Section VI – Preliminary Design Plan Specifications

Description of Operations for Harding Metals

Entering the Harding Metals, Inc Facility from Route 4 you pass through our Main Gate, this gate is open from 6:00 am through 4:00 pm Monday through Friday. Once you pass the gate you will notice our Facility Sign on the right hand side of the drive.

Building #4 is our Maintenance Shop. It is located on the left hand side of the drive once you enter the facility. This is where routine maintenance is preformed on the equipment. It is also where the service and maintenance records are kept for our fleet of equipment.

If you continue down the drive a little further there is a truck parking area on the left and a roll of parking area on the right. Once you get beyond the truck parking area on the right, there is another roll of parking area.

We keep all of our Box Vans past the fuel pumps on the left hand side of the drive, at any time there could be 20 – 30 Box Vans that are parked in this lot.

Operations in Building #1 primarily are unloading Harding's Box Vans and other larger scrap dealers Box Vans. When unloading the material is inspected, weighed on Dept of Agriculture certified scales, and purchased. This is documented through our computer system. Once it has been documented it is staged for transfer to the proper areas, stockpiles or bins for temporary storage. Higher value materials are stored inside this building until they can be shipped out. Examples of that would be coppers, brass, and different grades of tool steel and industrial alloys.

Materials are also shipped from Building #1 as well.

Building #1 is also used as an industrial alloy and tool steel inspection area. These alloys are dumped onto a steel sorting table where random samples are checked with a Niton XRF analyzer. This device is registered with the NH Dept of Health and Human Services Radiological Health Section. After the alloys are inspected they are packed in either a Gaylord box, super sack or 55 open head drum so they can be inventoried and stored until shipment.

Building #1 is also the Clerical and Managerial office area. The Main Office area is where employees greet customers, check to see what they are dropping off, weigh up vehicles on the Certified Truck Scales, and then give them directions to the proper area and employee for drop off. After materials have been inspected and received in the yard customers return to the main office for payment

The main office area contains commodity inspection records, packaging records, shipment and receiving records, customer account information, Environmental records, plans and permits, DOT inspections and records, safety programs, and training and personal records. Employee parking is located just to the north of Building #1 Plant Office Building.

Building #3 is the Spinner Building. There are two completely different operations in this building. On the west side we wait on smaller scrap dealers, small commercial and residential customers. Materials are inspected and weighed up on certified scales, then entered into our computer system so that when customers go the main office they can be paid properly. There are also several smaller bins and drums located inside around the perimeter of this area that are used for temporary storage of recently purchased materials. As the smaller bins fill up, then they can be taken out the proper areas, stockpiles or bins for further temporary storage.

There is also two other pieces of equipment on the west side on the building that is used for sorting scrap. One is a Shaker Table. It is used to sort through smaller items. Materials are dumped on the back of the table and then the shaking motion of the table moves the material to the other end of the table where it is packaged. On the way it is sorted by hand picking out the materials that do not belong in the package, it also passes the material underneath a magnetic belt which removes the magnetic materials. The other piece of equipment is an Alligator Shear. This machine is used for cutting different grades of non ferrous pipe, and wire.

On the East Side of Building #3 is the Centrifuge. It is an auger fed process that feeds a small hammer mill that in turn feeds a centrifuge. This machine is used to remove the fluids from Non ferrous turnings and chips, primarily copper and brass. The fluids are captured in a275 gallon tote and stored until an authorized disposal service (Safety-Kleen) can come to pick them up. Once chips have been spun they are fed into super sacks, weighed and tagged for inventory and stored until shipment.

Building #2 is the Aluminum Building. It contains a horizontal bailer that is used to compress or condense materials to prepare them for a mill or further processing. Examples of materials that get bailed are Stainless Steel Scrap, Various grades of Copper Scarp and Wire, Various grades of Aluminum Scrap and Wire, Tin Cans, Cardboard, Plastics and some types of Steel Bushings. Materials are transferred from transfer from the proper areas, stockpiles or bins to the bailer belt. Once it's bailed its weighed on a certified scale and tagged for inventory and stored until shipment.

Building #2 also has a shaker table that is dedicated to sorting various grades of Aluminum punching and turnings. The process is identical to the shaker table in Building #2.

Materials that have been bailed or packaged can also be shipped from Building #3. There is one loading dock where tractor trailers can back into for loading.

On the north side of Building #2 there is another horizontal bailer. It is used for the same materials as the inside one. As materials are bailed they are taken in and weighed on the scale and tagged for inventory.

HMI Back Yard Operations are shown on Figure 3 Insert B. Materials Stored in this area is starting from the north and working around to the south east are ALTRAN (Aluminum Transmissions) and ALMB (Aluminum Motor Blocks). They are stored in covered 30 yard sealed roll off containers. When one fills up it is replaced with another then it is sold to another facility that can process the material.

The next is DSS (Dirty or Contaminated Stainless Steel). It is stored 30 yard open top roll offs. It is called dirty because it has other alloys that are attached to it either mechanically or has been welded. When the containers approach being full the material is sold. Typically an open top Dump Body Trailer Truck comes to pick it up. Occasionally this material is bailed. It is transferred from the storage container by dump truck to the cement pad in front of the Aluminum Building then a bobcat will push it on to the belt where it is dumped into the bailing chamber. Bales are them weighed tagged and stored until a box van comes to pick up the material.

The next items are IA (Irony Aluminum) and UPA (Unprepared Aluminum). The Irony is stored in the back of the bin. As the material approached a marketable amount, about a 30 yard roll off can it is sold to a facility that can process the material. The Irony loaded into a 30 yard with a scrap handler or front end loader and hauled to the facility. The Unprepared Aluminum is dropped on the front of the pad so that our hydraulic shear can get to the pile and cut it up. Once it's cut up a decision has to be made on how to package it. The heavy gauge materials have to boxed or strapped to a pallet. The lighter gauged materials can be transferred to the pad in front of the Aluminum Building where it can be pushed onto the bailer belt and bailed. Once bailed or boxed or palletized it is weighed and tagged for inventory and stored until shipped.

The next items are various grades of Stainless Steels. In Order they are 316, 18-8 or sometimes it's called 304, then the 400 and 430 series. These materials are all stored in uncovered stockpiles. As the bins or containers approach a marketable quantity, the material are sold and open top dump trailers arrive to pick the material up. These are loaded with the Scrap Handler.

The next items are Unprepared Steel and Prepared Steel. Unprepared is dumped on the behind the 400 series roll off containers and then the shear will cut it up to the desired dimensions and drop it to the left to create the prepared pile. These materials are shipped on a regular basis to local delivery points where they are accumulated to they can ship a marketable amount (Boat Load, Rail Care or Export Containers). Once a month or when the stockpiles have been shipped an electric magnet is used to clean up any residual that may be left behind.

The next area is low grade cable and communication wire. This wire is basically held until a marketable price can be attained. There sometime can be some sorting of this wire if it is deemed to have enough copper communication wire in it. It is picked apart and sorted by the scrap handler. The copper communication wire will be transferred to the Wire Bin in Figure 2 insert A.

The next area is for (P&S) Plate and Structural Steel. This is stockpiled on the ground; the hydraulic sheer is used to cut it up to a marketable dimension. It is shipped in the same manner as the prepared steel. Once a month or when the stockpiles have been shipped an electric magnet is used to clean up any residual that may be left behind.

The next area is TPB (Tin Plated Bushling). This material is stockpiled on a solid surface. It is held until there is a marketable quantity then sold. This is loaded into open top dump trailers by the scrap handler or a front end loader. Very rarely it is bailed if the market premium is there. The transfer process is the same as described previously.

The next area has series of 5 30 yard roll off container that are used to store EM (Electric Motors), MANG (Manganese Solids), CFE (Cast Iron Solids), and CU CLAD WIRE (Copper Clad Wire). The EM and CU CLAD WIRE are transferred to Building #2 for loading. The other material are loaded with a scrap handler into open top dump trailers

In the center area of the back yard are two other stockpiles. Light Iron and Bushling. They are loaded with the scrap handler into open top dump trailers.

If your look at Figure 2 Insert A the materials that are stored in this area are on pavement or cement. The turnings are stored behind a drain that captures the fluids. The other materials that area stored in this area usually require a bailer to be suitable for market.

We have 20 storage trailers that are used to store materials inside. On Figure 3 Insert B trailers #1 through #13 are used to store Gaylord boxes, Titanium Turnings, Brass, Comp, Copper Turnings Bagged for Shipment, Lead, Die Cast, Lead Acid Batteries, Office Paper, Plastic and new drums that we purchase for our customers. The trailers are not label for item but as materials are bought and sold they are managed by how materials are shipped.

Storage Trailers # 14 – 18 are located in front of Building # 2. Materials that are stored in these are Sealed Electric Motor Units, Ballasts, Copper & Brass Turnings Packaged for shipment and various grades of tool steel packaged ready for shipment.

Storage Trailers # 19-21 can be found on Figure 2 Insert A. Materials that are stored in these are mixed transformers, copper yokes, and small boxed stainless parts. We also keep our drums that we use for our customers in these trailers as well.