#### Materials & Tests Unit

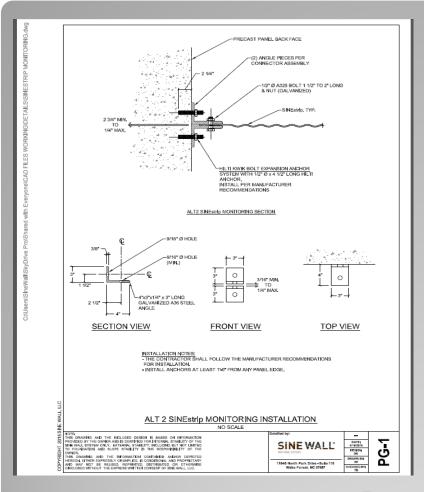
# SINE Wall Alternative Strap Mounting Guide



Revised 14 September 2015

- NCDOT has partnered with SINE Wall in coordination with the Transportation Research Board (TRB) IDEA Highway submission program.
- The SINE ALT strap system utilizes an aluminized type 2 coating on the strap instead of zinc galvanizing.
- This alternative test strap installation should be approved by the Project Engineer and coordinated the Contractor in which should not incur addition charges to the Department.
- The Alternative test straps should be installed at the same time, same location behind the MSE wall panel and using the same exit point as a normal corrosion monitoring kit.

#### **General Information**



 A request from SINE wall should be made to the Project Engineer requesting to add this test strap to the inside of the MSE wall where a corrosion monitoring kit will be installed.

### Step #1- Receive Approval of the Project Engineer



M&T will send out an alternative strap installation kit

- Aluminum Reference-#10 solid wire
- Front Strap Wire-#12 Orange Wire
- Back Strap Wire- #12
   Purple Wire

Step #2- Receive an alternative strap kit.

Reference Anode



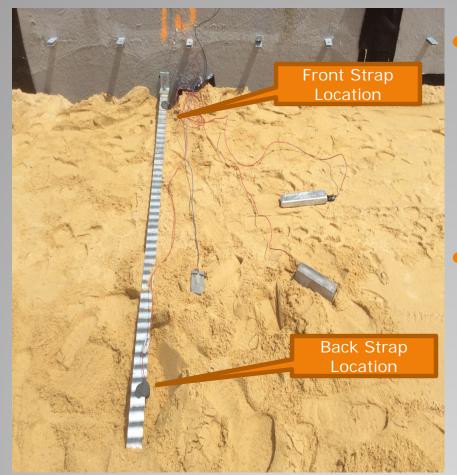
- Clip angles and test straps are supplied by the SINE Wall.
- Additional MSE test straps and aluminum anode is provided by the Department.

## Step #3- Install clip angles on the back of the MSE wall panel



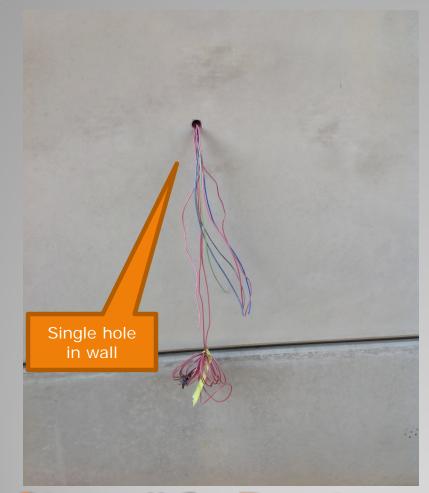
- Place the aluminum reference anode in the back.
- Anode should be 1-2 feet from the zinc and steel references as well not in contact with other straps.

Step #4-Install aluminum reference anode.



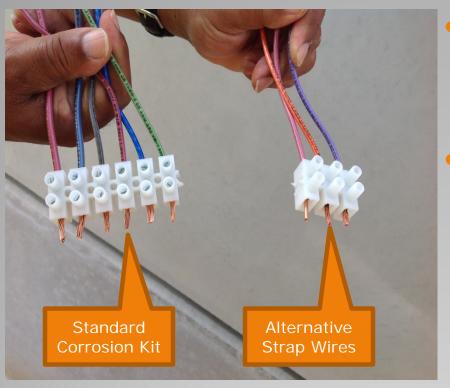
- Install and tighten the front strap wire (#12 orange) and seal with duct seal.
- Install and tighten the back strap wire (#12 purple) and seal with duct seal.

Step #5-Install front and back strap wires.



 The Contractor shall use a single hole in the MSE wall panel for all test wires to be routed through.

Step #6- Route wires to outside of wall



- No additional steps needed.
- This is how the wiring will look once the junction box is installed on the outside wall face.

### How the finish product looks