Demonstration Project Technical Guidance & Lessons Learned



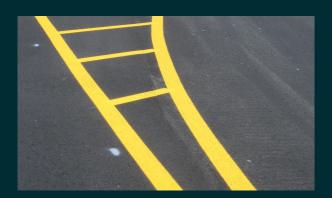
Key Materials

36" Vertical Delineators



Striping

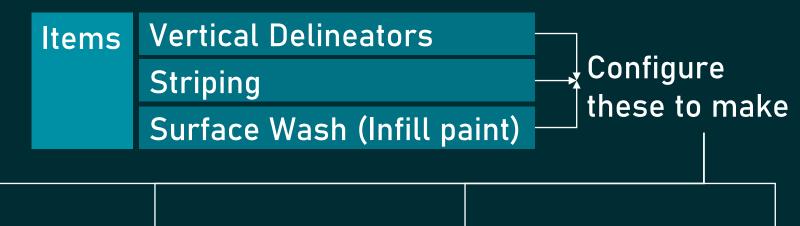
1 Temporary Tape2 PaintRetroreflective



Surface Wash (infill paint)



Applications



Curb Extensions



Ped Island



Chicane



Traffic Circle



MPO

Disclaimer

All projects were created using PE stamped plans to ensure adherence to laws and standards

Installation & Removal Supplies

ltem	Quantity	Installation	Clean-up
Construction Cones	5-10	Yes	_
High Visibility Vests	*	Yes	Yes
Trash Bag	2-3	Yes	Yes
Metal scraper (long-handled)	1	No	Yes
Broom	1-2	Yes	No
Gloves (pair)	*	Yes	Yes
Hand truck/Dolly **	1	Yes	Yes
Tape Measure (25ft)	1	Yes	-
Chalk set ***	1	Yes	_

per person

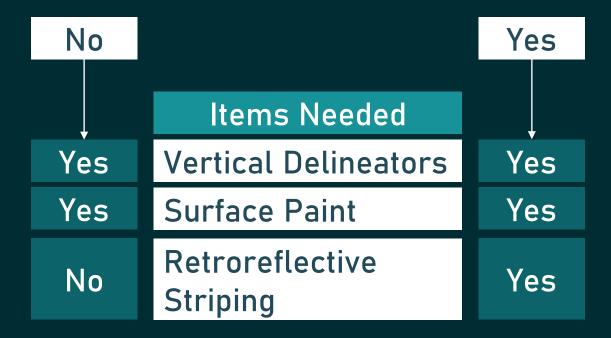
^{**} for moving storage totes
*** for marking project layout

Weather Issues

	Rain	Temperature
Vertical Delineator	Surface must be dry, or butyl won't stick	High temp below 60 degrees, use full 8" butyl pad
		High temp above 60 degrees, use small butyl pieces
Paint	Surface must be dry, or paint won't dry properly	
	If rain in 24-hour forecast, wait to paint until after	
Tape	Surface must be dry, or tape won't stick	High temp above 60 degrees for best result

Visibility at Night

Will your project be up overnight?



Retroreflective Striping

Options

Paint		Temp Tape
Low	Cost	Very High
More work	Install	Easy
Less Uniform	Result	Professional -
See Retroreflective Paint slide	More Info	See Temporary Tape slide



Homemade Retroreflective Paint

1	Sweep	Clean the surface of debris
2	Mix Paint	See Paint slide for striping formula
3	Paint	Paint stripes on the surface
4	Glass Beads	Immediately sprinkle glass beads
		on we paint

Glass Bead Tips & Tricks

- 1 Take an empty Corn Starch container & punch small holes in the lid
- 2 Fill the container with glass beads
- 3 Heavily sprinkle the glass beads over the wet striping paint.



Temporary Tape Tips & Tricks

- 1 Sweep entire path where tape will be laid
- Place a paint roller extension handle through the hole in the tape roll
- One person carries the roll by the extension handle
- 4 Second person places & tamps down the tape



Paint Formulas

White or Yellow Striping

16_{oz}

Paint

Corn Starch ~½ cup



Note for yellow striping: First paint a white line and let dry. Test a small section to see if one coat of yellow will work or if two coats will be needed. Only sprinkle glass beads on the last layer.

Red-brick Curb Extensions

Red Paint	32oz (2 small bottles)
Black Paint	1-2oz (4 squirts)
White Paint	4-8 _{oz} (8 squirts)
Water	2.5 gallons

Note: Make sure you have access to a water source on site or bring water to the site in a bucket with a lid.

Paint Supplies

Supplies		
Buckets (5gal)	Stir Stick / Whisk	
9" Paint Roller Frame	Rubber Scraper	
9" Paint Roller Cover	Paper Towels	
4" Paint Roller Frame	Trash Bag	
4" Paint Roller Cover	Gloves	
Roller Extension Poles		

Paint Trays Discouraged

Initially we used paint trays, but they became a hassle (i.e. when they would blow away). Now we mix the paint in a bucket and just dip the rollers in the bucket. This works really well and is one less thing to purchase or tote around. Have a rubber scraper handy to scrape down the sides of the bucket.

Paint Supply Notes

Bucket (5gal)

One bucket per paint color, plus an additional bucket(s) with a lid for water

Paint Roller Frames

Make sure the handle allows for an extension pole to be attached

9" Paint Roller Cover

This is for the red-brick wash so a thicker nap is better (semi-smooth to rough surface). Two covers per project usually works, unless you want more people helping to paint.

4" Paint Roller Cover

One cover per paint color (white and yellow), but always have extras as they often get too dirty to keep using

Stir Stick / Whisk

A rubber whisk works perfect to combine paint with the cornstarch

Gloves

The paint washes off easily with water, but when there isn't soap and water in the field, gloves may be a good idea. You probably want a different pair than the ones you use for butyl.

Prepping for Installation

Before Install Cut butyl pads into segments

Use utility knife to cut

Keep wrappers on cut pieces (to keep from sticking together)

Store pieces in bag to install on-site

Notes:

- Gloves are highly encouraged when working with butyl!
- Store butyl in a cool location out of direct sun

Butyl Supplies Trash Bag

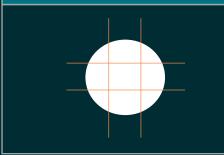
7" Metal Scraper

Gloves (pair)

Cardboard (for cutting butyl)

Utility Knife (for cutting butyl)

One 8" butyl pad becomes 9 pieces...enough for 2-3 bases



Delineator Installation

Day of Install

Take bag of butyl pieces to each delineator (already placed in final position)

Attach 3 or 4 small butyl pieces on each base

Use foot to apply pressure to delineator base to help secure to pavement

If the daily high temp is under 70 degrees, use full 8" pad

Have trash bag with you for paper & wrapper waste

Do not install if surface is wet!
Butyl won't stick

Delineator Installation

To use or not to use...

Are butyl pieces still sticky?
(there will be small rocks & dirt, but check to see if they are still tacky)

No

Remove old butyl pieces & install new butyl pieces

Yes

Install new butyl pieces over the old pieces

After 3 layers of butyl, remove all old pieces & start fresh

Delineator Storage

Delineators are 36" long, 39" with the bases

Removing and reinstalling the bases is time consuming

Store 10-12 delineators with bases attached in 55-gallon tough storage totes



Recommended Enhancements

1 Place a delineator on the centerline of the crosswalk



2 Install yield signs on all segments of a temporary traffic circle

or

Place "State Law Yield to Ped" sign on centerline & shoulder



Total Supply List

36" Vertical Delineators

Temporary Tape or Paint

Butyl Pads

Cardboard

Utility Knife

Tape Measure (25ft)

Chalk

Storage Containers (delineators)

Yield to Pedestrian Signs

High Visibility Vests for Install

Trash Bags

Metal scraper (long-handled)

Broom

Gloves

Hand truck/Dolly **

Only needed if using Paint

Glass Beads

Cornstarch

Buckets

9" Paint Roller Frame

9" Paint Roller Cover

4" Paint Roller Frame

4" Paint Roller Cover

Roller Extension Poles

Stir Stick/Whisk

Rubber Scraper

Paper Towels

Questions?

