



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD
GENERAL MANAGER'S DIVISION



TO: Commissioners Bishop, Menegat, Lanning, Simpson, Farmer
FROM: Ken Beeson
DATE: December 13, 2006
SUBJECT: Roosevelt Building Project Review

Issue Statement.

This memo provides background for the December 19 Board review of the Roosevelt Building Project.

Background.

I advised the Board two weeks ago that the CM/GC's initial estimate for construction of the project was substantially higher than the construction estimate we reviewed with the Board in June. On December 19, in addition to reviewing the overall status of the project, I want to:

- review this new estimate for construction;
- review how it impacts the overall project budget estimate;
- discuss how it differs from the June estimate;
- review potential rate implications related to the new estimate; and
- discuss our overall process for developing a final cost estimate in March 2007 for the project construction.

Discussion - Design Review.

Project design started in August and consists of (1) Design Development (completion expected in April/May 2007) which includes completion of substantial design of structures and yards, completion of cost estimate for use in construction funding decision; and (2) Construction Documents (completion expected in February 2008) which includes final drawings and specifications for construction.

Operations Building Design. Work area locations, adjacencies and space needs are set and the building "base sheets" have been sent to the design engineers (electrical, mechanical, structural, etc.). Right now, the Operations Building is approximately 127,000 square feet in size, and approximately 12,200 square feet larger than the 30% design program. This increase is discussed on page 4 of this memo under "*Operation Building Program Changes.*"

Warehouse and Fleet Buildings, Operations Yard. The Warehouse and Fleet building dimensions are set and the design "base sheets" have been sent to the design engineers. Space assumptions for warehouse, fleet and yard remain consistent with 30% design assumptions.

Operations Building Access Bridge. This is the pedestrian bridge from the employee parking area to the Operations Building entrance. It is approximately 220 feet long and planned as steel/wood construction; we are proceeding with design assuming no cover.

Site Security. The operations yard will include lighting, video surveillance and motion detection systems. A site access control system will be installed for operations yard and building entrances. Lighting and video surveillance will be installed for the employee parking area and for building access from the north (employee parking side). No fencing is planned for the employee parking area.

Sustainability Design Measures. Specific work includes:

- *Site Storm Water.* Design assumption remains that all storm water runoff will be handled on site (green roofs, bio swales, drainage to wetlands) and that city storm sewer connection will not be required (saving construction connection costs, SDC costs, and monthly discharge costs).
- *Site Sanitary Sewer.* We are reviewing possible installation of a “Living Machine” that would allow all sanitary effluent to be handled on site and no connection to city sanitary sewer (saving construction connection costs, SDC costs, and monthly discharge costs). Benefit/cost analysis will be completed.
- *Solar Photovoltaics.* The current estimate includes approximately \$900,000 in installed solar PV’s. We are reviewing what amount of PV’s we think we can justify and install (i.e., available roof space, generation/output assumptions, estimated net-metering credits, are tax credits available, etc.).
- *Independent Commissioning Authority.* We released an RFP for an Independent Commissioning Authority to help ensure the building mechanical, electrical, and safety systems are properly installed and functioning when the building is completed. They will also provide EWEB building operations personnel with a “systems manual” that describes operation and maintenance protocols for all systems. Employment of this firm is also required as part of the LEED certification process.
- *EWEB EMS Coordination.* EWEB Energy Management Services staff is working with the architects and engineers on energy efficiency measures and analysis. One focus of this work is to enable EWEB to take advantage of available Business Energy Tax Credits (BETC), Energy Trust of Oregon (ETO) credits, and any EWEB conservation credits.

Permitting Status. Significant permits required include:

- *Building Permit (City of Eugene).* City permitting is required to allow commencement of (1) earth / site work August 1, 2007, and (2) building construction work in early 2008.
- *Joint Removal-Fill Permit (Oregon Department of State Lands (DSL), Corps of Engineers and Oregon Department of Environmental Quality (DEQ)).* Permits allows for removal and fill needed for construction of operations buildings and yard, construction of employee parking, and restoration of wetlands. Joint permit application filed August 31, 2006. DSL posted their permit for public comment through end October and no comments were received; final approval decision expected by end March 2007. Corps and DEQ have started their review processes and will be taking public comment through December 19. We are working to secure these permits by June 2007 to allow for site work starting August 2007.

Prior to issuing a final fill permit, DSL will require that EWEB provide (1) a receipt showing purchase of credits in the West Eugene wetlands bank consistent with our permit application (approximately 13 acres at \$50,000 / acre), and (2) an “Instrument of Protection” approved by the Board showing that EWEB has set aside certain wetland on our site consistent with our permit application. Staff expects to request Board approval of a Resolution in early 2007 providing authorization for this instrument and authorization for the wetlands credit purchase.

Property Purchase. We have completed the purchase from Union Pacific Railroad of the 6-acre parcel located on the south side of the EWEB property.

Traffic Signal on Roosevelt. We are completing a city-required Traffic Impact Analysis (TIA) regarding installation of traffic signal at EWEB site entrance and Roosevelt Boulevard (northeast corner of site) and across from existing entrance to subdivision on north side Roosevelt.

Building Advisory team (BAT). The BAT continues to meet every three weeks with meetings planned through early next year. Meeting agendas include (1) review of design and current design questions, and (2) review of special design questions or issues (i.e., art selection, on-site fueling decision, site security, project budget / cost estimate review process, communication plan, LEED, project schedule, etc.)

Communication Plan. We are planning a public briefing here at EWEB in mid- to late January. In addition we want to hold a neighborhood meeting by early February. We are also planning to conduct “brown bag” or noon hour discussions to review the project with employees.

Project Cost Estimate Review.

In June, the Board approved a project budget estimate of \$72.3 million, an amount representing a 5% reduction from the \$76.2 million budget estimate that staff had prepared. Approximately \$54.1 million of that \$72.3 million represents the *direct construction cost* estimate (does not include costs for design and permitting, procurement of equipment and furniture, owners contingencies and overheads, etc).

In mid-November, the CM/GC completed a preliminary estimate of \$79 million for the *direct construction cost* for the Roosevelt project. This estimate (which has since been revised to approximately \$74 million) is based on the CM/GC’s interpretation of an assembly of project information (including the 30% design documents, current design material, discussions with the architects and engineers, etc.).

This estimate is being used to provide guidance to the design team as we proceed through design development. Another estimate will be developed in March 2007 that will be the final project construction estimate and if approved by the Board will be the estimate that can be used to support project construction financing.

Given the substantial difference between this new estimate and the estimate based on the 30% design, we spent time in the past few weeks working to identify and quantify the differences. This critical review will continue as we move forward with design; and the resulting discussion between the CM/GC and the architects and engineers provides opportunity to reassess design and constructions assumptions.

Project Cost Estimate Comparison. In order to review and compare these estimates, we have prepared Attachment A (“Project Cost Estimate Comparison”) which compares the original project budget reviewed with the Board in June and based on the 30% design estimate; the project budget estimate with the 5% reduction approved by the Board; and the CM/GC estimate described above. Each of these estimates includes

all estimated project costs including the direct construction cost estimate, as well as the costs for design and permitting, procurement of equipment and furniture, owners contingencies and overheads.

This comparison is organized to show estimated costs for (1) buildings and site, (2) fees and overheads associated with that construction, (3) procurement of new equipment and furniture, (4) permits and design and engineering services, and (5) EWEB contingencies and overheads related to the project construction.

Notes are included on a separate sheet describing the differences in each of these cost areas between the Board approved budget estimate and the CM/GC estimate. A few of these differences are highlighted below:

- *Operation Building Program Changes (\$2.0 million of the cost difference between the Board approved budget estimate and the CM/GC estimate).* We have completed substantial review of the program assumptions for the Roosevelt facility in the past several months and, as mentioned earlier, the Operations Building is approximately 12,000 sq feet larger than the 30% program. This net increase is in “shared space” and is comprised of a number of smaller increases as well as reductions.
 - We have added a basement (approximately 8000 square feet) to house all mechanical and electrical equipment. We are completing an economic life cycle analysis and believe it will be cost effective to house this equipment in a basement as opposed to on the roof and distributed through various parts of the building. This new space offsets approximately 2200 square feet of more expensive mechanical and electrical room space in the Operations Building; it also allows us to purchase less expensive equipment for indoor installation as opposed to more expensive roof-mounted equipment; it also means that equipment life will be substantially longer when placed indoors instead of outside.
 - We have added approximately 4800 square feet of atrium space in the central part of the building which provides for a central reception area and break/lunch room use; it offsets approximately 1250 square feet of more expensive break room and reception space in the Operations Building.
 - We have added approximately 1200 square feet to the IS data center to accommodate equipment required for EWEB’s Disaster Recovery systems. Using the Roosevelt site for this purpose is expected to save ongoing annual charges currently paid to a service provider to support these services. Cost analysis is being completed.
 - We are not constructing the “Wellness/Mechanical Building” (approximately 4300 sq feet) included in the 30% design; we are including approximately 1800 square feet in the Operation Building for fitness and wellness facilities (exercise, nurse, physical therapist).
 - Although we added some space in certain work areas as we started final design and reviewed the requirements, we recently went through the entire Operations Building and removed approximately 5300 square feet by making minor adjustments to each building section. The result is that “work area space” in the current Operations Building design is approximately 300 square feet less than the 30% design program.
- *Differences – including Escalation - in Construction and Material Assumptions (\$15 million).* These differences, which are still being reviewed and refined, constitute the largest area of cost difference, and cover various areas of construction, including site grading and rock installation, concrete paving for yard, building foundations, structural steel, glass and louvers, and mechanical and electrical systems. These cost differences fall into several categories including (1) escalation in material and construction costs since 2005, (2) different assumptions on quantity and / or type; and (3) some material included by the CM/GC was not included in the original estimate. I estimate that escalation accounts for approximately \$8 – 10 million of the total; we are continuing to clarify this assumption.

- *Overheads and Contingencies (5.9 million)*. This difference results from the CM/GC using a higher estimating contingency applied to a higher construction estimate. As design continues, this amount will either disappear or be incorporated into the construction estimate.
- *Procurement (\$350,000)*. This difference includes costs revisions I have made: (1) I have increased the escalation and contingency assumptions given the escalation increases we are seeing on the construction side; and (2) I am continuing to carry an assumption of public art based on 1% of the construction cost, which I have increased to follow the higher construction cost assumption.¹
- *Services and Permits (\$1,020,000)*. Possible increases in this area include (1) higher permit fees related to higher construction costs; (2) a possible increase in design and engineering fees related to some increase in time for design development and also to allow for possible acceleration of preparation of specifications and bid documents in late 2007 and early 2008; and (3) a possible increase in the cost for the commissioning agent contract, also related to higher construction costs.
- *EWEB Contingency and Administrative Overhead (\$1.7 million)*. These are a function of the total project cost; I think we should continue to carry this contingency until project development is further along; the administrative overhead is an EWEB accounting requirement.

Estimated Rate Impacts. Table 1 below provides a breakdown of the estimated project costs (assuming the new estimate) during the next several years, along with corresponding rate impacts. Estimated rate impacts related to incremental adjustments of \$5 million (up or down) in the project cost are also included.

Item / Time Frame	2006 - 2007	2008 - 2012	2013 +
Design and Planning	\$ 8,000,000	\$ -	\$ -
Roosevelt Building Construction	\$ -	\$ 90,000,000	\$ -
Downtown Site Sale	\$ -	\$ -	\$ -
Totals	\$ 8,000,000	\$ 90,000,000	\$ -
Rate Impact	0.32%	2.18%	3.65%
Adjust Project Estimate by \$5 million	0.00%	0.14%	0.22%

Notes on the “Rate Impact Estimates.”

- These rate impact estimates represent a combination of electric and water. Assuming the traditional electric and water accounting split of 86% electric and 14% water, the electric rate would be slightly less than the amounts shown above and the water rate would be approximately twice the amounts shown above.
- The rate impacts shown in the three successive time frames are inclusive. The 0.32% for 2007 includes principal and interest and assumes issuance of debt by fall of 2006. The 2.18% for 2008-2012 assumes debt issuance of \$90 million in mid-2007 with interest-only debt service payments through 2012. Continuation of debt service on the original \$8 million issue is included. It is also assumed the current bonds on the HQ building are taken out. The 3.65% for 2013 and beyond assumes principal and interest payments on the total debt.
- There is no credit assumed for proceeds from any sale of downtown property.

¹ I know there are various opinions on provision of art in this facility. My intention, prior to completion of a final estimate in March, is to review this matter with the Building Advisory Team and bring the Board a recommendation.

- Staff is currently reviewing the Roosevelt design and cost estimate to more specifically determine electric and water shares of the project cost and these rate estimates will probably be adjusted to reflect that analysis.

Schedule Notes. Upcoming significant project events and decision points include:

- Board Review Project Status, Budget (December 19)
- Board Work Session to review Project (late January) (tentative and not scheduled)
- Board / City Council Joint Work Session (February 12)
- Board Review Project Status, Budget (February 20)
- Completion of Architect and CM/GC estimates (based on design development) (March)
- Board review, consideration of final project cost estimate (April 3)
- Board consideration of financing process (URBA, Ballot) (tentative - April 17)

Recommendation / Requested Action.

There is no requested action. Please call me if you have any questions or if you need additional information.

Attachments

revised: December 13, 2006					ATTACHMENT A			
EWEB Roosevelt Building Project								
Project Cost Estimate Comparison								
		(Based on Nov 2005 30% Design)		(includes 5% reduction)		CM/GC Estimate		Difference
		Schematic Design Estimate (June 2006)		Project Budget Estimate		Prelim Design Dev Estimate (Dec 2006)		CM/GC and
Notes	Project Element	Area	Total	Area	Total	Area	Total	Project Budget
	Site		\$ 11,100,000		\$ 10,600,000		\$ 15,200,000	\$ 4,600,000
	Canopies and HazMat	39,600	\$ 1,300,000	39,600	\$ 1,200,000	39,600	(included in "Site")	
	Fuel and Wash	8,500	\$ 600,000	8,500	\$ 600,000		(included in "Site")	
	Wellness	4,300	\$ 1,000,000	4,300	\$ 900,000		(included in "Ops Bldg")	
	Operations Building	111,200	\$ 18,400,000	111,200	\$ 17,800,000	129,000	\$ 29,500,000	\$ 11,700,000
	Warehouse	35,800	\$ 3,300,000	35,800	\$ 3,200,000	33,504	\$ 5,100,000	\$ 1,900,000
	Fleet Services	23,900	\$ 4,300,000	23,900	\$ 4,100,000	24,590	\$ 5,800,000	\$ 1,700,000
A	Total Buildings and Site	223,300	\$ 40,000,000	223,300	\$ 38,400,000	226,694	\$ 55,600,000	\$ 17,200,000
	General conditions	10.00%	\$ 3,600,000	10.00%	\$ 3,800,000	7.00%	\$ 4,000,000	\$ 200,000
	Contractor Fee	4.00%	\$ 1,600,000	4.00%	\$ 1,500,000	2.15%	\$ 1,500,000	\$ -
	Contractor contingency	0.00%	\$ -	0.00%	\$ -	2.50%	\$ 1,700,000	\$ 1,700,000
	Estimating contingency	5.00%	\$ 2,300,000	5.00%	\$ 2,100,000	7.00%	\$ 4,400,000	\$ 2,300,000
	Escalation	16.00%	\$ 7,300,000	16.00%	\$ 6,200,000	10.00%	\$ 6,300,000	\$ 100,000
	Owner's Contingency	5.00%	\$ 2,800,000	5.00%	\$ 2,100,000	5.00%	\$ 3,700,000	\$ 1,600,000
B	Total Overheads and Contingencies		\$ 17,600,000		\$ 15,700,000		\$ 21,600,000	\$ 5,900,000
	Procurement		\$ 2,310,000		\$ 2,280,000		\$ 2,280,000	\$ -
	Escalation	6.00%	\$ 135,000	6.00%	\$ 135,000	10.00%	\$ 230,000	\$ 95,000
	Contingency		\$ 120,000		\$ 120,000	8.00%	\$ 200,000	\$ 80,000
	Public Art	1.00%	\$ 545,000	1.00%	\$ 515,000	1.00%	\$ 690,000	\$ 175,000
C	Total Procurement		\$ 3,110,000		\$ 3,050,000		\$ 3,400,000	\$ 350,000
	Owner Services		\$ 1,275,000		\$ 1,275,000		\$ 1,275,000	\$ -
	Regulatory Agencies and Permits		\$ 1,745,000		\$ 1,745,000		\$ 1,870,000	\$ 125,000
	Architect Engineer Fees		\$ 5,650,000		\$ 5,650,000		\$ 6,300,000	\$ 650,000
	Other Services		\$ 1,234,000		\$ 1,235,000		\$ 1,410,000	\$ 175,000
	Contingency	5.00%	\$ 500,000	5.00%	\$ 500,000		\$ 570,000	\$ 70,000
D	Total Services and Permits		\$ 10,404,000		\$ 10,405,000		\$ 11,425,000	\$ 1,020,000
	Subtotal Project Costs		\$ 71,114,000		\$ 67,555,000		\$ 92,025,000	\$ 24,470,000
E	Project Contingency	5.00%	\$ 3,550,000	5.00%	\$ 3,380,000	5.00%	\$ 4,600,000	\$ 1,220,000
	Subtotal Project Costs		\$ 74,664,000		\$ 70,935,000		\$ 96,625,000	\$ 25,690,000
E	EWEB Overhead	2.00%	\$ 1,490,000	2.00%	\$ 1,410,000	2.00%	\$ 1,900,000	\$ 490,000
	Total Project costs		\$ 76,154,000		\$ 72,345,000		\$ 98,525,000	\$ 26,180,000

revised: December 13, 2006
 EWEB Roosevelt Building Project
 Project Cost Estimate Comparison

Notes on Differences Between Estimates

Notes	Project Element	June 2006 Project Budget Estimate	December 2006 CM/GC Estimate	Difference Between CM/GC and Project Estimates
A	Buildings and Site	\$ 38,400,000	\$ 55,600,000	\$ 17,200,000
	\$ 2,000,000	Operations Building changes (net addition of 12,000 sf; basement for mechanical equipment, atrium, etc.)		
	\$ 9,000,000	Estimated Escalation (June 2006 estimate based on Nov 2005 costs; Dec 2006 estimate based on current costs)		
	\$6,000,000	Different assumptions between Architect / Engineer and CM/GC on materials and construction		
B	Overheads and Contingencies	\$ 15,700,000	\$ 21,600,000	\$ 5,900,000
	\$ 1,700,000	Contractor's contingency		
	\$ 2,300,000	CM/GC using higher estimating contingency		
	\$ 1,600,000	Increase in Owner's contingency related to increased construction estimate		
C	Procurement	\$ 3,050,000	\$ 3,400,000	\$ 350,000
	\$ 175,000	Increased escalation and contingency assumptions		
	\$ 175,000	Increased estimate for public art (assumes 1% of direct construction estimate)		
D	Services and Permits	\$ 10,405,000	\$ 11,425,000	\$ 1,020,000
	\$ 125,000	Increase building permit costs (related to % of direct construction estimate)		
	\$ 650,000	Potential increase in A&E fees (related to possible acceleration of bid documents, increased design development)		
	\$ 175,000	Potential increase in commissioning agent cost (related to increased construction cost)		
	\$ 70,000	Increased contingency assumption		
E	EWEB Contingency, Administrative Overhead	\$ 4,790,000	\$ 6,500,000	\$ 1,710,000
	\$ 1,710,000	Increase EWEB contingency and administrative overhead (% of project costs)		