

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.

Inspector Information

Inspection Date	8/20/07	Names Of Inspectors	Ryan Maw, Holly Griffin
Region	1	Identifying Road/Intersection	US-89 MP 472-475

MSE WALL CHARACTERISTICS

MSE Wall at Bridge	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Bridge Number if applicable:		Wall Number	R-222
Surrounding Structures	N/A		Maximum Height of Wall (ft)	varies	
Distance to Each Structure	20' A' 20' B'		One Stage, Two Stage or Block Wall	modular block	
State Route Number	605 606 U.S. 89		Estimated Max Length of Wall Abutment	varies	
Approximate Mile Marker	MP 475 + 472		Max Slope of Ground in front of wall:	varies	
GPS Datum	WGS/84, NAD/83, or NAD/27		Max Height of wall burial line above surrounding level ground:	varies	
MSE Wall GPS Coordinates (Location of Measurement shown on plan view)	two different locations		Please draw rough layout of panel with approximate dimensions in space provided below:		
If known, Panel or System Manufacturer	unknown				

Summary of Key Observations:

Bridge 605: wall A'
 Bridge 606: wall B'

WALL A' HAS SIGNIFICANT EROSION ALONG ITS WIND WALL LEADING TO BOWING. THE SLOPE WAS VERY STEEP GREATER THAN 1:5 TO 1 BELOW THE WALL. THE BLOCKS HAD SEPERATED FROM THE ABUTMENT UP TO 1.5 INCHES.

WALL B' - WAS IN GOOD CONDITION WITH LIMITED PROBLEMS

Plan View/Drainage:

A'

B'

[B'2]

block wall

US-89

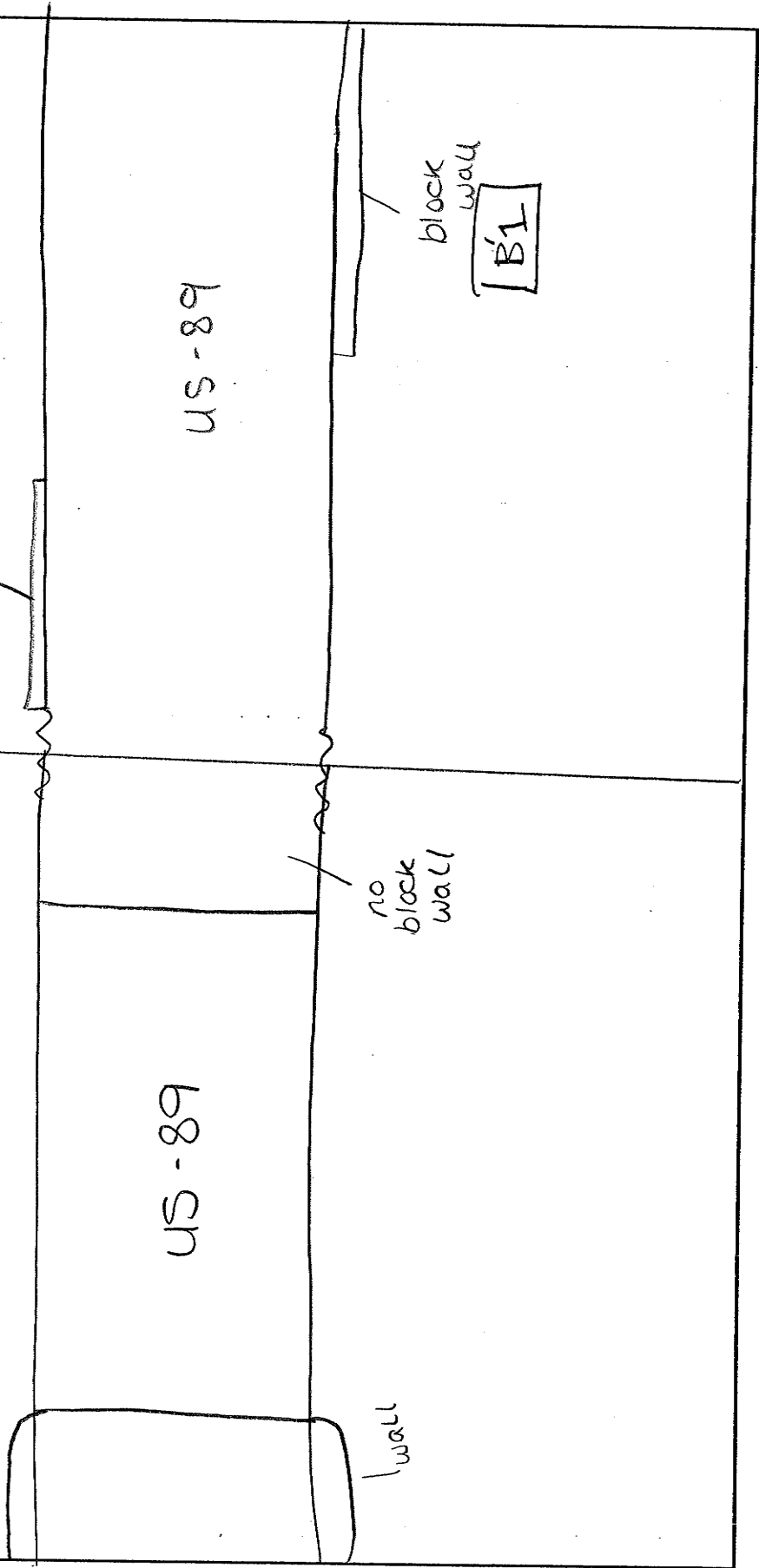
wall

no block wall

US-89

block wall

[B'1]



Cross Sections:

Cross Sections:

NSF WALL FINISH

Table with columns: Requirement, No., Yes, No, N/A, UNS, Description, Measurement/Extent of Problem, Location/Photo Numbers. Includes items 1-15 under 'Drainage' and 'Joints'.

NSF WALL JOINTS

Table with columns: Requirement, No., Yes, No, N/A, UNS, Description, Measurement/Extent of Problem, Location/Photo Numbers. Includes items 16-21 under 'Joints'.

NSF WALL FINISH

Table with columns: Requirement, No., Yes, No, N/A, UNS, Description, Measurement/Extent of Problem, Location/Photo Numbers. Includes items 22-33 under 'Wall Finish'.

NSF TOP OF WALL OBSERVATION

Table with columns: Requirement, No., Yes, No, N/A, UNS, Description, Measurement/Extent of Problem, Location/Photo Numbers. Includes items 34-36 under 'Top of Wall'.

Required Item	Yes	No	Remarks	Measurement/Extent of Problem/Location/Photo Numbers
17-A) Is the abutment, less the joint between the wall coping and the abutment exposed up significantly? If so, is the abutment wall pulling away from the concrete/abutment section? Please record maximum displacements for wall.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
18-A) Is coping wall pulling away from concrete/abutment section? Please record maximum displacements for wall.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
MSR STABILITY				
STRUCTURAL INTEGRITY				
19-What is the location depth of leveling pad? Found Coping/backs sets and located 2 inches from wall in a maximum depth of 24 inches at the minimum depth for MSR Wall.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
40-Is leveling pad exposed?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
41-Is there cracking in the leveling pad? If so, record maximum crack size with scope.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
42-Are there 4 feet from head? (Level slope directly along the wall before the slope changes (Record width))	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
43-Is there a slope greater than V: 1.2 in H: 1 in (in front of the wall)? Please record slope and height of backfill above top of wall.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
44-Is there a slope greater than V: 1.5 in H: 1 in below the wall? Please record slope and height of backfill below the wall.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
45-Is there excessive degradation of panel face?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
ANNUAL CORROSION				
REINFORCEMENT CORROSION				
Required Item	Yes	No	Remarks	Measurement/Extent of Problem/Location/Photo Numbers
46-Is there excessive corrosion on panels or other exposed metal that might indicate concrete condition?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
47-Are there major rust stains on the face panels? Along joints? If so, record total number.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
48-Are any exposed areas exposed? Does this appear to be corrosion on these areas? If applicable, please record the total number of areas affected.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
49-What is rebar spacing depth of exposed rebar? If so, please indicate depth in inches.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
50-Is there any indication of rebar corrosion (swelling, rust, exposed metal inside epoxy coating)? If so, please record the total number of panels affected.	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
MSR IMPACT COLLISION PROTECTIVE				
REINFORCEMENT CORROSION				
Required Item	Yes	No	Remarks	Measurement/Extent of Problem/Location/Photo Numbers
51-Are guardrail/wall protrusions in place at the base of the wall for protection from potential traffic impacts?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
52-Does it appear that the wall has been involved in an accident (replaced panels, recent damage to the wall)?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
53-Does it appear the walls functionality and integrity has been compromised by a collision or accident?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
MSR OBSTRUCTIONS IN REINFORCEMENT GEOMETRY				
Required Item	Yes	No	Remarks	Measurement/Extent of Problem/Location/Photo Numbers
54-Are there items well angle (90°)?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
MSR AS BUILT DIFFERENT FROM DESIGN				
Required Item	Yes	No	Remarks	Measurement/Extent of Problem/Location/Photo Numbers
55-Are there available drawings for the wall? Please indicate type (Submittal and Layout, Design, As Built, etc.)	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
56-Is the layout in general accordance with drawings?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
57-Are the panels CIP (Cast in Place) Does them appear to be excessive cracking in the panels?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
58-Was GED Form used in the construction of the wall?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
59-Are there any deficiencies on or near wall that were not included in initial drawings?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
60-Are there any stipulations, utilities, or encumbrances that are not part of the initial drawings?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
61-Have there been any encumbrances or evidence of excavations near the wall?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
62-How has temporary works changed the dynamics of the wall (additional structures, impactions, vegetation, etc.)?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
63-Are there piles located in the wall (bridge abutment)?	Y	N	UNSN	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

WALL A1 - WALL 61 & 62

AS-BUILT

NO AS-BUILTS AVAILABLE