

**Waste Reduction Coordination for Headquarters Renovation**

**Meeting Summary**

**March 3, 1992**

**Attendees:** Berit Stevenson, Glen Taylor, Flor Matias, Joanna Karl, Pat Varley, Andy Sloop, Genya Arnold, Jim Goddard, Debbie Palermini, and Leigh Zimmerman

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**Corrections to the February 11, 1992 minutes:**

- ◆ Allied Demolition company will not be crushing the concrete and brick to use as aggregate. Instead, brick will be sold to a private party for cleaning and reuse. Concrete will be hauled to St. Johns Landfill for use as closure material. All freon evacuated from the HVAC systems was sent to DuPont for recycling.
- ◆ The energy management system in 500 Lloyd Building (not 5000 Lloyd Building) was reviewed.

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1. **Design and Construction Work** Exterior demolition (see attached Oregonian photographs) and interior demolition on the upper two floors has progressed rapidly. Asbestos abatement is still being completed on the lower two floors. The design team is continuing interior design based on the most recent space plans.
2. **Salvage and construction site recycling.** Debbie Palermini is working on site to coordinate the recycling effort and document the quantities of materials. (See attached article.) She is also providing construction site recycling training for subcontractors and their crews. Hoffman continues to do an outstanding job of looking for innovative ways to recycle and reuse materials. Some examples are: disassembly of metal stud walls, separating metal from previously demolished materials, minimizing concrete removal around window openings, source separating wood and non-ferrous metals, looking for ways to reuse as many of the structural features as possible, and building construction offices from salvaged materials.
3. Bob Martin and Neil Saling will send a letter to Dave Myers, Hoffman's purchasing manager, explaining Metro's commitment to purchasing materials with **recycled content**. Wording about the preference to use recycled content materials will also be provided to Hoffman for inclusion in the subcontract packages. Market Development is very interested in obtaining feedback from Hoffman and subcontractors about how they receive and react to the "Buy Recycled" concept.

This will be important in the further development of efforts to close the loop. The method of applying the 5% price preference is still not clear.

Budget restrictions will not make it possible to include the "Complete The Cycle" Center in the building. The Metro's "Buy Recycled" Ordinance included only compost, tires and paper. Compost was included in the headquarter contract documents. The Ordinance does not require Metro's contractors to comply. Berit Stevenson will review the recycled content materials samples with Hoffman and finalize a list of acceptable items.

4. **Public Affairs** submitted a status report (attached). The suggested name for the project was "Future Metro Headquarters Resourceful Renovation." Most attendees liked the name but other comments included "it is a mouthful to say" and "doesn't suggest the long-term energy savings and waste reduction aspects of the building." Michel Gregory has been named the Public Affairs representative for the entire project.
5. The Hoffman preliminary bid for the **recycling chute** is approximately \$23,000, however, it must be checked against estimate of the contractor who developed the chute. The recycling room appears to have adequate space. The recently received building plans will be reviewed to confirm this.
6. The **EPA grant application** is in route for final signature and should be submitted to the EPA by March 6, 1992. The job description for the EPA position has been written and will be reviewed with personnel.
7. **Energy aspects** of the project were summarized in the Pacific Power and Light "Finanswer" report which was received on February 26, 1992. A preliminary review by facilities indicates that a few items have excessive pay-back periods. Joanna Karl made a preliminary review of the report, and listed the items that may need further investigation. (Attached.) A meeting about the energy aspects will be held to resolve these issues.
8. Additional items of discussion dealt with water conservation measures. These have been previously discussed with the design team and will be discussed again. The landscaping and irrigation system will be reviewed during the Portland design review, which is a public forum to be held on April 6, 1992. Hoffman was aware of the eastside design guidelines which place many of the requirements on the landscaping and exterior appearance of the building.

#### Action Items

- Jim Goddard  
Finalize EPA grant position job descriptions and begin recruiting work - **March 3**

- **Pat Varley**
  - Obtain a letter from Bob Martin and Neil Saling about "Buy Recycled" commitment -- **March 17**
  - Forward subcontract language for "Buy Recycled" to Hoffman -- **March 17**
  - Develop criteria for application of 5% price preference -- **March 17**
- **Andy Sloop**
  - Investigate recycled content roofing materials -- **March 17**
- **Michel Gregory**
  - Finalize project name -- **March 10**
  - Begin on-site signage concept -- **March 10**
- **Genya Arnold and Flor Matias**
  - Ensure that Hoffman's questions about the recycling chute are answered so that the estimate can be finalized -- **March 17**
  - Review Plan drawings to ensure space allocation in the recycling room is correct -- **March 10**
- **Leigh Zimmerman**
  - Ensure that EPA grant signatures are obtained -- **March 6**
- **Joanna Karl**
  - Finalize comments on energy system -- **March 5**
- **Berit Stevenson**
  - Investigate landscaping issues for conservation with architect -- **March 17**
  - Discuss water conservation issues with architect -- **March 17**
  - Review "Buy Recycled" material samples with architect to obtain final acceptable items -- **March 17**
- **Glen Taylor**
  - Resolve energy issues -- **March 17**

The next meeting will be held on March 17, 1992 at 3:30 p.m. in room 335 Metro Center.

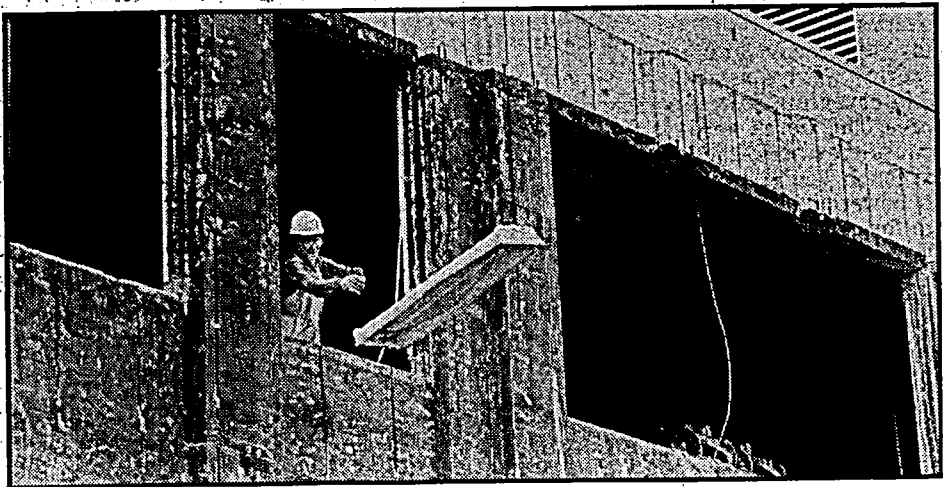
# BUSINESS




MICHAEL WILHELM

## Eastside face-lift

Above, Mathew Harris watches as Jesse Hancock takes the face off the old Sears building on Northeast Grand Avenue. Both men work for Allied Demolition Co., which is preparing the structure for its transformation into the new Metro headquarters building. At right, Marty Lane of Hoffman Construction Co. disposes of a light fixture.



# MEMO

To: Jim Goddard, Waste Reduction  
From: Michel Gregory, Public Affairs   
Date: March 3, 1992  
Re: Public Affairs Update - Headquarters Renovation

I'm unable to be at the March 3 meeting due to a last minute meeting conflict. My "report" follows.

## 1. Waste Reduction Project Identity

A possibility on identifying the project in relation to the overall renovation project is:

Future Metro Headquarters  
*Resourceful Renovation*

Graphics could develop this identity for signage with type and a graphic element -- perhaps a variation on the recycling symbol.

## 2. Signage

Given the relatively limited signage budget of +/- \$1,000, the most realistic option is multiple copies of a project identity sign, approximately 3' long x 1' high. These signs would be wired to site fencing along Grand and Lloyd. We could produce 8 - 14 signs depending on number of words and graphic elements. This option could be produced fairly quickly and is probably the most visible/readable to drive-by traffic.

Large freestanding project signs are very expensive and not realistic without more funds. However, perhaps the "Resourceful Renovation" tag line could be incorporated into the main project sign if it hasn't yet been produced.

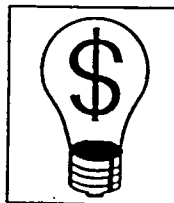
## 3. Project Communications Plan

Vickie Rocker and I met with Berit, Glen, Wayne Drinkward and Bob Thompson to discuss key elements to focus on and/or prepare for over the life of the renovation project. They include the waste reduction program, energy efficiency, financial investment, minority hiring/purchasing program, one percent for art program, handicapped access, and community impact. We should have a media relations plan completed for the entire project within the next week or so. We hope to position the building as a responsible long-term investment from the standpoint of dollars, recycling and reuse, and NE neighborhood renewal. In other words, we're building the best possible building we can within our means.

I expect we will be doing a media event or one-on-one story development about the project sometime this month. Finalization of the EPA grant, Hoffman's on-site recovery efforts and creative use of existing building elements (maple flooring, medallions, think tank, recycling shaft) are topics with the most immediate news value. I'll keep you posted.

Construction & Energy

# FOCUS



Energy conservation is increasingly being recognized as a valuable resource, but utilities still disagree on who should pay for it .. PAGE 19

The Continental Association of Certified Public Accountants is trying to untangle the problem of efficiency and profitability in the construction trades. Those low bids are just part of the problem ..... PAGE 20

## Reusing building materials gains favor as trash fees rise

*Don't throw away old wood scraps, nails and drywall—recycle it!*

By Britta Gordon

HERE IS NOTHING so enjoyable as creating with abandon. Children spew gobs of fingerpaint and squeeze mountains of clay in fits of inspiration; adults shoot endless pictures and ball up reams of paper in the search for the perfect image, the perfect word. Part of the joy in making something is tossing out the part that's not perfect.

But our imperfect efforts are coming back to haunt us. The new house glistening with fresh paint and newly varnished floors doesn't contain the unused nails, drywall, insulation, and odd pieces of wood out of which perfection grew. Those materials have been hauled to the dump.

The reality of our building extravagance can be demonstrated in a few figures. In the United States, nearly 2.5 tons of waste are generated in building each new single-family home. And in 1990, according to figures from the Metropolitan Service District (Metro), 200,000 tons of construction and demolition debris were sent to Portland-area landfills, costing more than \$13 million.

### Carrots and sticks

But while ordinary consciences squawk at tossing out perfectly usable items, the translation of the recycling ethic into the construction trades may necessitate a few more carrots—or, as the case may be, sticks. First of all, recycling on a construction site is not the same thing as forcing Junior to throw his pop cans into the proper bin. Each new house and office building is the product of numerous subcontractors, each of whom might be responsible for hauling away extra roofing, drywall and masonry materials. No one wants to pay workers by the hour just to sort out waste materials. And contractors aren't being besieged by companies begging them—much less paying them—to take excess wood and insulation off their hands.

But Debbie Palermini is convinced that building owners, developers and builders

can't afford to ignore the problem much longer. Though she says an ideal recycling system is just in its "infancy," Palermini, an environmental consultant, says new markets for recycling and new economic incentives to recycle should make it more appealing. In the last few years, Palermini has worked with Metro, Portland General Electric Co., building contractors and developers to plan and carry out demonstration projects in construction-site recycling. To her knowledge, Palermini is the only one "brokering" agreements and projects between builders, property owners and recyclers.

### Disposal fees rise

One of Palermini's and Metro's biggest arguments in favor of recycling is the increase in landfill disposal fees. According to Jim Goddard, a senior solid waste planner at Metro, fees have risen from \$19.70 per ton in April of 1987 to \$68 per ton in July of 1991. Goddard thinks that even contractors who balked at recycling will now be forced to find more economic alternatives: "Fifty dollars a ton is really over the threshold," he says.

That \$50 figure, Goddard says, also makes recycling products a viable business for more companies, which can now charge rates for materials that are cheaper than the disposal fees, yet will make it feasible to process the materials.

Palermini says her job in the demonstration projects has been to act as a "broker" between builders and recyclers. She finds recyclers willing to take materials, helps builders set up recycling plans and coordinates recycling efforts on the construction sites. Currently, she is helping Metro determine how it will salvage and recycle materials from its remodeling and construction of the old Sears building, which will house its new offices.

Metro funded Palermini's work on last year's Street of Dreams project, in which she helped to plan a recycling effort that coordinated six builders and the construction waste from seven new homes. Their efforts resulted in 56 tons of wood, 20 tons of drywall and five tons of cardboard removed from the construction sites and recycled.



Some may see trash, but environmental consultant Debbie Palermini sees potential in old building materials retrieved from the old Sears building in Northeast Portland.

John Kicker

CONTINUED ON PAGE 21

# Recycling building materials works best when group works together

CONTINUED FROM PAGE 17

Working with Roger Spring, PGE's residential new construction program manager, Palermini also coordinated recycling at a Clackamas apartment project developed last year by Gramor Development Inc. The 108-unit Talbert Creek Apartments yielded up 100 tons of wood to be recycled and saved \$5,000 in disposal costs, says Spring.

Palermini appraises the future of construction recycling optimistically. "Most everyone I've been out talking with is willing to think about it," she says. Demonstration projects like Metro's and PGE's, in which these organizations pay for her efforts to locate new recyclers and set up recycling programs, can pave the way for other developers and builders who may not have the time or the money to spend searching for secondary markets or experimentation on how to set up recycling programs. Eventually, she says, the "market will take care of the demand, (though) perhaps not in the very beginning stages of this."

The PGE project resulted in a pamphlet for builders and developers listing recyclers of wood, paint, Sheetrock, nails, cardboard, drywall, asphalt, concrete and scrap metal. Goddard says recycling markets are improving. It is easier to find a recycler for drywall than it was a year ago, he says, and the number of wood recyclers has doubled in that time. But Goddard says other materials won't find such a

happy reception: No one in the Portland area, for example, is yet willing to take asphalt roofing. Also absent from the pamphlet are recyclers for plastic and insulation. Clearly, there are gaps in the recycling markets.

## *Big push*

But even builders who have participated in these demonstration projects say their

*"In the old days, you just pushed a bulldozer through (and) took it to the dump."*

*—Wayne Drinkward*

brethren will need convincing. Most agree that the high disposal fees will provide a big push. Wayne Drinkward, executive vice president of Hoffman Construction Co., the general contractor on Metro's overhaul of the Sears building, says that before dumping fees began to increase, the cost of separating the materials to be recycled was too much for most contractors. "In the old days, you just pushed a bulldozer through (and) took it to the dump," he says, claiming this method was "cost-effective" in terms of labor costs.

Drinkward isn't sure how well the recycling program will work for the old Sears

building, or how much money will be saved. Many of the recyclers for construction equipment "haven't existed until the last few months," he says. And the logistics of separating materials and coordinating recyclers haven't been set. The plan needs to work, says Drinkward, "without it being a day-to-day management exercise."

Von Summers, director of marketing services for the Homebuilders Association of Metro Portland, agrees that many companies involved in construction recycling are new to the game. Some of the recyclers, he says, are "fledgling companies (who) live from day to day."

Summers says last year's Street of Dreams project, sponsored by Homebuilders, worked because the six builders shared recycling bins and were coordinated by Palermini's recycling plans. Summers estimates that each builder may have saved nearly \$2,000 in dumping fees; while no money was made on recycling, he says, no money was lost. Still, he acknowledges, "It isn't cheap yet to be able to recycle."

Although "everything's in place for this to be economical (and) efficient," not enough contractors realize that recycling can be done, Summers says. And for single builders not working in a group, the effort may be even more difficult. These contractors will have to be convinced that they'll save money. "In building, where the margins are so narrow, (savings) are a tremendous advantage," he says. "It's got to become a little more affordable to do it."

Craig Eason, president of Mybek Custom Homes Inc., which built two homes in last year's Street of Dreams, says that project worked because of the economies of scale. But Eason feels that for single builders, recycling is still impractical. "If you had to pay to have a (recycling) bin for one house, the cost would be more than paying the (dumping) fee," he says. The process "doesn't even come close to being cost-effective." And Eason says he thinks \$2,000 is probably high: He estimates \$600 may have been saved in disposal fees.

Brian Frank, regional project manager for Keyway National Corp., which built the Talbert Creek Apartments, says money was saved by letting a recycler haul the wood away, rather than sending it to the transfer station. Still, Frank says he paid more than necessary for the recycler to sort trash from the clean wood that was supposed to have filled his box. Frank says he would do it again, but says that subcontractors need to be made accountable in the process.

Tom Kelly, president of Neil Kelly Designers/Remodelers, says he doesn't think recycling is popular yet among builders. "We can't put ourselves in the position of spending a lot of effort and time," and creating more expense than the competition, he says.

Eventually, says Goddard, there will need to be a "communications network set up . . . so recyclers know what projects are going on and vice versa. Right now, it's kind of haphazard." □

DATE: March 2, 1992  
TO: Glenn Taylor  
FROM: Joanna Karl  
RE: Pacific Power FInanswer Design Assistance Study (February, 1992)


The following are preliminary comments to the report:

- (1) Its not clear whether a VAV or TRAV system has been modeled. (p.6)
- (2) ECM 1 (R-12.5 Wall Insulation): Its hard to believe there is no cost different for purchasing/installing R-12.5 wall insulation rather than R-11. If so, would it be cost-effective to increase the R-value (and the energy-efficiency) even more (p.14)?
- (3) ECM 2 (R-30 Roof Insulation): Is there a more cost-effective middle ground between R-19 and R-30 (i.e., R-25 if it is available)?
- (4) ECM 5 (3-Lamp T8 Fixtures w/ Electronic Ballasts) The ECM design lighting level of 1.38 watts/SF seems too high.
- (5) ECM 6 (Occupancy Sensors) Why not include in the general office space?
- (6) EMC 11 (Energy Management System) Need for heating/cooling should be based on occupancy, either through occupancy sensor or lights on.
- (7) Lighting features not included in this analysis:
  - Lighting shelves
  - Dimmer general lighting (10-20 footcandles) with task lighting
- (8) Domestic hot water features not included in this analysis:
  - Water conservation leads to less hot water to heat
  - Solar hot water system back-up could be on-demand gas
- (9) Why is a central system not being considered in lieu of the high efficiency packaged rooftop cooling?
- (10) Is co-generation a possibility? (The building is big enough, but is there a use for the steam)?
- (11) Is it possible to avoid having huge banks of lights remaining on in the evening (i.e., 6-10pm) after most employees have left for the day? Could this situation be improved with the use of task lighting which can be switched on/off at an individual's desk, and relatively dim lighting in the rest of the suite?

cc: Jim Goddard



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