

STATE OF UTAH MSE WALL INSPECTION FORM

Compiled As Part of Research By The Utah Department of Transportation

Instructions:

- Fill out required sections for MSE Wall Inspector and Wall Characteristics.
- 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.
- 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.
- 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		Identifying Road/Intersection	
	3	Moorh St, Hwy 6	

MSE WALL CHARACTERISTICS

MSE Wall at Bridge	N	Bridge Number if applicable:	
Surrounding Structures		Maximum Height of Wall (ft)	31 ft
Distance to Each Structure		One Stage, Two Stage or Block Wall	1-5 stage
State Route Number		Estimated Max Length of Wall Abutment:	67 ft
Approximate Mile Marker		Max Slope of Ground in front of wall:	0 ft
GPS Datum	WGS/84, NAD/83, or NAD/27	Max Height of wall burial line above surrounding level ground:	
MSE Wall GPS Coordinates (Location of Measurement shown on plan view)	40°41'52.23"N 110°35'10.59"W		
If known, Panel or System Manufacturer			

Please draw rough layout of panel with approximate dimensions in space provided below:

Summary of Key Observations:

- separation in joints
- exposed back fill

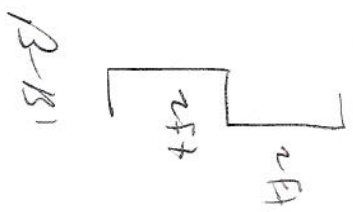
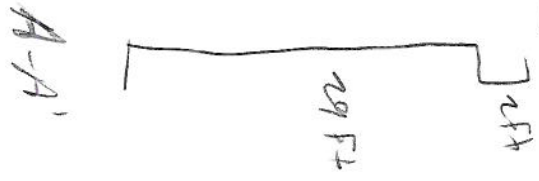
Plan View/Drainage:

Horizontal
Gaps
pic 2
X
CPS

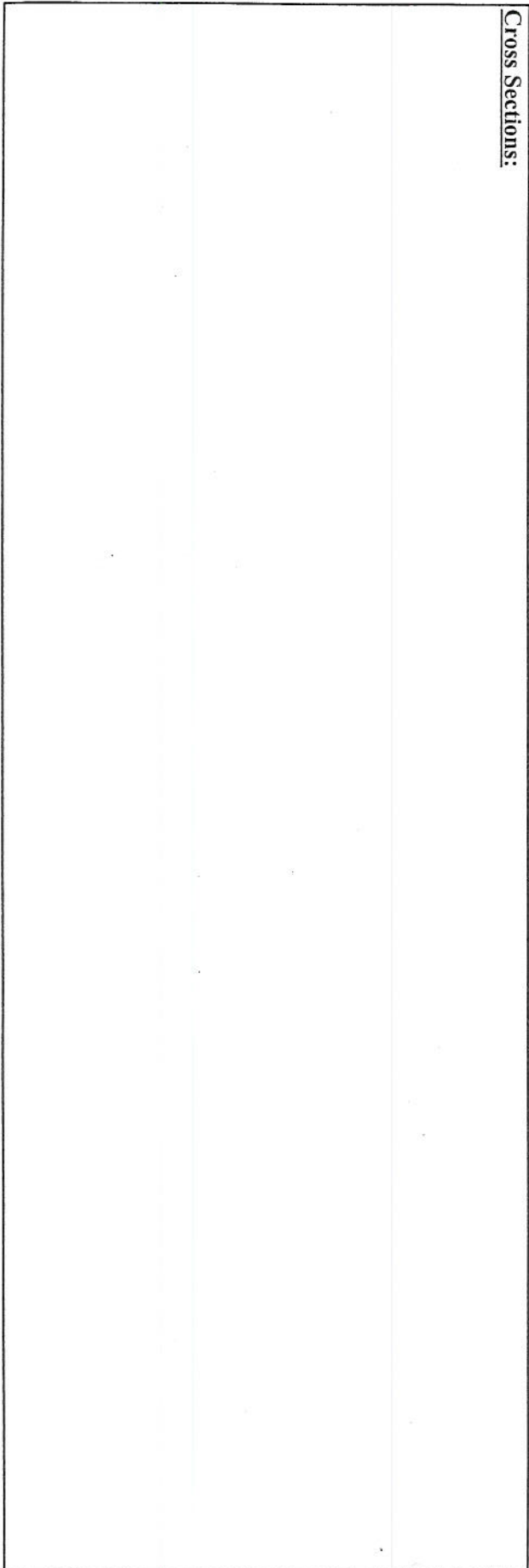
Tipping
panels
pic 1



Cross Sections:



Cross Sections:



NIS WALL DRAINAGE

Required Item	Inspection	Findings	Measurements/Extent of Problem/Action/Photo Numbers
Yes	NA	DN	Measurements/Extent of Problem/Action/Photo Numbers
Y	N	UN	1) Is there an active water source near the base of the wall (or the wall near a body of water with scour potential)?
Y	N	UN	2) If applicable, are the catch basins at the base of the wall blocked?
Y	N	UN	3) Are there obstructions protruding through the wall?
Y	N	UN	4) Are there vertical drains that extend through the backfill?
Y	N	UN	5) Is there evidence of the backfill of joint or bedding joint (Photo 12)
Y	N	UN	6) Is there evidence along the wing wall?
Y	N	UN	7) Are there any signs of water flow along the base of the wall?
Y	N	UN	8) Is there more than 12 feet between impingement splitters and wall?
Y	N	UN	9) Does the backfill of joint/drain appear to be unusual?
Y	N	UN	10) Are there expansion joints in panel joint (Photo 8)?
Y	N	UN	11) Are the deck drains and outlets at the top of the wall blocked? (Photo 14)
Y	N	UN	12) Can water enter the wall between coping and slab (i.e. Drain approximately)?
Y	N	UN	13) Is there evidence of discharge point of fill water through drain pipe?
NIS WALL JOINTS			
Required Item	Inspection	Findings	Measurements/Extent of Problem/Action/Photo Numbers
Yes	NA	DN	Measurements/Extent of Problem/Action/Photo Numbers
Y	N	UN	1) Is backfill meeting soil or are there piles of backfill at the base of the wall? (Photos 2 & 3)
Y	N	UN	2) Is the joint wide enough to see fabric or backfill behind panels when looking into joint? (Photo 5) If yes, record the approximate maximum joint width in inches.
Y	N	UN	3) Is there evidence of backfill or water leaking through joint? (Photo 3)
Y	N	UN	4) Does the catch basin in the district have evidence of backfill or water leaking through base? (No wall measurements to District)
Y	N	UN	5) Do the joints have a smooth horizontal surface? Are some horizontal joints larger/smaller than others? (Photo 6)
Y	N	UN	6) Is the joint more than 1/2 inch from vertical straightness? Are some vertical joints larger/smaller than others? (Photo 4)
Y	N	UN	7) Do the panels offset at the joints either in or out of the wall? (Photo 7) If yes, record the approximate maximum offset.
Y	N	UN	8) Is there the fabric exposed inside, or appear as if it has undergone excessive UV exposure?
NIS WALL FACINGS			
Required Item	Inspection	Findings	Measurements/Extent of Problem/Action/Photo Numbers
Yes	NA	DN	Measurements/Extent of Problem/Action/Photo Numbers
Y	N	UN	1) Is there evidence of "fill-in" or debris material in the joint?
Y	N	UN	2) Are there cracks that extend vertically through the panel? (Photo 8 & 10) If yes, record the approximate number of panels in the wall with cracking.
Y	N	UN	3) Are there cracks that continue horizontally through adjacent panels? (Photo 8 & 10) If yes, record the approximate number of panels in the wall with cracking.
Y	N	UN	4) Are the panel corners meeting contact with each other? If yes, record the approximate number in the wall.
Y	N	UN	5) Are the panel corners "popped out" or chipped from contact with an adjacent panel? If yes, record the number in the wall.
Y	N	UN	6) Does the panel corners "pop out" or chip from contact with an adjacent panel? If yes, record the number in the wall.
Y	N	UN	7) Does the panel appear to be damaged? If yes, it may be appropriate to consult UDOT if replacement is required.
Y	N	UN	8) Are there signs of delamination or chipping? If yes, record the maximum depth of delamination.
Y	N	UN	9) Are there signs of delamination or chipping? If yes, record the maximum depth of delamination.
Y	N	UN	10) Are there signs of delamination or chipping? If yes, record the maximum depth of delamination.
Y	N	UN	11) Are there signs of delamination or chipping? If yes, record the maximum depth of delamination.
NIS TOP OF WALL OBSERVATIONS			
Required Item	Inspection	Findings	Measurements/Extent of Problem/Action/Photo Numbers
Yes	NA	DN	Measurements/Extent of Problem/Action/Photo Numbers
Y	N	UN	1) Is there evidence of settlement at the top of the wall? (assess cracking, etc.)
Y	N	UN	2) Are there any open cracks in the concrete coping (foot railing)? If yes, record the approximate maximum crack width.
Y	N	UN	3) Do the observation data in the accompanying opening spread apr? (Photo 9) If yes, record the maximum joint width.

NIS WALL FACINGS

Y	N	UN	1" to the joint have a smooth horizontal surface? Are some horizontal joints larger/smaller than others? (Photo 6)	
Y	N	UN	6) Is the joint more than 1/2 inch from vertical straightness? Are some vertical joints larger/smaller than others? (Photo 4)	
Y	N	UN	7) Do the panels offset at the joints either in or out of the wall? (Photo 7) If yes, record the approximate maximum offset.	
Y	N	UN	8) Is there the fabric exposed inside, or appear as if it has undergone excessive UV exposure?	
NIS WALL FACINGS				
Y	N	UN	1) Is there evidence of "fill-in" or debris material in the joint?	
Y	N	UN	2) Are there cracks that extend vertically through the panel? (Photo 8 & 10) If yes, record the approximate number of panels in the wall with cracking.	
Y	N	UN	3) Are there cracks that continue horizontally through adjacent panels? (Photo 8 & 10) If yes, record the approximate number of panels in the wall with cracking.	
Y	N	UN	4) Are the panel corners meeting contact with each other? If yes, record the approximate number in the wall.	
Y	N	UN	5) Are the panel corners "popped out" or chipped from contact with an adjacent panel? If yes, record the number in the wall.	
Y	N	UN	6) Does the panel corners "pop out" or chip from contact with an adjacent panel? If yes, record the number in the wall.	
Y	N	UN	7) Does the panel appear to be damaged? If yes, it may be appropriate to consult UDOT if replacement is required.	
Y	N	UN	8) Are there signs of delamination or chipping? If yes, record the maximum depth of delamination.	
Y	N	UN	9) Are there signs of delamination or chipping? If yes, record the maximum depth of delamination.	
Y	N	UN	10) Are there signs of delamination or chipping? If yes, record the maximum depth of delamination.	
Y	N	UN	11) Are there signs of delamination or chipping? If yes, record the maximum depth of delamination.	

NIS TOP OF WALL OBSERVATIONS

Y	N	UN	1) Is there evidence of settlement at the top of the wall? (assess cracking, etc.)	
Y	N	UN	2) Are there any open cracks in the concrete coping (foot railing)? If yes, record the approximate maximum crack width.	
Y	N	UN	3) Do the observation data in the accompanying opening spread apr? (Photo 9) If yes, record the maximum joint width.	

