



Professional Contractors  
& Engineers Incorporated

*BNIM Architects*

THIS SUBMITTAL REVIEWED BY  
BNIM ARCHITECTS

- Approved
- Approved as Noted - Revise and Resubmit for record

Fabrication/Installation may be undertaken. Approval does not authorize changes to the Contract Sum or Contract Time.

- Revise and Resubmit
- Rejected

Fabrication and/or installation MAY NOT be undertaken. In re-submitting, limit corrections to items marked.

Review/approval neither extends nor alters any Contractual obligations of the Architect or Contractor.

PROJECT: 79076 DNR

**DNR GREEN OFFICE BUILDING** JP Date 05.16.03  
**JEFFERSON CITY, MO**  
**PROJECT NO. X0056-01**  
**Revision # 1 - May 15, 2003**

## WASTE MANAGEMENT PLAN

**Purpose:** In accordance with Specification Section 01360, Paragraph 1.3, Item OO, this plan shall detail specific instructions for the collection, transportation, and disposal of the waste generated at the construction site. It's purpose is to reduce the amount of material ultimately sent to a landfill.

In order to comply with this requirement and specifically addressing the items identified in Section 01736 - Construction Waste Management, Paragraph 1.2, Item A, we have set up the following procedures by product to meet the goals established for this construction project:

### Item A.1 Land Clearing Debris

Stumps and trees removed in the Site Clearing Operation shall be taken to a local mulch processing facility run by Twehaus Construction where they can be recycled into mulch and used in the community. Twehaus has a contract with the city to provide grinding and mulching to the community at large. Trees and stumps will be hauled to this facility and not placed in any landfill. Cubic Yards of Material will be documented as material is hauled away.

*PER 01736 1.2A: Could this material be used to produce mulch for use in this project?*

### Item A.2 Concrete, Masonry, and Other Inert Fill Material

These inert materials can be used as site fill and Taos Construction, our excavating subcontractor, has access to land that requires fill material to level or otherwise make

efficient use of the land. These materials will be separated and stockpiled at the site and hauled to these soil fill areas as they accumulate sufficiently to justify a dump truck. Where required, chunks will be broken into manageable sizes to facilitate hauling. These will not be taken to any landfill. Quantities in cubic yards will be documented and submitted monthly.

Where possible, waste masonry products may be crushed and used as fill material on site as long as it is buried below 18" from finish grade. If grades are already in place such that this is not possible, the waste shall be transported and used a fill on another off site location.

**Item A.3 Metals (Iron, Steel, Copper, Brass, Alum, Stainless Steel, Banding, Rebar, Metal Studs, Pipe, and Metal Ductwork)**

The first priority of this section is that the subcontractor using the materials take as much of the reusable materials back to their shop for reuse on other projects. This includes such items as pipe, wire, misc angles, etc. It is also reasonable to return unused portions for credit from material suppliers. If unusable, then it should be placed in the appropriate recycle container for transport to a recycle facility.

We will set a dumpster on site with specific signage noting that the above products are to be placed into this container for recycle. Pieces too long for the container will be cut into manageable pieces. As the container fills, it will be taken to "Scrap All Recycling" located at 10716 County Road 499, Holts Summit, Mo (573-896-5151). There is also another scrap metal recycling facility in Columbia if this facility can not take all the materials. Most of this recycling will happen toward the later stages of the project and dumpster size may adjust as amount of materials mount. Quantity shall be recorded and included in the monthly Waste Recycle Report.

It is also the intent of this Plan that subcontractors doing assembly of products at offsite locations shall, to the maximum extent possible, recycle or allow for the reuse of any aluminum, packing, pallets, etc, consistent with their scope of work. This would specifically pertain to Aluminum Curtain Walls and other offsite fabrication involving any of the materials addressed in this plan. Where materials are recycled from offsite locations, it is the subcontractor's responsibility to provide PCE with tonage or volume tickets noting quantities of materials recycled.

**Item A.4 Untreated Wood (lumber, plywood, strand board, masonite, particle board, and shipping pallets to be discarded)**

This wood shall be segregated on the site and periodically taken to the Twehaus mulching facility as described in item A.1 above. If it becomes apparent that the quantity of

materials justify the use of a dumpster, one will be set and marked. In the absence of a dumpster, the Superintendent will identify a specific area to be used for stockpiling the untreated waste wood where it can be periodically hauled to the mulching facility. Quantity shall be recorded and included in the monthly Waste/Recycle Report.

Where possible, pallets shall be returned to the original user for reuse in their construction process on future projects. Other pallets in good condition shall be recycled to the T & T Pallet Company, 12403 Renz Farm Road, Jefferson City, Mo. (Unless reused by agency providing the pallets). Pallets not suitable for reuse shall be recycled as a wood product where possible.

Miscellaneous lumber shall be reused wherever possible for such items as railings, ramps, temporary protection, temporary doors, and barricades as needed. When condition is such that they are not usable for anything, they shall be recycled as noted above.

#### **Item A.5 Gypsum Wallboard Scrap**

When drywall work starts, a dumpster will be set on site and marked to receive drywall gypsum cutoffs and waste products. These waste products will be taken to the Columbia City Landfill which has a recycle process for the gypsum products. The Fulton City Landfill is developing this recycle process and once on line, we will take the gypsum products to that facility to reduce the mileage we have to haul the waste. Quantity shall be recorded and included in the monthly Waste/Recycle Report.

Where pieces are large enough ( ½ sheets or larger) to justify use by Habitat for Humanity, such pieces shall be made available to them. This shall be based on the subcontractors decision of which pieces of waste are not to be reused. These pieces shall be stacked together and delivered to Habitat for Humanity when sufficient quantities are accumulated.

#### **Item A.6 Salvaged Materials (Lumber, Fixtures, Gypsum Board, and Building Supplies)**

These products shall be removed by the contractor supplying the products for use on other projects. They have option of reusing them on other projects, selling them, returning them, or donating them to a community help agency such as Habitat for Humanity. They will not be allowed to be taken to a landfill. Quantity shall be recorded and included in the monthly Waste/Recycle Report.

**Item A.7 Cardboard and other Packaging Materials**

Due to the large amount of cardboard products typically used on a construction project for packing, we will set a dumpster or closed container on site once materials start arriving. These products will be taken to New World Recycling, 2007 Idlewood Road, Jefferson City, Mo (573-635-0331). Quantity shall be recorded and included in the monthly Waste/Recycle Report.

Metal and Plastic Banding Materials shall be deposited in the appropriate recycle container as noted in this Plan.

Newsprint or similar paper products shall be placed in the appropriate recycle container for paper products. These will be provided throughout the project and marked accordingly. They shall be recycled in conjunction with Item A.8 noted below.

**Item A.8 Paper (Discarded Office Paper Waste)**

Thirty Gallon trash containers will be marked and placed in the offices of the general contractor and state for collection of paper waste to be recycled. These will be collected periodically and transported to New World Recycling as noted in Item A.7 above. Quantity shall be recorded and included in the monthly Waste/Recycle Report.

In conversations with New World Recycling, we need to distinguish between white bond type paper (fax paper, copy paper, plans, etc), slick paper (magazines, advertisements, etc), and newsprint (anything that comes with a newspaper). Because of the variation in volumes, small containers will be provided in the offices for slick paper and newsprint, and larger containers will be provided for the normal white paper associated with office paperwork. These will be recycled to New World Recycling periodically as load demands.

**Item A.9 Plastic Buckets or other Containers of Construction Products**

Plastic Buckets (where clean and without any toxic chemicals) shall be recycled to New World Recycling as noted in item A.7 above. Where chemical residue is apparent, they will be transported to Columbia Waste Recycling which takes paints and other such items. These items would include (but not limited to) taping compounds, paint, waterproofing compounds, sealers, etc. Quantity shall be recorded and included in the monthly Waste/Recycle Report.

**Item A.10 Glass (all types) and Beverage Containers**

We will place thirty or fifty-five gallon trash containers around the site and offices, specifically in break and eating areas. These shall be marked for glass, plastic and

aluminum drink container waste. They will be emptied and recycled to the New World Recycle facility noted in Item A.7 above. Quantity shall be recorded and included in the monthly Waste/Recycle Report. These products can be furnished to New World combined.

Should glass construction waste become of sufficient quantities to justify larger separate containers, they will be provided and marked accordingly for transport to New World Recycling. Wire glass will not be recycled.

*PLATE GLASS ?*

**Item A.11 Reusable Carpet Remnants or Tiles**

Where not removed by the installer for sale as remnants, these pieces shall be donated to a help agency such as Habitat for Humanity or similar use. The determination as to "reusable" shall be made by our superintendent. Quantities shall be recorded and included in the monthly Waste/Recycle Report.

**Item A.12 Paint and Paint Containers**

See Item A.9 above. These containers and any remaining paint not left for the end user as touchup will be transported to a paint recycling center such as the one in Columbia. It will be identified, segregated, and transported as quantities accumulate in sufficient quantities to justify hauling. It will not be placed in the landfill dumpster. Quantities shall be recorded and included in monthly Waste/Recycle Report.

**Item A.13 Electrical Conduit and Wire**

These will be handled in the same way and in conjunction with Item A.3 above. As a metal product, they fall into the same recycling procedure as metals noted above. Past experience has indicated that the electrical subcontractor typically recycles his own copper to be resold on his own. Where included with the metal recycling or removed for resale, quantities shall be recorded and included in monthly Waste/Recycle Report.

**Item A.14 Other Mixed Construction/Demolition Waste**

As construction progresses, any items identified as a recyclable construction waste in a sufficient quantity to justify recycling will be brought to the superintendent's attention and will be addressed specifically. Material and Quantities shall be recorded and included with monthly Waste/Recycle Report.

Other miscellaneous items might include (but not limited to)

- a. Curing blankets and visqueen vapor barriers
- b. Styrofoam cutoffs as blockouts in concrete work.

**Item B.1 Non Recyclable Waste**

All other non-recyclable waste shall be placed in a dumpster so marked and transported to the Jefferson City Landfill as required. Quantities shall be documented and recorded for inclusion in the monthly Waste/Recycle Report. All quantities shall be recorded in either tonnage or volume (CY) and the material recycled.

*Quantities shall be recorded using a consistent unit of measure throughout the project. Estimate using either weight OR volume. PCE to set a standard to be upheld. (This is a LEED requirement to document using one method of measurement.)*

**SUBCONTRACTOR'S RESPONSIBILITIES**

- A. **REMOVE ALL OF THEIR UNUSED OR WASTE MATERIALS TO BE RECYCLED TO THE APPROPRIATE CONTAINER OR LOCATION AS DIRECTED BY THE SUPERINTENDENT.**
- B. **RECORD AND SUBMIT ITEMS AND QUANTITIES OF ANY MATERIALS RECYCLED SEPARATELY BY THE SUBCONTRACTOR (TAKEN BACK TO THE SHOP FOR REUSE OR RECYCLING).**
- C. **REMOVE EXCESS QUANTITIES OF MATERIALS TO BE REUSED ON OTHER PROJECTS FROM SITE. (PIPE, WIRE, HARDWARE, ETC)**

Where Subcontractors recycle their own waste by removing it from the project for their own reuse or recycle, quantities shall be provided to the superintendent as noted above.

Mr. Albert Schoeneberg, our Superintendent shall be the overall coordinator of this plan on site. Any questions can be directed to him at the site or Alan Vinson at our office. They will receive attention and be resolved in a timely fashion. Any conflicts with recycle agencies noted should be directed to Alan Vinson at our office.

All Subcontractors on this project must participate in this recycle effort in accordance with the contract documents and agree to do all possible to facilitate achieving our recycle goals. As confirmation of their participation, as supervisors and foreman for the various crafts begin their respective work on site, they will read and sign this plan on a copy to be maintained at the PCE Construction Office. Copies will be available for each foreman to take. These include:

**Professional Contractors & Engr** \_\_\_\_\_  
**Lawrence Pest Control.** \_\_\_\_\_  
**Drilling Service Company** \_\_\_\_\_  
**Jefferson Asphalt Company** \_\_\_\_\_  
**I & I Works** \_\_\_\_\_  
**Schrimpf Landscaping** \_\_\_\_\_  
**Taos Construction** \_\_\_\_\_  
**Ceco Concrete Construction** \_\_\_\_\_  
**Con-Dev Concrete Construction** \_\_\_\_\_  
**A & W Steel Construction** \_\_\_\_\_  
**Hathman Masonry** \_\_\_\_\_  
**A & H Steel Erectors** \_\_\_\_\_  
**Fab Building Center** \_\_\_\_\_  
**Galyon Lumber Company** \_\_\_\_\_  
**S & W Waterproofing** \_\_\_\_\_  
**George McDonnell & Sons, Inc** \_\_\_\_\_  
**Natsch & Company, Inc** \_\_\_\_\_  
**Boone Construction Company** \_\_\_\_\_  
**Roberts Loading Dock** \_\_\_\_\_  
**Brady's Jefferson City Glass** \_\_\_\_\_  
**Braun Plastering** \_\_\_\_\_  
**National Floor Covering** \_\_\_\_\_

**Lubbert Floors** \_\_\_\_\_

**Golterman & Sabo** \_\_\_\_\_

**W & W Painting** \_\_\_\_\_

**CT Flooring** \_\_\_\_\_

**Flooring Systems** \_\_\_\_\_

**T & G Specialties** \_\_\_\_\_

**Riley, Bernard, O'Connell** \_\_\_\_\_

**Bi State Loading Dock** \_\_\_\_\_

**Evan Corporation** \_\_\_\_\_

**Woodard Contract** \_\_\_\_\_

**Schindler Elevator** \_\_\_\_\_

**Ecton & Associates** \_\_\_\_\_

**Jayhawk Fire Sprinkler** \_\_\_\_\_

**Environmental Engineering** \_\_\_\_\_

**Harold Butzer, Inc** \_\_\_\_\_

**Richard A Howerton Electric** \_\_\_\_\_

**Robbins Lighting, Inc** \_\_\_\_\_

**(Blanks provided for additional subcontractor on site not noted above)**

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_____	_____
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We appreciate the cooperation of all the subcontractors and remind them not to lose site of the ultimate goal of reducing the amount of waste that is transported to a landfill. We hope all will do their part.

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\*\*\*copy of this will be mailed to home offices of all subcontractors noted.