edgecore line was their choice in processors in their latest line. As Qlife followed Edgecore's upgrade path for electronics we were moved from multi-core processors to (faster) single core processors. Even though the single core processors are faster they present issues with simultaneous monitoring and logging events. Thus, Qlife has been forced to keep monitoring and logging of electronics to a minimum.

Security

Qlife currently utilizes an “Air Gap” security method. All management of Qlife electronics requires physical access to the Qlife network. Qlife does not have a firewall to hack. Qlife does not utilize wireless for management access.

There are advantages and disadvantages to this methodology. Management requires technicians to physically drive on site however without a firewall to hack there is not a firewall to monitor. Proper monitoring of a firewall requires continuous analysis of the firewall's logs as well as continuous focus on network analysis and activity. This increased monitoring would increase technical maintenance costs for operations.

Server

A new server should be budgeted in the next couple of years. This is probably not a CIP project however should be considered in budgeting. A server is utilized for network operations and system monitoring. Qlife currently utilizes VMware ESXI infrastructure to host multiple server functions upon the same physical hardware. All server roles are currently based upon Linux operating systems.

Recommendations

We have developed a recommendation matrix below. These recommendations take into consideration project predecessors as well as our opinions regarding a project's potential future value to Qlife.

In the event we do not have opinions regarding relative value or priorities of projects we attempt to provide background information to management such that sound decisions can be formed.

We are not recommending Qlife perform all projects listed, for example with the Co-Location projects any one of the recommended projects might possibly service Qlife's growth requirements for a considerable time.

Recommendations are based upon today's known events. Future events will likely change our recommendations, for example a new customer requesting a specific Co-Location site might justify re-prioritization of that requested site.

Recommendation Matrix

Priority	Required Projects	Recommended Projects	Not currently Recommended
1	- Downtown Bypass Project		
2		- Central Business District Project	
3		- East Bisector Project	
4		* see footnotes (1,2) - City Hall Co-Location - Big Eddy Co-Location - CGCC Co-Location - Sign Museum Co-Location	* see footnote (3) - Wasco County Co-Location
			* see footnote (4)

Priority	Required Projects	Recommended Projects	Not currently Recommended
5			- Secondary expansion zones with high NRC build-out costs.
6			* see footnote (5) - Upgrade Electronics

Recommendation Footnotes

1. Only one of the following three projects is likely required: Big Eddy Co-Location, CGCC Co-Location, Sign Museum Co-Location. However, City Hall Co-Location improvements may be required as a separate project from the other listed projects.
2. In the event the Sign Museum Co-Location project is chosen, this project should be prioritized as the Sign Museum site would be a likely site to terminate other fiber projects.
3. In the event Qlife runs out of Co-Location space the Wasco County Co-Location project would likely be re-classified and re-prioritized.
4. While we are not currently recommending Qlife expansion into these zones, we might recommend a special fund be developed such that when opportunities arise there are available funds to assist with such expansion.
5. While there are functions in Qlife's electronics that would be enhanced with upgrades, given Qlife's current focus on dark fiber it is recommended that priority be given to enhancing physical infrastructure over electronics upgrades. In the event the new pricing changes for lit services generate considerable additional demand this recommendation should be re-evaluated.

Aristo Networks LLC
Technical Management Report
By
John Amery
2/18/2016

Items of Discussion:

- A core switch feeding only TDWifi customers has lost management access. We will likely have to replace the switch. Customer connectivity has not been affected.
- Qlife has been asked to review our logs regarding potential blips reported by an end customer (Qlife's customer's customer). We have yet to find correlating issues within our logs.