

# Appendix C



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Bryan Johnson  
City of Madison Streets Division  
Recycling Coordinator/Public Information Officer

RE: Demolition of 4933 Femrite Drive

The City Engineering Division has recently acquired the property located at 4933 Femrite Drive for a future extension of Dairy Drive. The existing single family residence is a 2 story, 3 bedroom, one bath structure with approximately 1200 square feet of living space. The house was constructed in 1938 and is in very poor condition. It also has an unfinished basement and is wood frame construction with cement board siding and asphalt shingles. The property also has a pole building built in 1990, which also had a shed addition constructed in 1998. The pole building and shed are constructed slab on grade with wood frame and steel roof and siding. City of Madison Engineering will be hiring a contractor to complete the demolition of the buildings and will recycle and dispose of all materials in accordance with this plan.

The Deconstruction Reuse and Recycling Plan are divided into three sections in order to coordinate with the project timeline.

- I. Reuse Phase: Salvaging reusable items.**
- II. Pre-Deconstruction Phase Recycling:** Hazardous and regulated materials must be removed for proper disposal prior to full deconstruction. These items include lighting, electronics, batteries, refrigerants, appliances, and hazardous chemicals.
- III. Deconstruction Phase Recycling:** Recycling building materials during deconstruction and demolition can reduce negative environmental impacts and reduce landfill fees. Recyclable materials include concrete, brick, asphalt, metal, and wood.

**I. Reuse Phase**

City staff coordinated with Advanced Health and Safety and with Habitat for Humanity Restore to determine what materials may be salvaged and reused. The appliances and fixtures have mostly been removed with the exception of the fuel oil tank and furnace in the basement, some lights and a mercury thermostat.

Habitat for Humanity Restore will visit the site for items that are in good enough for reuse. The house will likely not have any reuse items. The shop may have reuse of the siding, trusses, windows and overhead doors. The shed may be repurposed by the current renters for use on a different site.

See pictures in Appendix A.

## II. Pre-Deconstruction Recycling

Asbestos testing was completed by Advanced Health and Safety. A summary of the findings is shown below. Advanced Health and Safety will be removing and safely disposing of the asbestos prior to deconstruction of the structure. In addition, Advanced Health and Safety will also be disposing of the fluorescent tube and mercury thermostat as part of the abatement. The City's contractor hired to perform the demolition work will be required to safely dispose of the fuel oil tank and furnace as part of the public works contract.

### ABATEMENT

#### To be completed by Advanced Health and Safety:

##### List A

- Asbestos Containing Friable Materials (Required to be Abated prior to Demolition)
  - 9 Old green sheet vinyl flooring in the kitchen and bathroom. 180 ft.<sup>2</sup>

##### List B

- Asbestos Containing Category II Non-Friable Materials (will become friable; required to be Abated prior to Demolition)  
Sample# Description
  - 14 Exterior cement board siding. Approximately 1000 ft.<sup>2</sup>. Some is assumed to be under the wood shake siding.

##### List C

- Asbestos Containing Category I Non-Friable Materials (May Be Able To Remain In Building During Demo if Not Friable- Consult DNR)  
(These Materials Must Be Abated Prior To Burning)  
Sample# Description
  - 10A 9-inch brown floor tiles from the back entrance. 40 ft.<sup>2</sup>
  - Assumed positive: Roofing shingles

#### No hazardous material abatement required – dispose of all materials by demolition contractor:

##### List D

- Materials Found Not To Contain Asbestos At 1% Or Greater (Both Tested or Known Not To Contain Asbestos)  
(No Abatement Required)
  - **Sample# Description**  
Shop and shed buildings:

- 1 12-inch floor tiles with very little mastic in the bathroom. 50 ft.<sup>2</sup>
- 2 Drywall/joint compound

##### House:

- 3 9-inch floor tiles plus a very little mastic under the carpet in the living room. 270 ft.<sup>2</sup> on a thin underlayment
- 4 12-inch brown floor tiles from the back entrance. 40 ft.<sup>2</sup>
- 5 Asbestos paper on the ductwork in the basement. One boot
- 6 Chimney flue mortar from the basement
- 7 Top layer of 12 inch floor tiles in the kitchen. 140 ft.<sup>2</sup>
- 8 Newer 12-inch floor tiles in the bathroom on the first floor. 40 ft.<sup>2</sup>
- 10B Black mastic from the back entrance. 40 ft.<sup>2</sup>
- 11 Flooring from the first floor south east bedroom. 120 ft.<sup>2</sup>
- 12 Flooring from the first floor north east bedroom. 120 ft.<sup>2</sup>
- 13 Sheet vinyl flooring from upstairs. 300 ft.<sup>2</sup>
- 15 Exterior window caulking
- 16 Exterior door caulking
- 17 Window glazing. 15 double hung windows

- 18 Black/gray tabs under the cement board siding. Each piece is about 2 inches wide and 1 foot long.
- 19 Black tarpaper under cement board siding

#### **ABATEMENT/RECYCLING - Universal waste**

- One fluorescent tube (disposed of by Advanced Health and Safety)
- One mercury thermostat (disposed of by Advanced Health and Safety)
- Furnace in the basement (disposed of by the City hired contractor performing the demolition)
- Fuel oil tank (disposed of by the City hired contractor performing the demolition)

NOTE: State hazardous waste regulations provide guidance for recycling the following items after the reuse phase is complete and prior to building deconstruction. Options for recycling efforts are provided below. If the demolition contractor chooses to use facilities other than those provided, documentation and receipts of materials recycled will be provided.

1. Fluorescent Lighting
2. Batteries
3. Refrigerants
4. Appliances and HVAC equipment
5. Hazardous chemicals, including paint
6. Thermostats containing mercury
7. Computers and Electronics

For additional lists of various recycling centers please see:

<https://www.cityofmadison.com/streets/recycling/demolition/CertifiedRecyclers.cfm>

#### Lighting

- *Background Information:* State hazardous waste regulations require all light bulbs and ballasts containing mercury or polychlorinated biphenyls (PCBs) to be recycled. If not reused, bulbs and ballasts must be taken to a recycler or consolidator. The consolidator or recycler must be licensed and in compliance with applicable environmental regulations.
- *Site Materials:* One fluorescent tube light was found on site and will be disposed of by Advanced Health and Safety. Any incandescent lights found will be disposed of by the demolition contractor.

#### Batteries

- *Background Information:* Batteries may contain toxic heavy metals and chemicals, including nickel, cadmium, manganese, mercury, lead, and sulfuric acid, which threaten our environment if not properly handled.
- *Site Materials:* There were no batteries found on site during initial inspection. Any batteries found will be recycled.
- *Lead or Acid Automotive Type Batteries Recyclers:*
  - Clean Sweep
  - All Metals Recycling
  - Batteries Plus
- *Other Rechargeable Batteries Recyclers:*
  - Clean Sweep
  - Batteries Plus
  - Radio Shack
- *Alkaline & Other Disposables:* May be disposed of in trash.

#### Refrigerants

- *Background Information:* Refrigerants are used in cooling equipment such as air conditioners and refrigerators. Wisconsin Administrative Code NR 488 regulates handling and disposal of refrigerants. It requires all commercial entities handling and recovering these refrigerants and coolants to register with the Wisconsin DNR and annually certify that they will transport items

in a manner that prevents refrigerant releases. Documentation of proper handling must be retained for three years.

- *Site Materials:* no refrigerants were found on site during the initial investigation. If refrigerants are found during the demolition phase they will be recycled at an appropriate facilities.
- *Recycler:*  
All Metals Recycling  
1802 S. Park St.  
Madison, WI 53713  
608-255-0960
- <https://www.allmetalsrecyclingllc.com/>
- For current metal prices, dumpster rentals or any other questions, please call.

#### Appliances and HVAC equipment

- *Background Information:* Wisconsin Statute 287.07 requires the recycling of major appliances including clothes washers and dryers, dishwashers, air conditioners, stoves, ovens, microwave ovens, freezers, refrigerators, water heaters, furnaces, dehumidifiers, and boilers. All of these appliances are banned from landfills as of 1991. Microwave ovens may be landfilled only if the capacitor has been removed. Most major appliances are made primarily of high quality steel. They also may contain glass, plastic, rubber, copper, aluminum, and several hazardous materials that require special handling. Any appliances that have refrigerants or coolants must be handled according to instructions in the refrigerants section.
- *Site Materials:* The house has a furnace, however all other appliances were removed from the site.
- *Recycler:*  
All Metals Recycling  
1802 S. Park St.  
Madison, WI 53713  
608-255-0960
- <https://www.allmetalsrecyclingllc.com/>
- For current metal prices, dumpster rentals or any other questions, please call.

#### Paints, Stains, and Other Chemicals

- *Background Information:* Oil-based paints, products containing organic solvents, and latex paint cans that are more than half full are considered hazardous waste and must be taken to a designated recycler for disposal. Latex-based paints can be properly hardened and disposed of in the trash if the can is less than half full.
- *Site Materials:* No chemicals were found on site during initial inspection. If materials are found on site they will be properly disposed of by the demolition contractor.
- *Recycler:*  
Clean Sweep  
7102 US Hwy 12, Madison, WI 53718  
Clean Sweep Phone: (608) 838-3212  
<https://landfill.countyofdane.com/services/clean-sweep>
- *Cost:* see the Clean Sweep website for costs and what materials can be accepted and hours of operation.

#### Thermostats Containing Mercury

- *Background Information:* Mercury-containing thermostats hold mercury equivalent to the amount in 200-300 fluorescent bulbs and must be recycled. Though mercury is a hazardous waste, the Universal Waste Rules allow thermostats to be recycled without going through a hazardous waste permitting process. Care must be taken not to break the glass bulb containing the mercury during deconstruction and transportation.
- *Site Materials:* a mercury thermostat was found on site.
- *Recycler:*  
Clean Sweep

7102 US Hwy 12, Madison, WI 53718  
Clean Sweep Phone: (608) 838-3212  
<https://landfill.countyofdane.com/services/clean-sweep>

- *Cost:* see the Clean Sweep website for costs and what materials can be accepted and hours of operation.

### III. Deconstruction Phase Recycling

This section includes information for the recycling or proper disposal of the following:

- Concrete and asphalt pavement
- Metal
- Cardboard, Paper, Cans, and Bottles
- Wood
- Asphalt Shingles

#### Concrete and Concrete Block

- *Background Information:* Clean concrete and concrete block may be crushed and used as fill, aggregate in roadbeds, or for recycling into new concrete. "Clean" means that concrete is free of dirt, clay, wood, and any paint. Recycling these materials costs substantially less than hauling them to a landfill. Recycling also reduces the impacts of quarrying and extracting materials for new concrete.
- *Site Materials:* The existing house sits on a concrete block foundation and the shop and shed also have concrete slabs. City demolition contractor will coordinate to remove the concrete and asphalt to have it recycled.
- *Recycler:*  
Homburg, 6106 Milwaukee Street  
Madison, WI, 53704  
(608) 241-1178
- *Details:* In order to be recycled to use as aggregate, concrete must be free of rebar. If it contains rebar, it will be used as clean fill. Homburg has a staffed scale and can provide receipts.

#### Metal

- *Background Information:* Though not required by law, we recommend recycling all metals. Painted metal, even if it contains lead-bearing paint, is typically recyclable.
- *Site Materials:* The materials that contained sources of metal were the gutters, ducts, exterior hand railing, plumbing and wiring.
- *Recyclers:*  
All Metals Recycling  
1802 South Park St  
Madison, WI 53713  
(608) 255-0960  
<https://www.allmetalsrecyclingllc.com/>
- For current metal prices, dumpster rentals or any other questions, please call.

#### Cardboard, Paper, Cans, and Bottles

- *Background Information:* Cardboard, paper, cans, and bottles must be recycled under Wisconsin law.
- *Site Materials:* Any recyclable materials on-site or generated during demolition must also be recycled.
- *Recycler:*  
Madison Recycling Center  
2200 Fish Hatchery Road  
Madison, WI 53713

(608) 251-2115.

- Cost: No charge for recycling except electronics
- Logistics: It only accepts materials from designated haulers. Needs to be separated and sorted by material types.
- Details: The Madison Recycling Center is not affiliated with the City of Madison. It is operated by Recycle America, a division of Waste Management.

### Wood

- *Background Information:* Any unpainted and untreated wood is recyclable. If possible, the demolition contractor should collect unpainted and untreated dimensional lumber and engineered lumber, such as oriented strand board (OSB), plywood, and particleboard for recycling.
- *Site Materials:* Any untreated and unpainted wood that can be separated from other building materials is recyclable. While some of the wood in the structures is painted or treated, wooden studs and subfloor materials may be present. Framing for the shop and shed are all unpainted wood.
- *Recyclers:*  
Purple Cow Organics  
2159 Range Trail  
Verona, WI 53593  
(608) 831-0349
- Cost: Wood is accepted for recycling free of charge.
- Logistics: No pick-up is available, but any third party hauler is acceptable. The Bruce Company has pre-arranged hauling agreements in place with Green Valley Disposal, Pellitteri Waste, and Royal Container Service.
- Details: No treated, painted, or stained wood is accepted. OSB, engineered lumber, and nails and fasteners smaller than 3/8" diameter are accepted.
- Royal Container Service  
P.O. Box 6438  
Monona, WI 53716  
(608) 221-1919  
<http://royalcontainer.com>
- Costs: Royal charges approximately \$125 for a wood recycling container and hauling. There is no additional tipping fee however there is a \$25 drop off fee. Contact Royal Container for current pricing information.
- Details: Wood that is treated, painted, or stained is not accepted. OSB, engineered lumber, and nails and fasteners smaller than 3/8" diameter are accepted.

### Asphalt Shingles

- *Background Information:* Asphalt shingles have been banned from the Dane County Landfill. This material can be ground and used as part of a mix to manufacture new asphalt. Recycling asphalt is cost effective and reduces consumption of oil and other raw materials.
- *Site Materials:* The roofing material was asphalt shingles, however it was assumed that due to the age of the structure that the shingles are assumed positive for asbestos and will be disposed of by Advanced Health and Safety as part of the abatement process.

# Appendix A – Photos

## House at 4933 Femrite Drive











**Shop at 4933 Femrite Dr**





