

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	3	Identifying Road/Intersection	University Ave. Interchange

MSE WALL CHARACTERISTICS

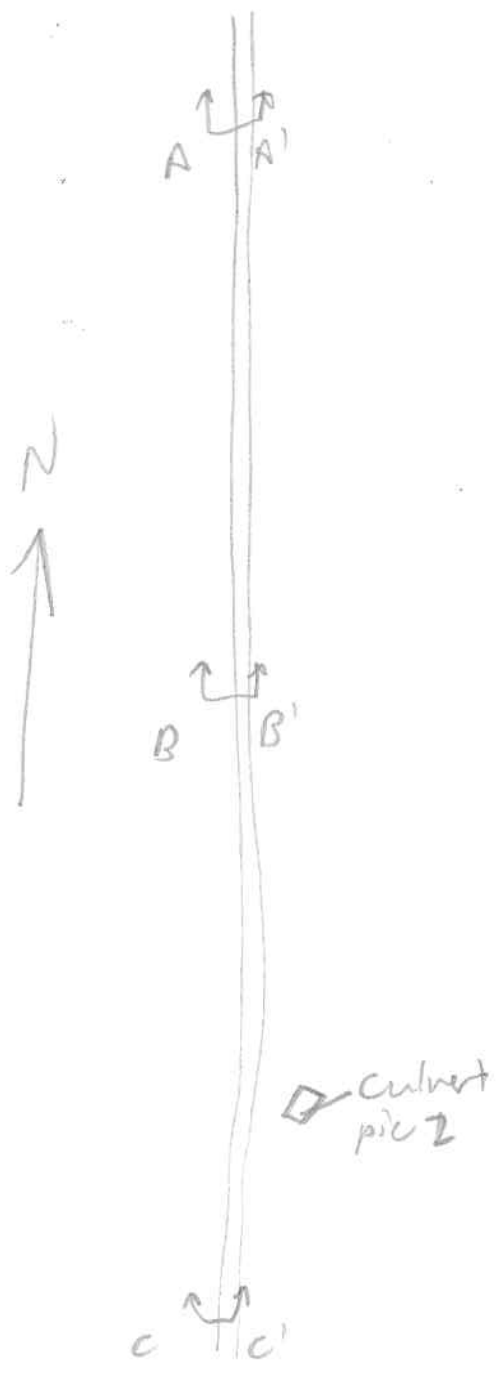
MSE Wall at Bridge	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Bridge Number if applicable:		Wall Number	R-319-A
Surrounding Structures				Maximum Height of Wall (ft)	14 ft
Distance to Each Structure				One Stage, Two Stage or Block Wall	one stage
State Route Number	I-15			Estimated Max Length of Wall Abutment:	200 ft
Approximate Mile Marker	263			Max Slope of Ground in front of wall:	0
GPS Datum	WGS/84, NAD/83, or NAD/27			Max Height of wall burial line above surrounding level ground:	0
MSE Wall GPS Coordinates (Location of Measurement shown on plan view)	40° 12' 30.88" N 111° 39' 33.05" W		Please draw rough layout of panel with approximate dimensions in space provided below:		
If known, Panel or System Manufacturer					

Summary of Key Observations:

good

12/30/20

Plan View/Drainage:



Cross Sections:



A-A1



B-B1



C-C1

Cross Sections:

MISE WALL DRAINAGE

Required Tests:		Long Level String - Center-Creek	Measurement/Extent of Problem/Location/Photo Numbers
Yes	N/A	UNSN	Drainage
Y	N/A	UNSN	1-4: Is there an active water source near the top of the wall with water pooling?
Y	N	UNSN	2-1: If applicable, are the catch basins at the base of the wall blocked?
Y	N	UNSN	3-1: Are there culverts protruding through the wall?
Y	N	UNSN	4-1: Are there vertical drains that travel through the backfill?
Y	N	UNSN	5-1: Is there erosion at the base of the wall or leveling pad? (Photo 12)
Y	N	UNSN	6-1: Are there cracks along the wing wall?
Y	N	UNSN	7-1: Are there any signs of water flow along the base of the wall?
Y	N	UNSN	8-1: Is there less than 14 feet between irrigation sprinklers and wall?
Y	N	UNSN	9-1: Does the backfill or joint fabric appear to be saturated?
Y	N	UNSN	10-1: Is there vegetation growing in joint fabric? (Photo 8)?
Y	N	UNSN	11-1: After the deck drains and outside at the top of the wall blocked? (Photo 14)
Y	N	UNSN	12-1: Can water enter the wall between coping and slab (i.e., drain appropriated)?
Y	N	UNSN	13-1: Is there evidence of discharge point of fill washing through drain pipe?
			Blocked
Y	N	UNSN	Clear / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

MISE WALL JOINTS

Required Tests:		Long Level String - Center-Creek	Measurement/Extent of Problem/Location/Photo Numbers
Yes	N/A	UNSN	Joint
Y	N/A	UNSN	14-1: Is backfill coming out of joints or over piles of backfill at the base of the wall? (Photos 2 & 3)
Y	N/A	UNSN	15-1: Are the joints wide enough to see fabric or backfill behind panels when looking low joint? (Photo 5) If yes, record the approximate maximum joint width in inches.
Y	N/A	UNSN	16-1: Is exposed backfill visible in the horizontal joint? (Photo 4)
Y	N/A	UNSN	17-1: Are there visible tears in the fabric? Is there evidence of backfill or water leaking through tear? (Do not induce additional damage to fabric)
Y	N/A	UNSN	18-1: Do the joints have a non-uniform horizontal spacing? Are some horizontal joints larger/smaller than others? (Photo 6)
Y	N/A	UNSN	19-1: Do the joints have a non-uniform vertical spacing? Are some vertical joints larger/smaller than others? (Photo 4)
Y	N/A	UNSN	20-1: Do the joints have a non-uniform vertical offset at the joint either in or out of the wall? (Photo 7) If yes, record the approximate maximum offset.
Y	N/A	UNSN	21-1: Does the fabric appear brittle, or appear as if it has undergone excessive UV exposure?
			Blocked
Y	N	UNSN	Clear / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

MISE WALL FACING

Required Tests:		Long Level String - Center-Creek	Measurement/Extent of Problem/Location/Photo Numbers
Yes	N/A	UNSN	Wall Facing
Y	N/A	UNSN	22-1: Are the panels "Tilt-Up"? Is there excessive cracking in the panels?
Y	N/A	UNSN	23-1: Are there cracks that continue vertically through adjacent panels (Photos 9 & 10)? If yes, record the approximate number of panels in the wall with cracking.
Y	N/A	UNSN	24-1: 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/A	UNSN	25-1: Are the panels forming racking contact with each other? If yes, record the approximate number in the wall.
Y	N/A	UNSN	26-1: Are the panel corners "rippled-off" or chipped from contact with an adjacent panel? If so record the number in the wall.
Y	N/A	UNSN	27-1: Does crack spacing suggest Differential Settlement?
Y	N/A	UNSN	28-1: Does the coping exhibit Vertical Offset?
Y	N/A	UNSN	29-1: Are the coping and parapet loose or detaching? If yes, it may be appropriate to contact UDOT if detachment seems imminent.
Y	N/A	UNSN	30-1: Are the panels in danger of falling off? (If potential exists contact appropriate UDOT region).
Y	N/A	UNSN	31-1: Are the panels bulging (bowing horizontally)? If so, record maximum deformation from acceptable coping to leading pad. (Photo 11)
Y	N/A	UNSN	32-1: Is there "spalling" at the top or bottom of the wall? (Record maximum degree of flipping from acceptable using vertical level and affected area).
			Blocked
Y	N	UNSN	Clear / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

MISE TOP OF WALL OBSERVATIONS

Required Tests:		Long Level String - Center-Creek	Measurement/Extent of Problem/Location/Photo Numbers
Yes	N/A	UNSN	Top Of Wall
Y	N/A	UNSN	33-1: Is there evidence of settlement at the top of the wall? (pavement cracking, etc)
Y	N/A	UNSN	34-1: Are there any signs cracks in the concrete coping (not hairline)? If yes record the approximate maximum crack width.
Y	N/A	UNSN	35-1: Have the construction joints in the concrete coping opened up? (Photo 6). If yes, record the maximum joint width.
			Blocked
Y	N	UNSN	Clear / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

