

STATE OF UTAH MSE WALL INSPECTION FORM

Compiled As Part of Research By The Utah Department of Transportation

Instructions:

1- Fill out required sections for MSE Wall Inspector and Wall Characteristics.

2- Inspect the wall using the attached form. Questions that require a 'Yes' answer should be documented by noting the extent of the problem in the right most column and photo documentation. Photo documentation should consist of wall or bridge number, nature of problem, date, photo number for wall, and a size reference, which should be indicated in the photo (white board/paper). Photos taken should be placed on the Top View layout and indicated with the appropriate number. Note should be taken by the inspector that often anomalies are due to construction and should be distinguished from those that are a result of post-construction. If it is observable that they existed at the time of construction note should be taken in the space provided for drawings.

3- Shoot digital photos of the entire wall. This may require the use of a variety of shots and angles on each wall to cover the wall in its entirety.

4- Indicate Layout of MSE Wall in respect to major intersections, roadways, potential hazards, irrigation, vegetation, locations of conditions for which 'Yes' was marked, etc. in space provided below. Also indicate approximate GPS Coordinates of Site of Interest in space provided below

Region	4	Identifying Road/Intersection	Hwy 10 North of Huntington
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MSE WALL CHARACTERISTICS

MSE Wall at Bridge	Y <input checked="" type="radio"/> N	Bridge Number if applicable:	Wall Number	NE
Surrounding Structures			Maximum Height of Wall (ft)	8 FT
Distance to Each Structure			One Stage, Two Stage or Block Wall	Block
State Route Number			Estimated Max Length of Wall Abutment:	130 FT
Approximate Mile Marker			Max Slope of Ground in front of wall:	1.5:1
GPS Datum	WGS/84, NAD/83, or NAD/27		Max Height of wall burial line above surrounding level ground:	4 FT
MSE Wall GPS Coordinates (Location of Measurement shown on plan view)	39° 21' 25.44" N 110° 55' 43.11" W		Please draw rough layout of panel with approximate dimensions in space provided below:	
If known, Panel or System Manufacturer	<div style="border: 1px solid black; width: 200px; height: 100px; margin: 0 auto; position: relative;"> 18ⁿ 8ⁿ </div>			

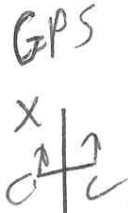
Summary of Key Observations:

lots of vegetation against wall

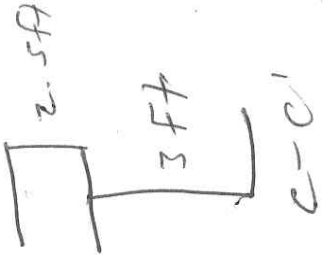
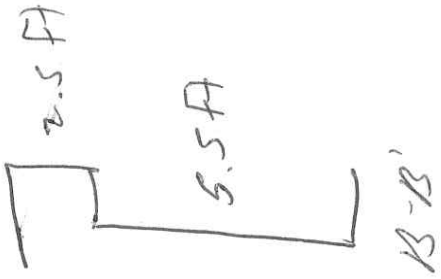
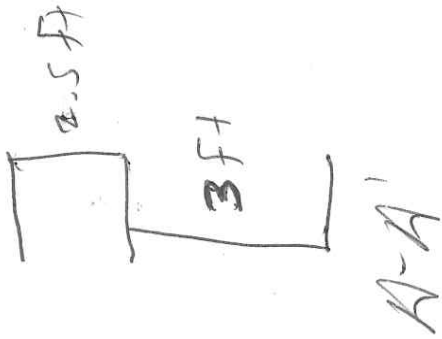
Plan View/Drainage:



↑
Hwy
10
↓



Cross Sections:



Cross Sections:

RISE WALL DRAINAGE

Required Item	Yes	No	NA	UNS	Measurement/Extent of Problem/Location/Photo Numbers
1-Is there any visible water source near the base of the wall (e.g. water with sewer penetration)?	Y	N	N/A	UNS	Drainage / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
2-If applicable, are the catch basins at the base of the wall blocked?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
3-Are there obstructions protruding through the wall?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
4-Are there vertical drains that extend through the backfill?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
5-Is there evidence at the base of the wall or leveling pad? (Photo 12)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
6-Is there evidence along the wing wall?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
7-Are there any signs of water flow along the base of the wall?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
8-Is there less than 14 feet between longitudinal girders and wall?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
9-Does the backfill or joint fabric appear to be saturated?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
10-Is there vegetation growing in joint fabric (Photo 3)?	Y	N	N/A	UNS	Blocked / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
11-Over the deck drains and outlets at the top of the wall blocked? (Photo 14)	Y	N	N/A	UNS	Clear / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
12-Can water enter the wall between coping and slab (i.e., drain appropriately)?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
13-Is there evidence at discharge point of fill washing through drain pipe?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

RISE WALL JOINTS

Required Item	Yes	No	NA	UNS	Measurement/Extent of Problem/Location/Photo Numbers
1-Is the backfill coming out of joint or are there piles of backfill at the base of the wall? (Reference 2 & 3)	Y	N	N/A	UNS	Backfill / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
2-Is the joint wide enough to see fabric or backfill behind panels when looking into joint? (Photo 3) If yes, record the approximate maximum joint width in inches.	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
3-Is there evidence of backfill or water leaking through joint? (Do not include additional damage to fabric)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
4-Do the joints have a non-uniform horizontal spacing? Are some horizontal joints larger than others? (Photo 6)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
5-Do the joints have a non-uniform vertical spacing? Are some vertical joints larger than others? (Photo 6)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
6-Do the panels have a non-uniform vertical spacing? Are some vertical joints larger than others? (Photo 6)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
7-Do the panels have a non-uniform horizontal spacing? Are some horizontal joints larger than others? (Photo 6)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
8-Do the panels have a non-uniform vertical spacing? Are some vertical joints larger than others? (Photo 6)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
9-Do the panels have a non-uniform horizontal spacing? Are some horizontal joints larger than others? (Photo 6)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
10-Do the panels have a non-uniform vertical spacing? Are some vertical joints larger than others? (Photo 6)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
11-Does the fabric appear brittle, or appear as if it has undergone excessive UV exposure?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

RISE WALL FACING

Required Item	Yes	No	NA	UNS	Measurement/Extent of Problem/Location/Photo Numbers
1-Do the panels "tilt up"? Is there excessive cracking in the panel?	Y	N	N/A	UNS	Cracking / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
2-Are there cracks that continue vertically through adjacent panels (Photos 8 & 10)? If yes, record the approximate number of panels in the wall with cracking.	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
3-Are there cracks that continue horizontally through adjacent panels (Photos 9 & 10)? If yes, record the approximate number of panels in the wall with cracking.	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
4-Are the panel corners cracking in contact with each other? If yes, record the approximate number in the wall.	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
5-Are the panel corners "pop-out" or chipped from contact with an adjacent panel? If yes, record the number in the wall.	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
6-Does the overlying coping exhibit Vertical Offset?	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
7-Do the coping and parapets loose or dislodge? If yes, it may be appropriate to contact UDOT if detachment occurs evident.	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
8-Are the panels in danger of falling off? (If potential exists contact appropriate UDOT region).	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
9-Are the panels "bulging" (bowing horizontally)? If so, record maximum deformation from acceptable coping to leveling pad (Photo 11)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
10-Is there lifting at the top or bottom of the wall? (Record maximum degree of lifting from vertical coping to leveling pad (Photo 11))	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

RISE WALL OBSERVATIONS

Required Item	Yes	No	NA	UNS	Measurement/Extent of Problem/Location/Photo Numbers
1-Is there evidence of settlement at the top of the wall? (movement cracking, etc)	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
2-Are there any open cracks in the concrete coping (not hairline)? If yes, record the approximate maximum crack width.	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
3-Is there any construction joints in the reinforcing coping opened up? (Photo 6). If yes, record the maximum joint width.	Y	N	N/A	UNS	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

