King County

Metropolitan King County Council
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MEMORANDUM

DATE: January 16, 2009

TO: Metropolitan King County Councilmembers

FROM: Cheryle A. Broom, County Auditor

SUBJECT: Data Center Relocation Monthly Oversight

Attached is the second Data Center Relocation monthly status report prepared by the Facilities Management Division (FMD) and the Office of Information Resource Management (OIRM). Oversight of this project was added to the King County Auditor's Office work program under the Capital Projects Oversight (CPO) program in September 2008, and the first report was transmitted to the Capital Budget Committee on December 23, 2008. Oversight is being conducted through monthly meetings with the project team, review and comment on draft status reports, and discussion of emerging risks on this project. This report provides a review of the status of scope, schedule, budget, and risk for the Data Center Relocation project through November 2008.

Summary

The scope of the project may be reduced to save costs, the project is on schedule, and it is anticipated that an additional budget appropriation may be needed in 2009. The project team is actively managing the remaining risks on the project.

Scope

The project team continues to evaluate a change in the scope of the project which would reduce the size of the office space lease at the new data center location at the Sabey Center. This change is being considered as a project cost saving measure and is made possible because suitable office space is available for OIRM employees in the Chinook building. Our office will monitor, review, and report on the impacts of any change in project scope.

Schedule

The baseline schedule for the project shows commissioning of the data center on May 22, 2009, finishing the physical move of county equipment from Seattle to Tukwila on October 12, 2009 and completion of the secondary fiber installation by April 6, 2010. Currently the project is on schedule. The schedule will be updated once the relocation consultant is under contract to reflect the schedule for milestones on their scope of work. If the relocation consultant is not under contract by the end of 2008, the completion of the project could be delayed. A focus of oversight in the future will be to understand and communicate the cost impacts of any schedule delay.

Budget
This project has a total budget of $18,886,115. Through November, life-to-date expenditures have been $918,292 or approximately 5% of the project budget. However, the expenditure reports do not reflect the progress made on the tenant improvements as the lease calls for payment in one lump sum, upon substantial completion of the work. The graphic on page 3 of the attached report titled "Cashflow: Actual Versus Planned Expenditure" shows the actual earned value through October to be ahead of schedule, or approximately where it would be expected to be in February. This is based on an estimation of Sabey's progress on the tenant improvements at the new data center location which is proceeding faster than planned.

The forecast project cost through completion shown in the November report indicates that all appropriated funds will be needed. At this time none of the contingency funds have been needed, however it should be noted that the $1,744,132 budgeted as contingency includes the budget for sales tax. Future reports will breakout the estimated sales tax component and will report on any use of the contingency funds. Furthermore, the current budget does not show the planned supplemental 2009 budget appropriation. Estimates will be reviewed and the total supplemental amount needed will be developed with the assistance of the relocation consultant who will be under contract in January. When updated estimates become available, future oversight reports will comment on the level of confidence associated with the revised cost estimate for the additional funds.

Risk
The project team actively manages a risk register on the project and conducts a monthly review of the risk register with the project sponsors. Significant changes to the risk register are discussed at monthly oversight meetings. In November, two developments resulted in a lessening probability of two very urgent, high-cost project risks: contract with Sabey to provide temporary secondary fiber; and contract negotiations with the relocation consultant nearing completion.

We appreciate the collaborative efforts of FMD and OIRM in providing for effective oversight of the Data Center Relocation project consistent with council intent. No formal presentation of this monthly report has been scheduled for any council committee. As with all CPO reports, this will be placed on the KCAO website so it will be available to the public. Should you have questions or comments on the report, please contact me or Tina Rogers, the Capital Projects Oversight Manager.

CB:TR:jl

Attachments: Data Center Relocation, Facilities Management Division & Office of Information Resource Management, November 2008 Monthly Reporting

cc: Ron Sims, County Executive
David Martinez, County Chief Information Officer
Jim Buck, County Administrative Officer Designee
Bob Cowan, Budget Office Director
Kathy Brown, Director Facilities Management Division
Saroja Reddy, King County Council Policy Staff Director
Mark Melroy, Senior Principal Legislative Analyst

DATA CENTER RELOCATION

Facilities Management Division & Office of Information Resource Management

November 2008 Monthly Reporting

Project Summary

The Data Center Relocation Project will create a dedicated King County facility in the new Sabey Data Center located in Tukwila, Washington. The project will develop approximately 7,500 s.f. of data space and 580 s.f. of storage. The total budget is $18.8 million which includes $9.9 million for tenant improvements. The Data Center currently resides in leased space in the Seattle Municipal Tower. Over the next 12 months the Facilities Management Division, Office of Information Management and the Sabey Company will collaborate on designing, constructing, equipping and relocating approximately 60% of the server capacity for King County government to this new, state-of-the-art facility. In addition, the project will provide 2 distinct, secure fiber lines to serve as the main and secondary connections between the Data Center and King County's wide area network in downtown Seattle. This new fiber line system will accommodate 100% of the County's needs with capacity for growth.

King County

Progress Highlights

- OIRM negotiations with the relocation consultant are nearing conclusion. An agreement on the contract scope, budget and schedule is anticipated in December. The consultant would then be on track to begin work in January as planned.

- OIRM is re-evaluating the need for office space in the Sabey building. An alternative plan to locate space in the Chinook building is being considered and reviewed by the property services division. Further analysis will be provided in the December report.

- The project team met with the King County Auditor this month to review the overall project status. During that meeting the auditor received a portfolio of information including a copy of the project's MOU, Monthly Tracking Report, Risk Register, contingency review process and consultant contract information. The Auditor made recommendations on the reporting format and content which have been incorporated herewith.

- During the monthly meeting a Communication Protocol Document was presented by the Auditor's Office outlining a process for sharing information and documentation. The document is being reviewed by the Executive's Project Sponsors, which include the Directors of OIRM, DES, Budget and FMD as well as the Prosecuting Attorney's Office.

Key Issues

- The project team is questioning the level of completion on the 80% design submittal package from Sabey. They have requested additional information on consistency with performance standards; and overall level of architectural detail. The project team has exchanged correspondence with the consultant and they will work together towards a revised Sabey submittal. This is not expected to impact the construction schedule.

- Installation of temporary, secondary fiber by Abovenet remains on the critical path. King County has contracted with Sabey to expedite installation. The Abovenet fiber will be required until the secondary fiber line is fully installed in 2010.

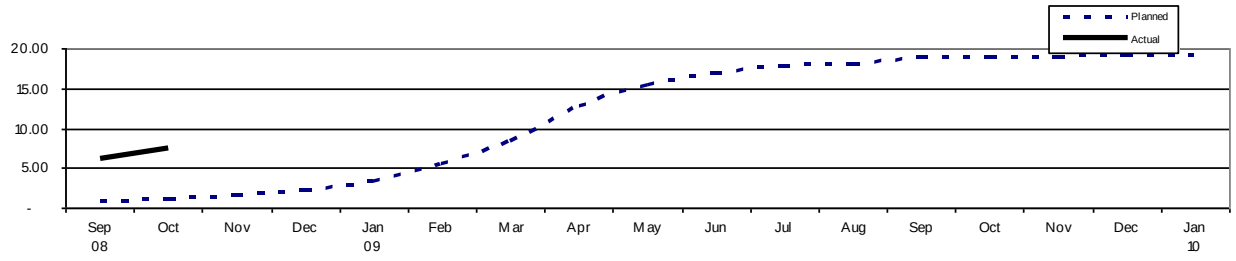
Project Milestone Chronology

- July 2008 Data Center Legislation Approved
- August 2008 King County Lease with the Sabey Data Center LLC
- August 2008 Sazan Contract – CM and Technical Consultant
- October 2008 Monthly Reporting to Auditor's Office and County Council
- November 2008 MOU Between FMD, OIRM and the Budget Office
- November 2008 Contingency Review Process established
- November 2008 Responsibility Matrix established

Expenditure Summary

Description	Current Budget	Expenditures 11/30	Forecast thru Completion	Projected Balance
FMD Data Center Relocation	10,756,215	900,561	9,855,654	-
OIRM DC Relocation	6,385,768	17,731	6,368,037	-
OIRM DC Contingency	1,744,132	-	1,744,132	-
Grand Total All Projects	18,886,115	918,292	17,833,456	-

Cashflow: Actual Versus Planned Expenditure



Cost Note: Sabey started Central Plant construction prior to August 2008

- *The cashflow will be further refined as new expenditure data from consultants is received. The project anticipates an additional appropriation in 2009.*

Summary Schedule

% Complete	Activity	Planned		Actual		Current Forecast	
		Start	Finish	Start	Finish	Start	Finish
100%	Lease Development	2/4/08	8/15/08	2/4/08	8/15/08		
	Design TI's	8/18/08	11/21/08	8/18/08	11/12/08	9/19/08	11/21/08
	Permits	10/24/08	11/21/08	10/30/08	11/18/08	10/24/08	11/21/08
	Construct TI's	11/24/08	4/10/09	11/19/08		11/24/08	4/10/09
	Commissioning	4/13/09	5/22/09			4/13/09	5/22/09
	Data Center Infrastructure	5/5/08	5/11/09	5/5/08			6/1/09
	Network Engineering	5/5/08	9/30/09	5/5/08			10/12/09
	Telephony	9/15/08	6/22/09	9/15/08			5/15/09
	Wireless & KCPAN	9/15/08	10/7/09	9/15/08			10/19/08
	Server Build Area	11/12/08	7/25/09			11/14/08	10/5/09
	I-Net Equipment	3/16/09	6/29/09			2/20/09	6/1/09
	KCWAN Fiber-Primary Line	5/5/08	6/15/09	5/5/08			5/15/09
	KCWAN Fiber-Secondary Line	5/5/08	4/6/10	5/5/08			4/6/10
	Temporary Fiber (AboveNet)	9/4/08	4/30/09	9/4/08			4/30/09
	Systems Engineering	12/3/08	9/23/09			11/17/08	10/1/09
	Applications	9/15/08	8/10/09	9/15/08			7/31/09
	Relocation Consultant Physical Mo	4/22/08	10/12/09	4/22/08			9/30/09

Budget Detail: The budget continues to track consistently with the schedule and planned expenditure levels.

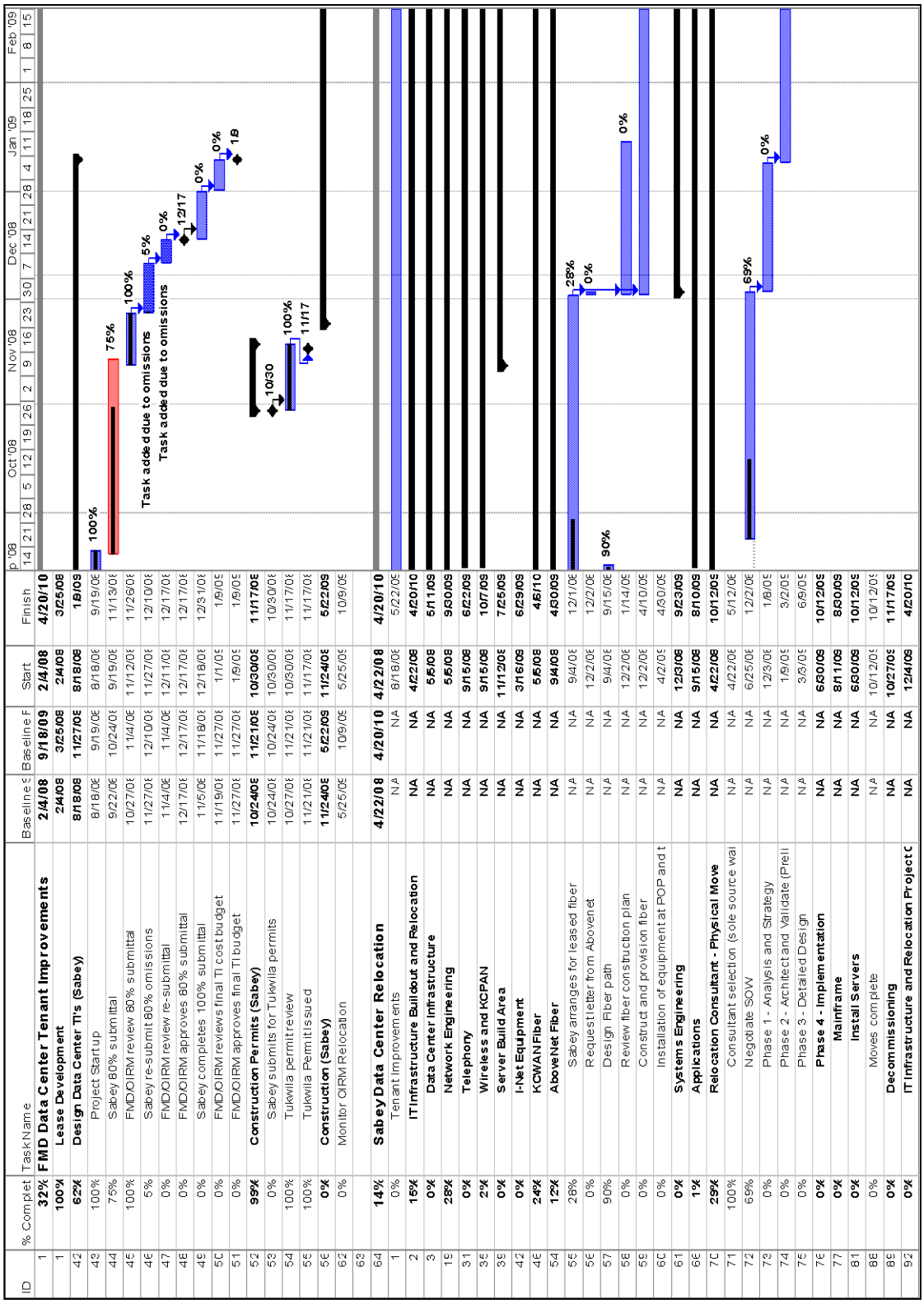
ProjectNo	Cost Element	Description	Current Budget	Expenditures	Encumbrance	Current Balance	Forecast thru completion	Projected Balance
		FMD Data Center Relocation						
395657								
	001	Design	907,886	709,369	6,517	192,000	192,000	-
	003	Construction	9,503,721	3,721	-	9,500,000	9,500,000	-
	004	Equipment/Furnishings				-	-	-
	005	Contingency				-	-	-
	006	1% for Art				-	-	-
	007	County Force Design				-	-	-
	009	Project Management	344,608	187,471	-	157,137	157,137	-
		Totals	**10,756,215**	**900,561**	**6,517**	**9,849,137**	**9,849,137**	-
377219		**OIRM Data Center Relocation**						
	101	Data Center Infrastructure				-	-	-
	102	Network Engineering	1,177,310		125,088	1,052,222	1,052,222	-
	103	Telephony				-	-	-
	104	Wireless & KCPAN				-	-	-
	105	Server Build Area				-	-	-
	106	I-Net Equipment						
	107	KCWAN Fiber	1,839,866			1,839,866	1,839,866	
	108	Abovenet Fiber	1,056,762			1,056,762	1,056,762	
	109	Systems Engineering						
	110	Relocation Consultant	1,306,800			1,306,800	1,306,800	-
	111	OIRM Labor	1,005,030	17,731	2,762	984,537	984,537	-
		Totals	**6,385,768**	**17,731**	**127,850**	**6,240,187**	**6,240,187**	**-**
377220		**OIRM Data Center Contingency**						
	005	Contingency	1,744,132			1,744,132	1,744,132	-
		Totals	**1,744,132**	**-**	**-**	**1,744,132**	**1,744,132**	-
		Grand Total All Projects	**18,886,115**	**918,292**	**134,367**	**17,833,456**	**17,833,456**	**-**

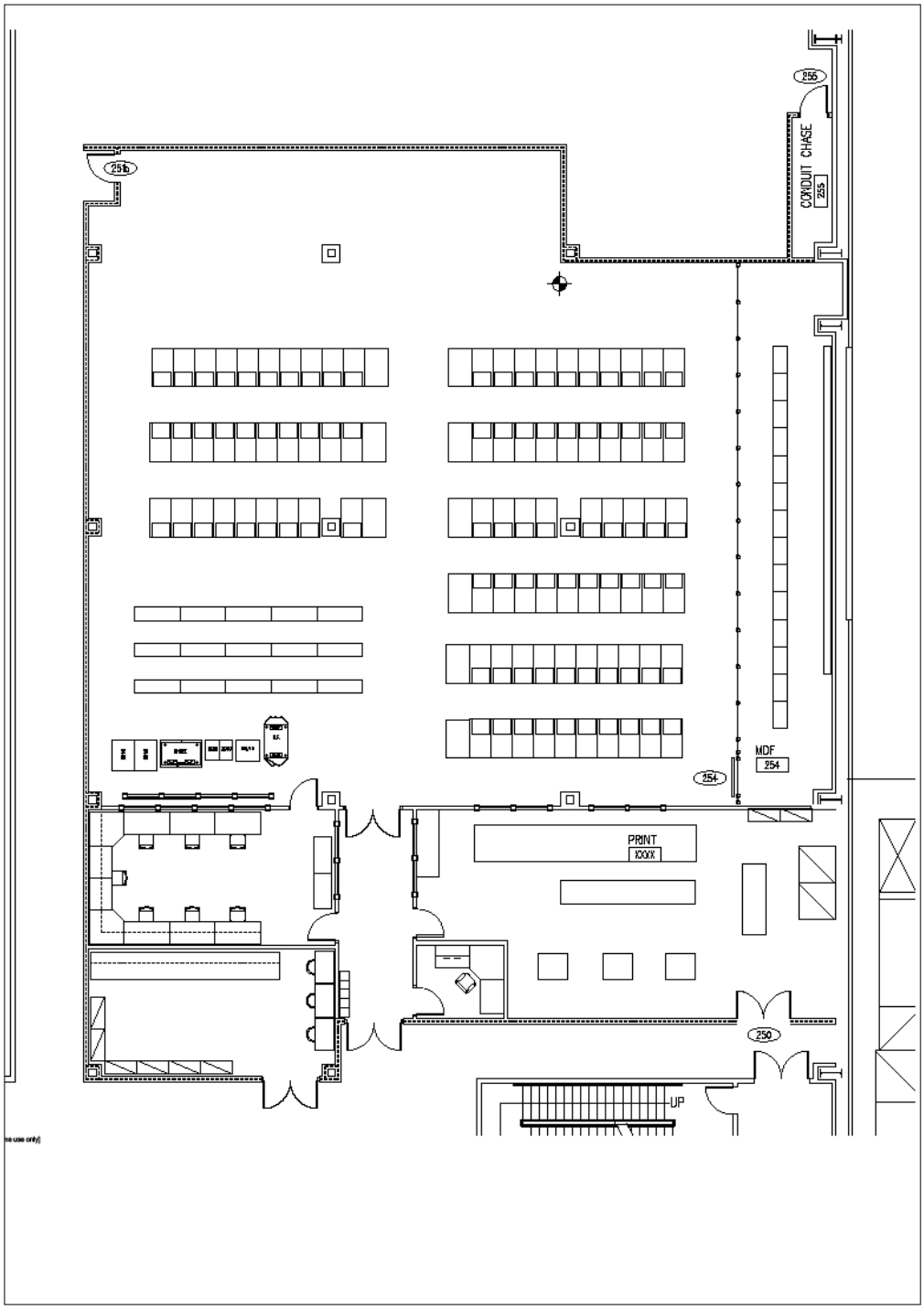
Planned Contract Listing

Description of Each Contract or Work Agreement	Estimated Amount	Estimated Timeframe
Relocation Consultant: The contract would focus on consulting services for planning, scheduling and executing the relocation of the King County Enterprise Data Center.	$1,500,000	12/08 - 12/09
Blanking panels and shelving for cabinets, power cords, patch cables, horizontal power, MDF caging	$33,000	1/09-6/09
Digital KVM and associated equipment, console controllers	$324,000	1/09-6/09
Network switches	$1,700,000	3/09-8/09
I-Net switch	$86,000	3/09-6/09
Other move related expense (e.g., surplus)	$20,000	9/09-10/09
Decommissioning of Seattle Municipal Tower	TBD	9/09-12/09
Decommissioning Fortress Co-location (Auxiliary Server Room I and II)	TBD	9/09-10/09
Closeout of lease at Fortress co-location	TBD	9/09
Seed equipment for distributed moves requiring minimal downtime	$170,400	5/09 – 10/09

Schedule Detail

Tenant Improvement work is on track according to Sabey's proposed construction schedule. Issues with the 80% CD submittal package are being managed through the review process and are not expected to impact the schedule.



ID	% Complet	TaskName	Baseline S	Baseline F	Start	Finish
1	32%	**FMD Data Center Tenant Improvements**	2/4/08	9/18/09	2/4/08	4/20/10
1	100%	**Lease Development**	2/4/08	3/25/08	2/4/08	3/25/08
42	62%	**Design Data Center TI's (Sabey)**	8/18/08	11/27/08	8/18/08	1/9/09
43	100%	Project Startup	8/18/08	9/19/08	8/18/08	9/19/08
44	75%	Sabey 60% submittal	9/22/08	10/24/08	9/19/08	11/13/08
45	100%	FMD/OIRM review 60% submittal	10/27/08	11/4/08	11/12/08	11/26/08
46	5%	Sabey re-submit 80% omissions	11/27/08	12/10/08	11/27/08	12/10/08
47	0%	FMD/OIRM review re-submittal	11/4/08	12/11/08	12/11/08	12/17/08
48	0%	FMD/OIRM approves 80% submittal	12/17/08	12/17/08	12/17/08	12/17/08
49	0%	Sabey completes 100% submittal	11/5/08	11/18/08	12/18/08	12/31/08
50	0%	FMD/OIRM reviews final TI cost budget	11/19/08	11/27/08	1/1/09	1/9/09
51	0%	FMD/OIRM approves final TI budget	11/27/08	11/27/08	1/9/09	1/9/09
52	99%	**Construction Permits (Sabey)**	10/24/08	11/21/08	10/30/08	11/17/08
53	0%	Sabey submits for Tukwila permits	10/24/08	10/24/08	10/30/08	10/30/08
54	100%	Tukwila permit review	10/27/08	11/21/08	10/30/08	11/17/08
55	100%	Tukwila Permit Issued	11/21/08	11/21/08	11/17/08	11/17/08
56	0%	**Construction (Sabey)**	11/24/08	5/22/09	11/24/08	5/22/09
62	0%	Monitor OIRM Relocation	5/25/09	10/9/09	5/25/09	10/9/09
63						
64	14%	**Sabey Data Center Relocation**	4/22/08	4/20/10	4/22/08	4/20/10
1	0%	Tenant Improvements	NA	NA	8/18/08	5/22/09
2	15%	**IT Infrastructure Buildout and Relocation**	NA	NA	4/22/08	4/20/10
3	0%	**Data Center Infrastructure**	NA	NA	5/5/08	5/11/09
19	28%	**Network Engineering**	NA	NA	5/5/08	9/30/09
31	0%	**Telephony**	NA	NA	9/15/08	6/22/09
35	2%	**Wireless and KCPAN**	NA	NA	9/15/08	10/7/09
36	0%	**Server Build Area**	NA	NA	11/12/08	7/25/09
42	0%	**I-Net Equipment**	NA	NA	3/16/09	6/29/09
45	24%	**KCWAN Fiber**	NA	NA	5/5/08	4/6/10
54	12%	**AboveNet Fiber**	NA	NA	9/4/08	4/30/09
55	28%	Sabey arranges for leased fiber	NA	NA	9/4/08	12/1/08
56	0%	Request letter from Abovenet	NA	NA	12/2/08	12/2/08
57	90%	Design Fiber path	NA	NA	9/4/08	9/15/08
58	0%	Review fiber construction plan	NA	NA	12/2/08	1/14/09
59	0%	Construct and provision fiber	NA	NA	12/2/08	4/10/09
60	0%	Installation of equipment at POP and	NA	NA	4/2/09	4/30/09
61	0%	**System s Engineering**	NA	NA	12/3/08	9/23/09
65	1%	**Applications**	NA	NA	9/15/08	8/10/09
70	29%	**Relocation Consultant - Physical Move**	NA	NA	4/22/08	10/12/09
71	100%	Consultant selection (sole source wai	NA	NA	4/22/08	5/12/08
72	69%	Negotiate SOW	NA	NA	6/25/08	12/2/08
73	0%	Phase 1 - Analysis and Strategy	NA	NA	12/3/08	1/8/09
74	0%	Phase 2 - Architect and Validate (Preli	NA	NA	1/9/09	3/2/09
75	0%	Phase 3 - Detailed Design	NA	NA	3/3/09	6/9/09
76	0%	**Phase 4 - Implementation**	NA	NA	6/30/09	10/12/09
77	0%	**Mainframe**	NA	NA	8/11/09	8/30/09
81	0%	**Install Servers**	NA	NA	6/30/09	10/12/09
88	0%	Moves complete	NA	NA	10/12/09	10/12/09
89	0%	**Decommissioning**	NA	NA	10/27/09	11/17/09
92	0%	**IT Infrastructure and Relocation Project C**	NA	NA	12/4/09	4/20/10

Data Center Floor Plans