

THE PEOPLE'S PRONOUNS

Emerson East Park
Installed on December 3, 2019
Ray Chi, artist

Maintenance Guide

SCULPTURE MATERIALS OVERVIEW

- The three sculptures have been fabricated out of steel sheet with galvanized steel hardware and aluminum pipe spacers.
- Steel front faces, rear perforated layers and rear skirt have been laser cut, sandblasted, washed and finished with industrial powder-coat color.
- Bolts, washers and nuts are all galvanized steel to prevent corrosion and rust. They have also been painted to match the sculptures.
- The 6-inch gap between front faces and perforated rear faces is spanned by powder-coated aluminum pipe spacers and white nylon washers. Aluminum will not rust.
- Mounting plates are made of 1/2" steel, painted with industrial epoxy paint.
- 7" wedge concrete anchor bolts, square washers and nuts are galvanized steel to prevent rust and corrosion.
- Footings are solid concrete poured to 48" below grade to prevent 'frost heave'.

ASSEMBLY DETAILS

In the unlikely event that disassembly be necessary, all parts of the sculpture are mechanically fastened and could be individually disassembled and replaced.

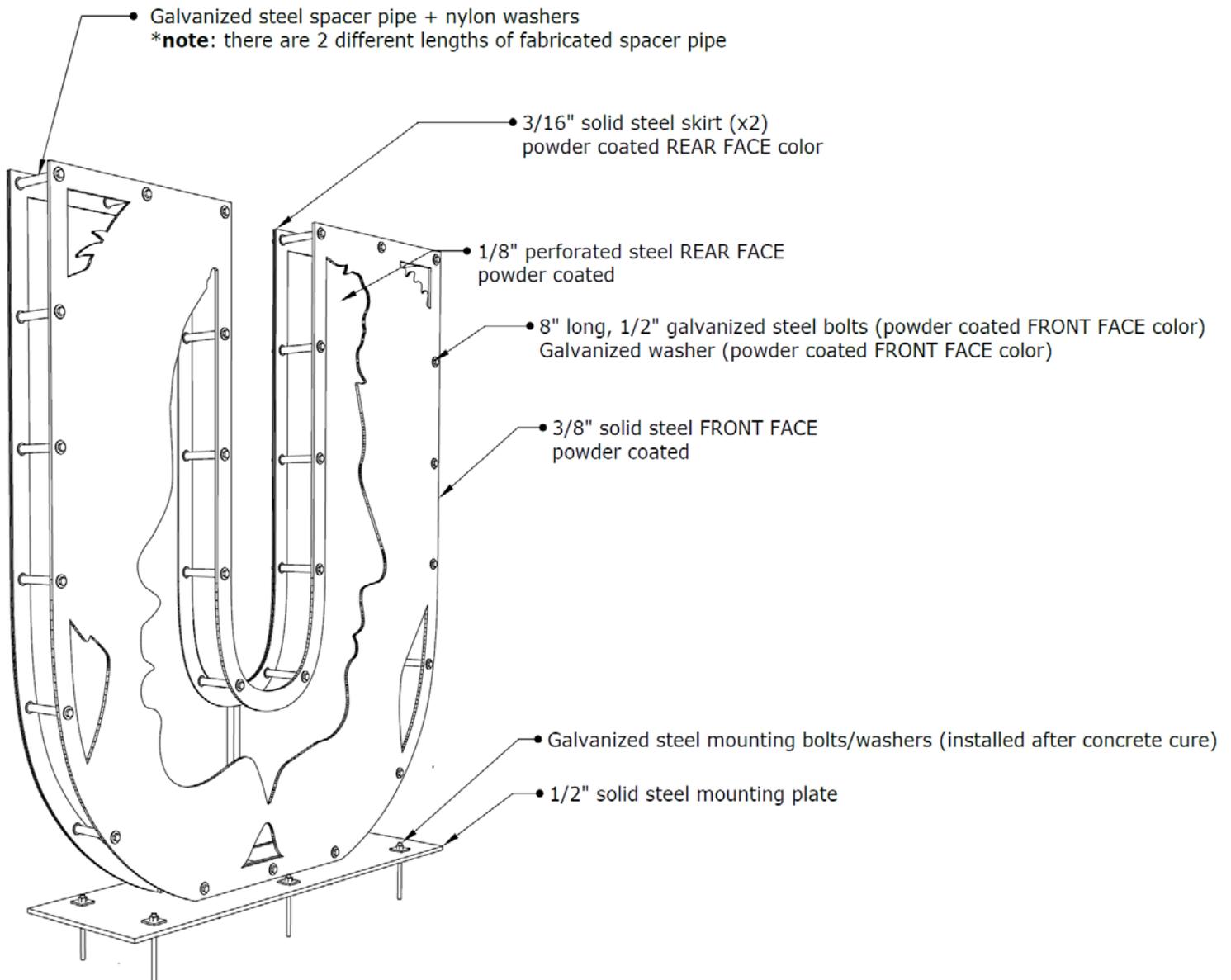
For detailed construction and assembly information, please reference the separately included files:

- 'Letter Fabrication'
- 'Mounting Plates Fabrication'

Those two documents include detailed drawings and instructions for fabrication and assembly of the sculptures.

Some additional notes on assembly:

- Nuts on through-bolts on rear of sculptures are 'lock-nuts'. Lock nuts are designed to prevent loosening. That said, the nuts CAN be physically removed if necessary, using a wrench or driver. If lock nut is removed, a NEW lock-nut should be used to replace it. Extra lock nuts and touch-up paint have been included as detailed in the 'EXTRA PARTS INVENTORY' section of this document.
- Nuts on mounting plates have been tightened with Loctite Thread-lock (blue). The thread-lock product is used to prevent unwanted loosening of the nuts. Follow Loctite's product instructions should those nuts ever need to be removed.



MAINTENANCE

The sculptures have been designed and fabricated to require little to no maintenance. That said, basic and common sense maintenance will increase the longevity and beauty of the work.

CLEANING

The powder coated surfaces of the sculpture are resistant to both dirt and grime. Most dirt and mud will be washed off by rain. This goes for grass clippings as well. When possible, though, please brush/blow loose clippings and leaves off sculpture/pad. If dirt or other materials do not wash off in rain, warm soapy water should be enough to remove it.

SNOW

Please do not use any type of salt to melt snow off of sculpture or pad. Salt will speed up corrosion and compromise the powder coating.

The sculptures should look just fine in the snow, but if snow removal is desired, please use care not to scratch the painted surfaces of the sculptures. A plastic shovel would be preferred.

MOISTURE

Cleaning and removing debris will help prevent moisture trapping. If possible during regular park maintenance, please blow or remove debris from sculpture/pad.

PAINT TOUCH UP

If painted surface is scratched or begins to rust, please use the provided touch-up paint to seal the area before rust can spread. Again, the powder coating if treated well and does not come into contact with salt, should last for many years before any maintenance is necessary.

Affected area, rust, loose paint edges should be sanded and clean before applying touch-up paint. Multiple coats may be necessary, and feathering the edge will help the repair blend in.

DAMAGE / REPLACEMENT

In the unlikely event that any sculpture parts need replacing, contact the artist, Ray Chi. All parts have an associated laser-cutting file and can be precisely replicated and replaced. Because of the mechanical fastening of all parts, any single part of individual letters can be replaced without disturbing the rest of the sculpture. Please reference VENDOR/CONTRACTOR list detailed in this document for more contact info.

EXTRA PARTS INVENTORY

At time of installation, the artist provided the City Arts Administrator with boxes full of extra parts and touch up paint. Specifically, this is what was provided:

- **Touch up paint** (spray paint) color-matched to every color present in the sculpture design. For refills contact paint manufacturer www.orbittx.com
- **Metal touch up paint shield.** This can be used to isolate bolt heads / nuts for touch up painting.
- **Extra Through-Bolts:** Hex bolts, Hot dipped galvanized steel, 1/2"-13 x 8"
- **Extra color-matched washers:** powder coated, USS flat washers, Hot dipped galvanized steel, 1/2"
- **Extra lock nuts:** Top lock nuts, Hot dipped galvanized steel, 1/2"-13
- **Extra pipe spacers**
- **Extra nylon washers**



VENDOR / CONTRACTOR contacts

Artist: Ray Chi, chiray@gmail.com, 414-791-3236

Metal Fabricator: VMetals, contact: Aaron Malinowski, aaron@vmetalsfab.com, 414-430-7429

Installation: Operation Fresh Start, contact: Jason Henkins, jhenkins@operationfreshstart.org, 815-564-8587

Metal Supplier: Direct Metals Company, LLC, www.directmetals.com

Hardware Supplier: The Bolt Depot, www.boltdepot.com

Engineer: Richard DeVries Ph.D., P.E. , rad-structures@wi.rr.com, 414-277-7596



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