

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 Provo Canyon, riverside #1 (B.V.F)

MSE WALL CHARACTERISTICS

MSE Wall at Bridge	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	Bridge Number if applicable:		Wall Number	R-130, 130
Surrounding Structures				Maximum Height of Wall (ft)	33 ft
Distance to Each Structure				One Stage, Two Stage or Block Wall	1-stage
State Route Number				Estimated Max Length of Wall Abutment:	550 ft
Approximate Mile Marker				Max Slope of Ground in front of wall:	1.7:1
GPS Datum	WGS/84, NAD/83, or NAD/27			Max Height of wall burial line above surrounding level ground:	3 ft

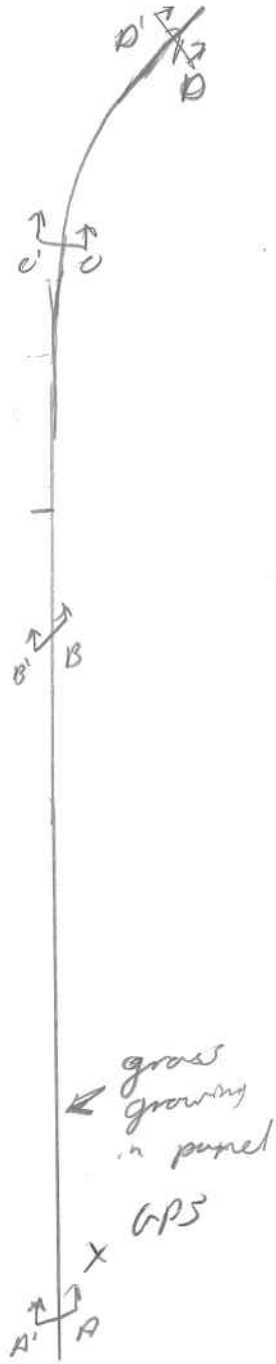
MSE Wall GPS Coordinates (Location of Measurement shown on plan view)	40° 20' 23.99" N	111° 36' 26.90" W	Please draw rough layout of panel with approximate dimensions in space provided below:
If known, Panel or System Manufacturer			

Summary of Key Observations:

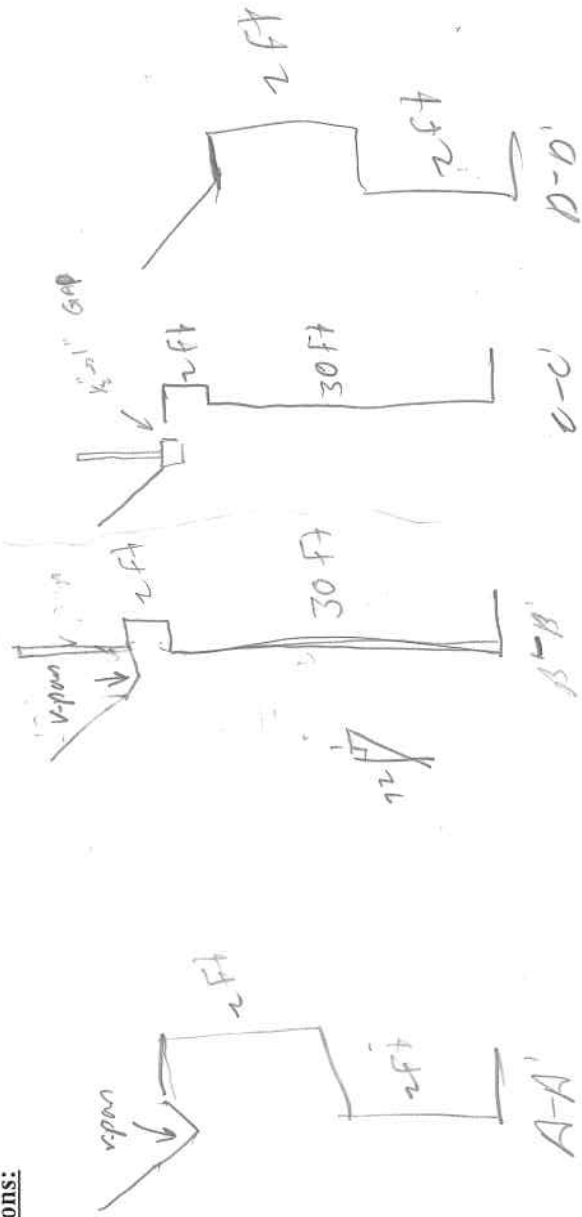
vegetation in wall panels

Plan View/Drainage:

SR-189



Cross Sections:



Cross Sections:

Y	N	N/A	UKS	16-Is there a large gap between the approach side and the approach pavement? (Photo 13) Other than pedestrian barriers, examine the approach pavement for any cracks. Record the approximate maximum gap size. (17-A) For moments, has the joint between the wall coping and the abutment opened up significantly? If so, record the opening/wall falling away from pavement inside or outside? Please record maximum displacement for wall.	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% / / 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% / / 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
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NSB STABILITY

Required Field:		Structural Integrity		Measurement/Extent of Problem/Location/Photo Numbers	
Yes	No	N/A	UKS	/	0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	17-What is the location depth of leveling pad? Found Close-Probe into wall located 2 inches from wall to a maximum depth of 24 inches (2 inches is the minimum depth for NSB Wall)	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	18-Is there any settlement inside or outside? Please record maximum crack size with gaps.	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	19-Is there a four foot bench (front steps) directly along the wall before the slope changes (Record WS&D)?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	20-Is there a slope steeper than V:1.5 to H:1 in front of the wall? Please record slope and height of backfill above top of wall.	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	21-Is there a slope greater than V:1.5 to H:1 below the wall? Please record slope and height of backfill below the wall.	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	22-Is there excessive degradation of road base?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /

NSB METAL CORROSION

Required Field:		Metal Corrosion		Measurement/Extent of Problem/Location/Photo Numbers	
Yes	No	N/A	UKS	/	0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	23-Is there excessive corrosion on guardrails or other exposed metal that might indicate corrosion conditions?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	24-Are there major rust stains on the face panels? Along joints? If so, record total number.	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	25-Are any internal straps exposed? Does there appear to be corrosion on these straps? If applicable please record the total number of straps affected.	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	26-Was a red-oxide sample taken if exposed wall? If so, please indicate depth in inches.	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	27-Is there any indication of rust corrosion (swelling, flaking, rust, exposed metal inside epoxy coating)? If so please record the total number of panels affected.	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /

NSB IMPACT COLLISION PROTECTION

Required Field:		Impact Collisions		Measurement/Extent of Problem/Location/Photo Numbers	
Yes	No	N/A	UKS	/	0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	28-Are guardrails wall penetrations in place at the base of the wall (to protect it from potential traffic loads)?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	29-Does it appear that the wall has been involved in an accident (replaced panel, recent damage to the wall)?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	30-Does it appear the wall functionality and integrity has been compromised by a collision or accident?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /

NSB OBSTRUCTIONS TO REINFORCEMENT GEOMETRY

Required Field:		Obstructions to Reinforcement Geometry		Measurement/Extent of Problem/Location/Photo Numbers	
Yes	No	N/A	UKS	/	0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	31-Are there steel wall angles (<90°)?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /

NSB AS BUILT DIFFERENT FROM DESIGN

Required Field:		Drawings/Construction		Measurement/Extent of Problem/Location/Photo Numbers	
Yes	No	N/A	UKS	/	0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	32-Is the design different than design (Situation and Layout, Design, As Built, etc.)?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	33-Is the layout in general accordance with drawings?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	34-Are the panels CIP (Cast in Place) Does there appear to be excessive cracking in the panels?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	35-Were GFCOs used in the construction of the wall?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	36-Are there any structures on or near wall that were not included in initial drawings?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	37-How were any irrigation, utilities, or imbeds that are not part of the initial drawings?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	38-How have been any excavations or evidence of excavation near the wall?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	39-How have been any excavations or evidence of excavation near the wall (additional drawings, logfiles, photographs, etc.)?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	N/A	UKS	40-Are there files located in the wall (bridge abutment)?	/ 0-30 1% 5% 10% 25% 50% 75% 90% 95% 100% /