

## SCOPE OF WORK

### 2022 Routt County Minors Bridge Inspection

#### Agreement for Provision of Professional Services Exhibit A

#### 1. GENERAL

The goal of this project is to inspect (50) minor bridges (Minors) in accordance with National Bridge Inventory (NBI) practices and prepare an individual report for each Minor to inform Routt County Road and Bridge Department (the County) and Project Manager Mike Mordi of the conditions of the Minors. The inspections of the Minors shall be referred to as “the work” henceforth in this scope.

#### 2. CONSULTANT QUALIFICATIONS

The Bridge Inspection Team Leader is pre-qualified to conduct bridge and culvert inspection work for the State of Colorado Department of Transportation (CDOT).

The individual in charge of the organizational unit, in charge of the inspection team, and the inspectors, shall meet the qualifications as stated in the Code of Federal Regulations, 23 CFR, 650.307.

#### 3. PROJECT DURATION

The work shall commence on the date specified in the notice to proceed and shall be completed by

#### ~~By~~ CONSULTANT RESPONSIBILITY

- A. CONSULTANT shall be responsible for the complete inspection and reporting of all (50) Minors. CONSULTANT shall stay informed of changes in the Minor bridge inventory due to annexations, replacements, or newly constructed Minor bridges. Additional inspections and/or analyses shall be completed as necessary with prior approval from the County Project Manager, and CONSULTANT will bill the County for actual additional costs, using the negotiated rates, incurred while performing the work.
- B. If a deficiency compromises the ability of the Minor to safely convey traffic or poses other immediate safety concern, the inspector shall contact Mike Mordi immediately to discuss the findings. It will be determined whether the deficiency requires 1) Immediate Closure, 2) Posting Restrictions, 3) Restrictions to Traffic, or 4) Urgent Repairs. Follow-up will be made within 10 working days after notification to discuss what action was taken to remedy the deficiency.
- C. CONSULTANT shall conduct the work in accordance with all governing safety rules and regulations applicable to the work.
- D. CONSULTANT will provide the necessary personnel and equipment to complete the work.
- E. CONSULTANT shall provide all inspection and source files to the County after work completion.
- F. The Bridge Inspection Team Leader shall be on site at all times during the inspections. The Bridge Inspection Team Leader is responsible for the final evaluation and documentation of each structure.

## 5. INSPECTION AND REPORTING REQUIREMENTS

- A. Structures identified as “High Priority” (identified below) shall include the following detail in the inspection report:
  - a. Cover Page including:
    - i. Structure Name, Facility Carried and Feature Intersected
    - ii. Structure Elevation Photo
    - iii. Good/Fair/Poor Rating
    - iv. GPS Coordinates
    - v. Recommendations
  - b. Significant Findings requiring short term maintenance, repair/replacement or monitoring
  - c. Typical Inventory Photos and Deficiency Photos
  - d. Streambed Profile (as determined necessary)
  - e. Deficiency/Undermining Detail Sketch (as determined necessary)
- B. All remaining structures shall include the following detail:
  - a. Cover Page (as detailed above)
  - b. Typical Inventory Photos and Deficiency Photos
- C. Typical Inventory Photos shall include:
  - a. Roadway View in the Direction of Inventory
  - b. Both Elevation Views
  - c. Channel Views Upstream and Downstream
  - d. Superstructure or Culvert Interior
- D. All inspection reports shall include the inspector’s name, original signature, and inspection date
- E. All recommendations shall include the recommendation, priority, and target year for completion

## 6. LUMP SUM BASIS OPTION

The Client and Consultant select the Lump Sum Basis for Payment for services provided by Consultant. During the course of providing its services, Consultant shall be paid monthly based on Consultant's estimate of the percentage of the work completed. Necessary expenses and equipment are provided as a part of Consultant's services and are included in the initial Lump Sum amount for the agreed upon Scope of Work. Total payments to Consultant for work covered by the Lump Sum Agreement shall not exceed the lump sum amount without written authorization from the Client.

The Lump Sum amount includes compensation for Consultant's services and the services of Consultant's Consultants, if any, for the agreed upon Scope of Work. Appropriate amounts have been incorporated in the initial Lump Sum to account for labor, overhead, profit, expenses and equipment charges. The Client agrees to pay for other additional services, equipment, and expenses that may become necessary by amendment to complete Consultant's services at their normal charge out rates as published by Consultant or as available commercially.

The total lump sum amount for services will be \$37,126.21 including expenses and equipment.

## High Priority Structures

ROUT NUMBER	Road	NBI Item 8 (BrKey)	Common Name	Structure Type	Latitude	Longitude	Structure Length	Width	Waterway Intersected	ADT in 2012	Restrictions / Tons Type 3/3S/2 Truck	Sufficiency Rating - 2012	Condition	Comments
400	RCR 3	M10700301.00400	King Creek Culvert	metal pipe culvert	40.0489444	-106.894722	4.2	56	Smith Creek	40	none	62.5	F	
402	RCR 5	M10700501.00402	Egeria Creek Bridge/Old #806	Girder Span Bridge	40.0521944	-106.801833	19	22.1	Egeria Creek	90	16/25/25	95.9	G	
403	RCR 5	M10700502.00403	Egeria Creek Bridge/Old #807	Girder Span Bridge	40.0496111	-106.865806	18.75	24.2	Egeria Creek	90	11/18/18	82.9	G	
411	RCR 12	M10701201.00411	Phippsburg Bridge	Girder Span Bridge	40.238222	-106.940166	19.75	16.6	Yampa River	177	none	70.9	F	
413	RCR 15	M10701503.00413	North Hunt Creek	metal pipe culvert	40.2099444	-106.959972	4	52.5	North Hunt Creek	400	none	69.8	F	
419	RCR 18C	M10718C01.00419	Green Creek Structure at Gay Ranch/Old #874	3 METAL PIPE CULVERT	40.328111	-106.807389	14	20	Green Creek	5	none	74.9	F	
421	RCR 21	M10702101.00421	Art Deco Bridge/Old #880	Concrete slab	40.1706666	-106.919611	9	21.67	Watson Creek	20	15/15/15	35.0	NR	Replace due to scour, settlement and deterioration. Post 15T/15T/15T
423	RCR 21B	M107021B1.00423	Yampa River Bridge/Old # 820	metal arch culvert	40.2052778	-106.926139	19	20.42	Yampa River	10	none	48.5	P	Monitor deflection of aluminum arch
424	RCR 22	M10702201.00424	Culvert	metal pipe culvert	40.3990277	-106.842528	12.33	60	Oak Creek	749	none	48.2	P	Buckling with corrosion holes. Replace culvert.
425	RCR 25	M10702501.00425	Oak Creek	metal pipe culvert	40.2255278	-107.040444	6.5	83.33	Oak Creek	60	none	72.9	F	Slipline pipe to retain shape and stabilize
440	RCR 44	M10704401.00440	Roper Bridge (Lower Elk)/Old #855	Girder Span Bridge	40.4898056	-106.977306	18.42	23.4	Lower Elk River	60	none	68.9	F	Backwalls failed at mudline
450	RCR 52E	M107052E2.00450	Salt Creek Bridge/Old #890	Girder Span Bridge	40.59325	-106.927306	17.33	23.67	Salt Creek	111	none	60.9	F	
451	RCR 52E	M107052E1.00451	Salt Creek (Deep Creek)/Old #891	metal pipe culvert	40.6304167	-107.003556	16.67	60.75	Salt Creek	15	none	46.8	P	Slipline pipe to retain shape and stabilize
452	RCR 53	M10705301.00452	Race track culverts	2 metal pipe culvert	40.4678333	-107.24675	5 ea	40.33 ea	Unnamed Drainage	1761	none	64.0	F	Slipline pipes to retain shape and stabilize
456	RCR 56	M10705601.00456	Calf Creek Bridge/Old #837	Girder Span Bridge	40.6458056	-107.262944	12.25	20.2	Calf Creek	10	20/20/20	36.9	NR	Replace due to extensive settlement and scour damage. Post 20T/20T/20T
482	RCR 56	M10705601.00482	Cottonwood Creek Bridge/Old #833	Pipe Girder Span Bridge	40.6338333	-107.169639	9.5	16.25	Cottonwood Creek	10	20/20/20	30.7	NR	Footings undermined. Post 20T/20T/20T. Posting based on undermined foundation
491	RCR 132	M10713201.00491	North Hunt Creek	metal pipe culvert	40.2007778	-106.9955	5	66	North Hunt Creek	30	none	70.0	F	Slipline pipe to retain shape and stabilize
493	RCR 179	M10717902.00493	at HWY 131	metal pipe culvert	40.32475	-106.959472	11	62	Oak Creek	150	none	48.4	P	Severe deflection and corrosion holes. Replace culvert.
412	RCR 15	M10701502.00412	Middle Hunt Creek	metal pipe culvert	40.1969444	-106.969583	8.5	57	Middle Hunt Creek	400	none	48.5	NR	Replace due to extensive damage
418	RCR 17	M10701701.00418	South Hunt Creek	metal pipe culvert	40.1788333	-106.959444	6.25	57	South Hunt Creek	400	none	48.5	NR	Replace due to extensive damage
426	RCR 27	M10702702.00426	Middle Creek	metal pipe culvert	40.3390833	-107.025778	5.2	88.83	Middle Creek	535	none	39.4	NR	Replace due to extensive damage
432	RCR 35	M10703501.00432	Romick's Bridge/Old #899	metal pipe culvert	40.3553055	-106.90975	16.5	60	Oak Creek	250	none	48.6	NR	Holes throughout. Replace culvert.
433	RCR 35A	M10735A01.00433	Oak Creek Bridge/Old #850	metal pipe culvert	40.3528056	-106.9265	15.5	60	Oak Creek	20	none	48.8	NR	Replace culvert due to extensive damage
434	RCR 36	M10703601.00434	Gunn Creek Culverts	2 metal pipe culvert	40.5345278	-106.824611	6.0 ea	32.5	Gunn Creek	1440	none	33.8	NR	Holes in inverts, pave with concrete
435	RCR 37	M10702702.00435	Fish Creek Culvert/Old #847	metal arch culvert	40.3305556	-107.156528	12	36	Fish Creek	39	none	48.7	NR	Replace due to extensive damage
455	RCR 56	M10705603.00455	Irrigation Ditch Bridge/Old #836	metal pipe culvert	40.6340833	-107.027528	5	42.67	Coleman Creek	250	none	47.6	NR	Replace due to extensive damage
471	RCR 78	M10707801.00471	Rock Spring Gulch	metal pipe and concrete arch culvert	40.55975	-107.328361	5.8	58.33	Rock Spring Gulch	100	none	48.4	NR	Replace due to extensive damage

## Low Priority Structures

ROUT NUMBER	Road	NBI Item 8 (BrKey)	Common Name	Structure Type	Latitude	Longitude	Structure Length	Width	Waterway Intersected	ADT in 2012	Restrictions / Tons Type 3/3S2/3-2 Truck	Sufficiency Rating - 2012	Condition	Comments
401	RCR 3	M10700202.00401	Egeria Creek Culvert/Old #825	2 metal pipe culvert	40.04833	-106.89575	7.2 & 5.2	30 ea	Egeria Creek	35	none	96.8	G	
404	RCR 6C	M107006C1.00404	Phillips Creek Bridge/Old #805	Girder Span Bridge	40.1249722	-106.892611	18.42	20	Phillips Creek	10	none	90.9	G	
405	RCR 7	M10700704.00405	Irrigation Ditch - by Klinkies	Girder Span Bridge	40.1056666	-106.949556	9	28.5	Irrigation Ditch	50	none	97.0	G	
406	RCR 7	M10700704.00406	Upper Bear River	metal pipe culvert	40.1071389	-106.948528	11.25	30.5	Bear River	50	none	97.0	G	
407	RCR 7	M10700702.00407	Bear River Bridge/Old #803	Girder Span Bridge	40.1244167	-106.927167	17.33	19.75	Bear River	50	none	95.0	G	
408	RCR 7	M10700701.00408	Bear River Bridge/Old #804	metal arch culvert	40.1259167	-106.923306	16	26.25	Bear River	100	none	97.0	G	
409	RCR 8	M10700801.00409	Yampa River Bridge/Old #824	Girder Span Bridge	40.1576667	-106.901361	18.9	22	Yampa River	51	none	91.5	G	
414	RCR 15	M10701501.00414	South Hunt Creek	metal pipe culvert	40.1800556	-106.976056	6.1	30	South Hunt Creek	40	none	86.0	G	
415	RCR 16	M10701601.00415	Germain's Morrison Creek	Girder Span Bridge	40.2249722	-106.782306	18.1	20	Morrison Creek	75	none	89.9	G	
416	RCR 16	M10701602.00416	Muddy Creek	metal pipe culvert	40.1804167	-106.754583	5	67	Muddy Creek	75	none	96.9	G	
422	RCR 21	M10702102.00422	Yampa River Bridge/Old #822	Girder Span Bridge	40.1829167	-106.915444	18.33	20	Yampa River	40	none	84.0	G	
427	RCR 27	M10702701.00427	Roger's Culverts	2 metal pipe culvert	40.356	-107.104139	6.58 ea	102.33 ea	Fish Creek	535	none	99.8	G	
428	RCR 29	M10702901.00428	Upper Trout Creek	metal pipe culvert	40.2433333	-107.086222	11.33	31	Upper Trout Creek	20	none	97.0	G	
430	RCR 33	M10703302.00430	Foidel Creek	metal pipe culvert	40.3904722	-106.996278	5.25	86.83	Foidel Creek	200	none	96.8	G	New
431	RCR 33	M10703301.00431	Middle Creek	metal pipe culvert	40.3972778	-106.980417	6	59	Middle Creek	200	none	85.7	G	Slipline pipe to retain shape and stabilize
453	RCR 53	M10705302.00453	Triple Culverts	3 METAL PIPE CULVERT	40.4293888	-107.255833	8.42 ea	111 ea	Dry Creek	1760	none	96.0	G	
454	RCR 56	M10705602.00454	Deep Creek Culvert	metal pipe culvert	40.6250278	-107.028861	16.1	62.67	Deep Creek	250	none	96.5	G	
457	RCR 56	M10705605.00457	Smith Creek/Old #895	metal pipe culvert	40.6382222	-107.014083	8.58	60.58	Smith Creek	250	none	96.5	G	
458	RCR 56	M10705604.00458	Day Creek Bridge/Old #896	Metal Pipe culvert	40.6392778	-107.027167	6.58	50.83	Day Creek	250	none	96.5	G	
470	RCR 56	M10705602.00470	Ditch No. 2	Girder Span Bridge	40.6453611	-107.256666	7.42	24.1	Ditch No. 2	10	none	90.9	G	
480	RCR 80	M10708001.00480	Hellyer's Bridge/Old #831	concrete box and concrete arch culvert	40.5147778	-107.250972	5.33	26.92	Unnamed Drainage	120	none	99.9	G	
492	RCR 132A	M1070132A.00492	Oak Creek	metal pipe culvert	40.2220556	-107.06375	5.1	55	Oak Creek	60	none	85.9	G	In Rio Blanco County
494	RCR 179	M10717901.00494	Trout Creek Bridge/Old #819	Girder Span Bridge	40.4268333	-106.974833	18.9	22.6	Trout Creek	75	none	96.0	G	