Purchasing Division

ADDENDUM NO. 2

DATE: **April 26, 2021**
FROM: **City of Grand Junction Purchasing Division**
TO: **All Interested Parties**
RE: **D Road Bridge Repair at Lewis Wash & 31 Road IFB-4909-21-SH**

Bidders responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following:

Question 1. Can you provide a description or a detail of the shims to be installed on the south girders? Thickness, are there bolt holes required, are the shims to be welded to the girders, etc.?
Answer: The new shims shall be made of A36 steel, with a maximum steel shim stack of 1/2" allowed. The shim shall be placed between the existing steel girders and the existing steel end wall at the (6) south-most girders, each abutment. The shims shall be welded to the girders and the end walls. The intent of the shims is to alleviate the settlement of the south side of the abutment foundation and eliminate the bump from the roadway to the bridge deck on the eastbound lane. It is unknown how much settlement has occurred at the south end of the bridge, but the attached Inspection Report shows about 3/4" settlement.

The original solicitation for the project referenced above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

Susan J Hyatt

Susan Hyatt, Senior Buyer
City of Grand Junction, Colorado

CITY OF GRAND JUNCTION
MINOR BRIDGE INSPECTION REPORT

IDENTIFICATION and LOCATION:

Structure Name: GRJM-D.0-31.01

Facility Carried: D Road

Feature Intersected: Lewis Wash

Latitude: 39° 3’ 46.2” Longitude: 108° 28’ 40.1”

DESCRIPTION OF STRUCTURE: Year Built: Unknown

Corrugated metal deck on steel wide flange stringers

Total Length: 16’ 0” Out to Out Width: 27’ 2”

SUMMARY OF INSPECTION:

The overall condition of the bridge is FAIR. The widened sections of the abutments have settled resulting in a large cracking in each abutment and non-uniform bearing.

ITEMS REQUIRING EXPEDITED OR CRITICAL REVIEW:

None.

INSPECTION DETAILS:

Inspection Date: 3/12/2018

Team Leader: Paul J. Jordan Assistant Inspector: Brian J. Inglis

Weather: 46° Partly Cloudy, Calm

Type of Inspection: Routine Report Prepared by: Short Elliott Hendrickson Inc.

Lead Inspector: Paul J. Jordan

SEH
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Signature

RECOMMENDED MAINTENANCE/REPAIRS:

REASON*/ PRIORITY**	DESCRIPTION
R/C	Secure loose decking and repave.
R/C	Patch concrete at base of abutments at north end to prevent further erosion and potential piping of the soil from behind the abutments.
H/C	Install bridge and approach rails that meet AASHTO/CDOT specifications.
R/N	Clean and paint the superstructure to retard corrosion and section loss due to leakage through the asphalt.
R/N	Stabilize both downstream slopes with angular engineered riprap.
R/N	Consideration should be given to replacing this bridge prior to spending large sums of money on maintenance and repairs because of the settlement of the abutments, deck deterioration, and poor deck geometry (too narrow).

*H = Health & Safety	R = Resource Protection	M = Mission
**E = Emergency	C = Critical	N = Non-critical

CONDITION RATINGS AND REMARKS

CONDITION RATING		REMARKS
58. DECK	**5**	
DECK SLAB	F	Corrugated metal, corrosion at all joints.
WEARING SURFACE	F	2” to 3” Asphalt. Areas of cracks, potholes, and patches at west end.
CURBS, SIDEWALKS, MEDIAN	N/A	N/A
BRIDGE RAILS	P	Galvanized W-beam on steel posts. South side moderate impact damage.
DRAINS AND DRAINAGE	N/A	N/A
EXPANSION JOINTS	N/A	N/A
UTILITIES	F	2” steel conduit on south side, 1” PVC on north side.
OTHER		
59. SUPERSTRUCTURE	**6**	
GIRDERS	F	Unpainted steel wide flange girders. Moderate rust, especially below leaking joints, no section loss.
BEARINGS	G	Girders welded to steel cap.
DIAPHRAGMS AND BRACING	F	Steel channels at ends.
PAINT	N/A	None.
DEFLECTIONS AND/OR VIBRATION	F	Noticeable vibration with vehicles.
ALIGNMENT	G	
OTHER		
60. SUBSTRUCTURE	**5**	
ABUTMENT WALL	P	Both abutments have been widened in the past, vertical cracks at joint with widened section. South side settled about 3/4".
ABUTMENT BACKWALL	G	Galvanized corrugated metal.
CAP AND/OR BEARING SEAT	F	Steel wide flange bearing on concrete. Heavy rust throughout caps.
PILES AND/OR COLUMNS	N/A	N/A
FOUNDATIONS	G	
WINGWALLS	F	Concrete with timber piles and lagging extensions at south. Southeast timber is leaning about 5” in 24”. North wingwalls are extensions of abutments and coincide with walls from check dam.
EROSION AND/OR SCOUR	F	1.5’ concrete slab at upstream ends all exposed. Concrete footing below, exposed up to 12”.
SETTLEMENT OR DEFLECTION	P	South half extension are settled approximately 3/4".
SLOPE PROTECTION	G	Concrete walls upstream, heavily vegetated downstream.
OTHER		

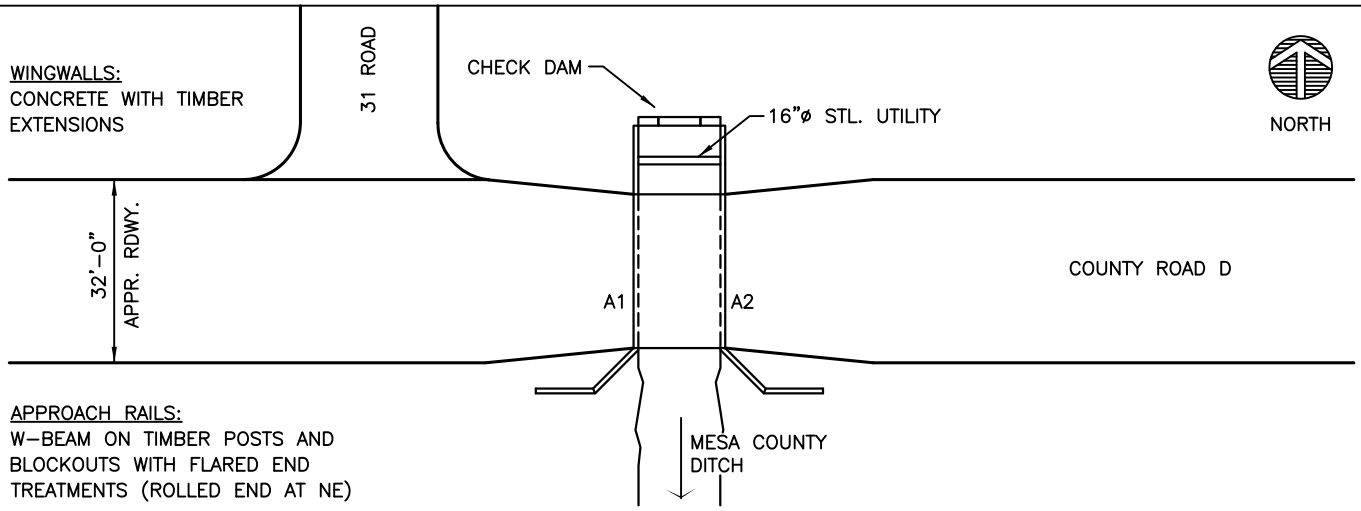
CONDITION RATINGS AND REMARKS (Continued)

CONDITION RATING		REMARKS
61. CHANNEL	**7**	
ALIGNMENT	G	Straight.
EROSION AND/OR SCOUR	F	Minor erosion of banks south of bridge.
CHANNEL PROTECTION	G	Concrete Upstream.
WATERWAY OBSTRUCTIONS	G	None.
ADEQUACY OF OPENING	G	Sufficient.
NORMAL VELOCITY		Moderate.
STREAMBED COMPOSITION		Concrete upstream. Silt and cobbles downstream.
OTHER		
72. APPROACH ALIGNMENT	**7**	
APPROACH GUARDRAIL	F	Galvanized W-Beam on timber posts. Northwest section has no blockouts. Other three corners blocks rotated. One missing at southeast.
SURFACING	F	Potholes at west end of bridge. Transverse cracks spaced 15', some longitudinal cracks near wheel paths.
EROSION	F	Minor erosion at corners of bridge.
SETTLEMENT	F	1" settlement at west approach.
SIGNS	F	Object markers at northeast and southwest corners only.
ALIGNMENT	G	
OTHER		

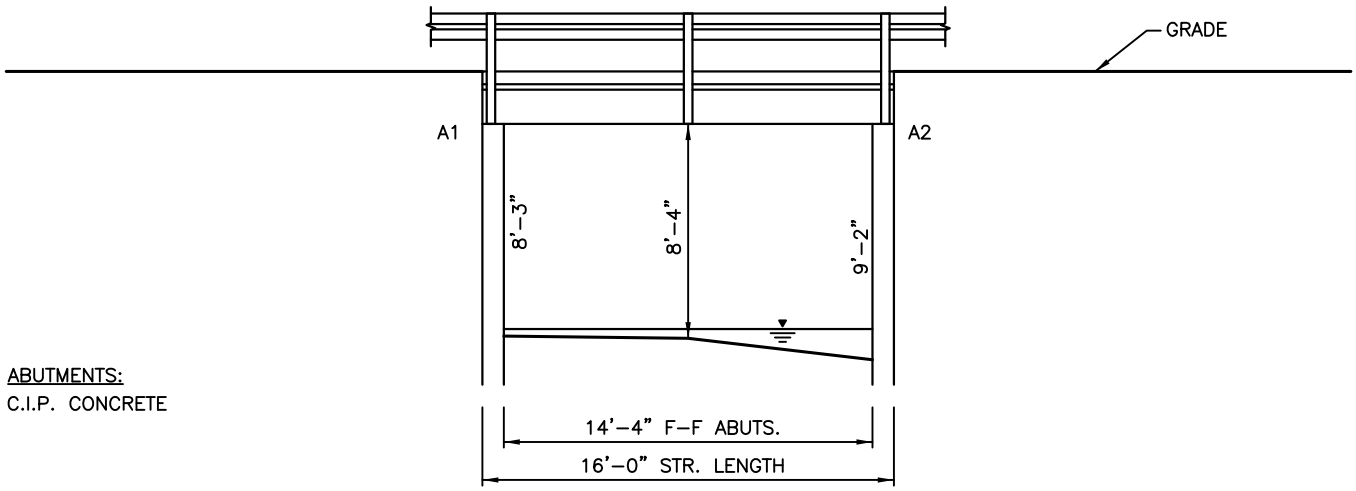
IF A PARTIAL INSPECTION WAS PERFORMED, LIST THE PORTIONS OF THE BRIDGE THAT WERE INSPECTED:

Short Elliott Hendrickson, Inc.
2000 S. Colorado Blvd., #6000
Denver, CO 80222-7938
(720) 540-6800 (800) 490-4966
Fax (303) 753-1510

GRJM-D.Ø-31.Ø1
MARCH 12, 2018



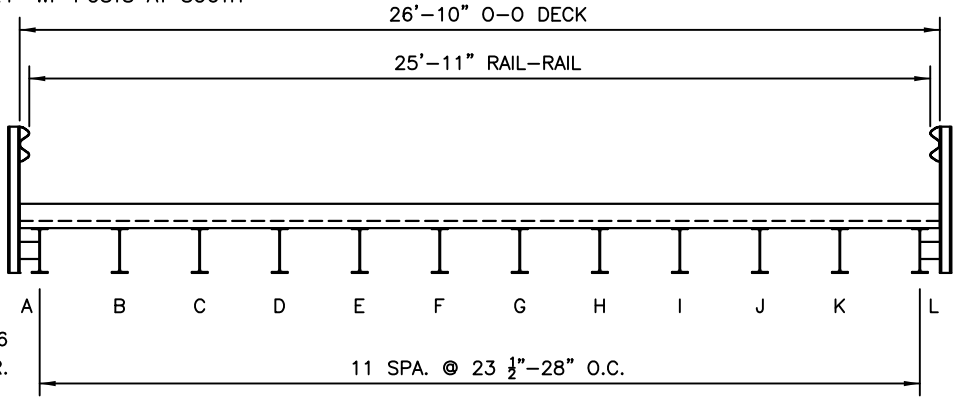
PLAN



ELEVATION

LOOKING NORTH

BRIDGE RAILINGS:
W-BEAM RAIL ON 4"x4" WF POSTS AT NORTH AND 4"x3" TS OR 6"x4" WF POSTS AT SOUTH



DECK:
6" ASPHALT ON 2 ½"x6 ½"x12 GA. GALV. CORR. MTL. DECKING

GIRDERS:
(13) W16x26

SECTION

LOOKING EAST

View Down Centerline of Roadway Looking West

View of Bridge Side Elevation Looking Downstream

View of Bridge Side Elevation Looking Upstream

General View of Underside of Bridge Looking East

View Looking Upstream

View Looking Downstream

Damaged W-Beam of South Bridge Rail, Mostly at West End

Cracked, Broken-Up Asphalt with Patched Potholes and Depressions at West End of Deck

Exposed Abutment Backwall due to Erosion at Southwest Corner of Deck

Southeast Wingwall Extension Leaning into Channel

Typical Rust and Corrosion along Deck Joints and at Contact Points with Top Flanges

Flaking Rust Typical on Girders, Especially below Corroded Deck Joints

Spalling along Vertical Crack in East Abutment

Gap between East Abutment Wall and Cap indicating Settling of South End of Wall

Scour Hole and Spall/Void at North End of East Abutment

CONDITION RATING OF NBI ITEMS 58 (DECK), 59 (SUPERSTRUCTURE), 60 (SUBSTRUCTURE)

N…… Not applicable.
9……..Excellent Condition.
8……..Very Good Condition-no problems noted.
7……..Good Condition-some minor problems.
6……..Satisfactory Condition-structural elements show some minor deterioration.
5……..Fair Condition-all primary structural elements are sound but may have minor section loss, cracking or spalling.
4……..Poor Condition-advanced section loss, deterioration, spalling or scour.
3……..Serious Condition-loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
2……..Critical Condition-Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.
1……..Imminent Failure Condition – major deterioration or section loss present in critical structural components or obvious vertical/horizontal movement affecting structure stability. Bridge closed but corrective action may put back in light service.
0……..Failed Condition-out of Service-beyond corrective action.

CONDITION RATING OF EACH MEMBER OR ELEMENT

NA	-Not applicable.
G = GOOD	-Element is in new or good condition.
F = FAIR	-Element is still performing the function for which it was intended but may need maintenance.
P = POOR	-Element is still performing the function for which it was intended but is in need of repairs.