THIRD AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT

DOWNTOWN SAFETY – ACCESS – MOBILITY PROJECT DESIGN AND ENGINEERING SERVICES

This AMENDMENT is made and entered into on the date fully executed below between the **CITY OF MISSOULA, MONTANA**, a municipal corporation organized and existing under the laws of the State of Montana, 435 Ryman St., Missoula, MT 59802-4297, referred to here as "City," and DJ&A, 2000 Maple Street Missoula MT 59808, referred to here as "Consultant."

RECITALS

1. On January 9, 2025, the above parties entered into an agreement whereby the Consultant agreed to perform work and provide the services in accordance with the requirements of the Scope of Services, as described in Exhibit A for which the City agreed to pay the amount of Two Hundred Forty-Eight Thousand Seven Hundred and Fifty-Seven Dollars ($248,757.00).

2. On March 26, 2025, the above parties amended the Services agreement through Amendment No. 1 to include additional work, as described in Exhibit A1 not to exceed the dollar amount of Two Hundred Forty-Nine Thousand Nine Hundred and Fifty Dollars ($249,950.00) for the additional work. That amendment brought the Agreement total to Four Hundred Ninety-Eight Thousand Seven Hundred and Seven Dollars ($498,707.00).

3. On May 19, 2025, the above parties amended the Services agreement through Amendment No. 2 to include additional work, as described in Exhibit A2 not to exceed the dollar amount of one million one hundred sixty-five thousand six hundred and seventy-two dollars ($1,165,672) for the additional work. That amendment brought the Agreement total to one million six hundred sixty-four thousand three hundred and seventy-nine dollars ($1,664,379).

AMENDMENT

Now therefore, in consideration of the mutual covenants and agreements contained here, the receipt and sufficiency of the same being acknowledged, the parties agree as follows:

A. **Scope of Work/Task Deadlines**, is amended as set forth in this Services Agreement Amendment No. 3 to include additional work, as described in

Exhibit A3 not to exceed the amount of $2,470,940 for the additional work. With a credit of 247,000 (two hundred forty-seven thousand dollars) from unused fee in the preliminary engineering fee, this brings the Agreement total to $3,888,319 (three million eight hundred eighty-eight thousand three hundred and nineteen dollars).

B. All other terms of the Agreement shall remain in full force and effect except as amended by this Amendment. If a conflict arises between the terms of this Amendment and the Agreement, the terms of this Amendment shall control.

WITNESS, the parties here have executed this instrument the day and year first above written.

CONSULTANT:

_____
Donny Pfeifer

MAYOR
City of Missoula, Montana

_____
Andrea Davis

ATTEST:

_____
Claire Trimble, City Clerk

(SEAL)

APPROVED AS TO FORM

_____
Ryan Sudbury, City Attorney

Project: **Downtown SAM FE Phase**
Contract Number: **7578**

Prepared By: Various
Checked By: Donny Pfeifer

Fee Estimate - EXHIBIT B
12/3/2025

																HDR	BSPR	Kittleson	Tetra - Tech	Ginny			
	Labor Classifications	**Senior Project Manager (Donny Pfeifer)**	**Project Manager II (Kyle Gauthier)**	**Project Manager I (Brendan Elkins)**	**Senior Project Engineer (Kirk)**	**Design Engineer I (Mehana Zetterberg)**	**Design Engineer II (Dan Lebsock)**	**Design Engineer III (Braden Burke)**	**Landscape Architect (Chris Brandriet)**	**Landscape Designer (Rachel Bakker)**	**Project Engineer (Tyler Pallen)**	**Survey Project Manager (Buck Rogers)**	**Survey CADD/Tech**	**Survey Crew (2-Person)**	**Right-of-Way Lead (Maureen Walsh)**	**Accounting**	**Administrative Support**	**HDR**	**BSPR**	**KITTLESON**	**TETRA TECH**	**GINNY TRIBE - FACILITATION**	**Total Hours Per Task**	**Total Cost Per Task**
	Average Hourly Rate	$72.00	$60.00	$54.50	$67.00	$30.00	$32.00	$40.46	$53.00	$35.00	$42.00	$48.00	$36.00	$77.00	$54.00	$37.00	$27.00							
Task Order Item																								
1.0	**Project Management**																							
1.1	Project Management and Contract Administration	84														0	0					84	$6,048.00
1.2	Billing and Invoices	26														26	13					65	$3,185.00
1.3	Project Meetings & Coordination	150	20	0	0	38	38	60	0		0											306	$16,783.60
1.6	Future Phase - Scoping	40	10					20				20				10	10					110	$5,889.20
2.0	**Project Development and Planning**																						
2.1	TRT Meetings (prep, attendance, follow-up)	20	10			200	40	40		40												350	$12,338.40
2.2	Working Group (prep, attendance, follow-up)	48	3			10		20		0												81	$4,745.20
2.3	CMGC Support	20	0			0	0	0														20	$1,440.00
2.4	Design Quality Assurance and Quality Control - DJ&A	15	15					60														90	$4,407.60
2.5	Design Quality Assurance and Quality Control - Kittelson																	Kittelson					KITTLESON
2.6	FHWA Funding Obligation Process (PS&E Checklist)	25						25														50	$2,811.50
3.0	**Multimodal Design**																						
3.1	**Higgins Avenue - Final Design**																						
3.1.1	60% Design and Plan Production	20			10	100		300														430	$17,248.00
3.1.2	60% Deliverable Package and Handoff (Plans, Specs, Estimate)	20				80		120														220	$8,695.20
3.1.3	60% Design Review and Comment Resolution	10			10	20		50														90	$4,013.00
3.1.4	90% Design and Plan Production	20			20	80		250														370	$15,295.00
3.1.5	90% Deliverable Package and Handoff (Plans, Specs, Estimate)	10				40		100														150	$5,966.00
3.1.6	90% Design Review and Comment Resolution	10			10	30		40														90	$3,908.40
3.1.7	RFC% Design and Plan Production	30			20	120		200														370	$15,192.00
3.1.8	RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)	20				80		120														220	$8,695.20
3.1.9	RFC - Stamp, Seal, and Prints/Electronic Distribution	10				20		40														70	$2,938.40
3.2	**Front/Main Two-Way Restoration - Final Design**																	HDR					HDR
3.2.1	60% Design and Plan Production																	HDR					HDR
3.2.2	60% Deliverable Package and Handoff (Plans, Specs, Estimate)																	HDR					HDR
3.2.3	60% Design Review and Comment Resolution																	HDR					HDR
3.2.4	90% Design and Plan Production																	HDR					HDR
3.2.5	90% Deliverable Package and Handoff (Plans, Specs, Estimate)																	HDR					HDR
3.2.6	90% Design Review and Comment Resolution																	HDR					HDR
3.2.7	RFC% Design and Plan Production																	HDR					HDR
3.2.8	RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)																	HDR					HDR
3.2.9	RFC - Stamp, Seal, and Prints/Electronic Distribution																	HDR					HDR
3.3	**Beartracks ADA Ramp - Final Design**																	HDR					HDR
3.3.1	60% Design and Plan Production																	HDR					HDR
3.3.2	60% Deliverable Package and Handoff (Plans, Specs, Estimate)																	HDR					HDR
3.3.3	60% Design Review and Comment Resolution																	HDR					HDR
3.3.4	90% Design and Plan Production																	HDR					HDR
3.3.5	90% Deliverable Package and Handoff (Plans, Specs, Estimate)																	HDR					HDR
3.3.6	90% Design Review and Comment Resolution																	HDR					HDR
3.3.7	RFC% Design and Plan Production																	HDR					HDR
3.3.8	RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)																	HDR					HDR
3.3.9	RFC - Stamp, Seal, and Prints/Electronic Distribution																	HDR					HDR
3.4	**Trail Connections & Widening - Final Design**																						
3.4.1	60% Design and Plan Production		27		40	130	180															377	$13,960.00
3.4.2	60% Design Review and Comment Resolution	6	4			28	28															66	$2,408.00
3.4.3	90% Design and Plan Production		24		36	60	160															280	$10,772.00
3.4.4	90% Design Review and Comment Resolution	6	6			10	40															62	$2,372.00
3.4.5	RFC% Design and Plan Production				20	60	140															220	$7,620.00
3.4.6	RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)		15			60	100															175	$5,900.00
3.4.7	RFC - Stamp, Seal, and Prints/Electronic Distribution	6	3			20	20															49	$1,852.00
3.5	**Signal Optimization (ASTPM & Detection) - Final Design**																			Kittelson			KITTLESON
3.5.1	60% Design and Plan Production																			Kittelson			KITTLESON
3.5.2	60% Deliverable Package and Handoff (Plans, Specs, Estimate)																			Kittelson			KITTLESON
3.5.3	60% Design Review and Comment Resolution																			Kittelson			KITTLESON
3.5.4	90% Design and Plan Production																			Kittelson			KITTLESON
3.5.5	90% Deliverable Package and Handoff (Plans, Specs, Estimate)																			Kittelson			KITTLESON
3.5.6	90% Design Review and Comment Resolution																			Kittelson			KITTLESON
3.5.7	RFC% Design and Plan Production																			Kittelson			KITTLESON
3.5.8	RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)																			Kittelson			KITTLESON
3.5.9	RFC - Stamp, Seal, and Prints/Electronic Distribution																			Kittelson			KITTLESON

Project: **Downtown SAM FE Phase**
Contract Number: **7578**

Prepared By: Various
Checked By: Donny Pfeifer

Fee Estimate - EXHIBIT B
12/3/2025

	Labor Classifications	Senior Project Manager (Donny Pfeifer)	Project Manager II (Kyle Gauthier)	Project Manager I (Brendan Elkins)	Senior Project Engineer (Kirk)	Design Engineer I (Mehana Zetterberg)	Design Engineer II (Dan Lebsock)	Design Engineer III (Braden Burke)	Landscape Architect (Chris Brandriet)	Landscape Designer (Rachel Bakker)	Project Engineer (Tyler Pallen)	Survey Project Manager (Buck Rogers)	Survey CADD/Tech	Survey Crew (2-Person)	Right-of-Way Lead (Maureen Walsh)	Accounting	Administrative Support	HDR	BSPR	Kittleson	Tetra - Tech	Ginny	Total Hours Per Task	Total Cost Per Task
																		HDR	BSPR	KITTLESON	TETRA TECH	GINNY TRIBE - FACILITATION		
	Average Hourly Rate	$72.00	$60.00	$54.50	$67.00	$30.00	$32.00	$40.46	$53.00	$35.00	$42.00	$48.00	$36.00	$77.00	$54.00	$37.00	$27.00							
3.6	**Signing Design and Plan Production**																			Kittelson				KITTLESON
3.6.1	60% Design, Production, Plan Submittal																			Kittelson				KITTLESON
3.6.2	90% Design, Production, Plan Submittal																			Kittelson				KITTLESON
3.6.3	RFC Design, Production, Plan Submittal																			Kittelson				KITTLESON
3.7	**Electrical and Lighting Final Design and Analysis**																	HDR						HDR
3.7.1	60% Design, Production, Plan Submital - all elements																	HDR						HDR
3.7.2	90% Design, Production, Plan Submital - all elements																	HDR						HDR
3.7.3	RFC Design, Production, Plan Submital - all elements																	HDR						HDR
3.8	**Landscape Architectural Design**								40	80													120	$4,920.00
4.0	**Public Involvement**																							
4.1	**Public Meetings Support and Content**	10	10			20		20		80													140	$5,529.20
4.2	**Public Meetings and Comment Tracking**																							BSPR
4.2.1	Final Design Public Meeting (Spring 2026)																		BSPR					BSPR
4.2.2	Construction Kickoff Public Meeting																		BSPR					BSPR
4.3	**Working Group Facilitation**																					Ginny		Ginny
5.0	**Enviromental**																							
5.1	**Section 408 Approval**																	HDR						HDR
5.1.1	Levee Modification Analysis																	HDR						HDR
5.1.2	Section 408 Levee Approval																	HDR						HDR
5.2	**Final Environmental Matters and NEPA Support**																	HDR						HDR
5.2.1	Final Environmental/Biological Review																	HDR						HDR
5.2.2	Categorical Exclusion Re-evaluation																	HDR						HDR
6.0	**Stormwater and Drainage**																							
6.1	60% Design, Production, Plan Submital - all elements				10			20			200												230	$9,879.20
6.2	90% Design, Production, Plan Submital - all elements				10			20			95												125	$5,469.20
6.3	RFC Design, Production, Plan Submital - all elements				10			20			40												70	$3,159.20
7.0	**Geotechnical**																							
7.1	Field Investigation and Lab Testing																				Tetra-Tech			Tetra-Tech
7.2	Final Geotechnical Report																				Tetra-Tech			Tetra-Tech
7.3	Construction QA Testing Plan																				Tetra-Tech			Tetra-Tech
8.0	**Survey**																							
8.1	Hold																						0	$0.00
9.0	**Right-of-Way**																							
9.1	Prepare R/W Documents	20				80		20				40	200		50								410	$16,469.20
9.2	Appraisals														75								75	$4,050.00
9.3	Negotiations & Acquisitions	40				10		10				40	100		200								400	$19,904.60
10.0	**Traffic and Safety**																							
10.1	Final Traffic Modeling and Technical Support																			Kittelson				KITTLESON
11.0	**Utilities**																							
11.1	Conflict Matrix & Weekly Utility Meetings			74			131																205	$8,225.00
11.2	SUE II Plan and Coordination with Jackson			20			65																85	$3,170.00
11.3	Final Utility Plans and Comment Resolutions			40			200	60															300	$11,007.60
11.4	**Dry Utility Relocation**																							
11.4.1	Formal Utility Notifications (1st and 2nd notifications)			12			30																42	$1,614.00
11.4.2	Negotiate for Utility Agreements			12			30																42	$1,614.00
11.4.3	Relocate Utilities			12			80	30				20		60									202	$10,007.80
11.5	Sanitary Sewer Utility Design (60% through RFC)			15			30																45	$1,777.50
11.6	Water Utility Design (60% through RFC)			15			30																45	$1,777.50
12.0	**Construction Administration**																							
12.1	Constructability and Cost Reconciliation Workshops (3 ea)	30	6		6	15		30															87	$4,585.80
12.2	Independent Cost Estimating (ICE) - 60% / 90% / TCC																	HDR						
																							7018	$297,643.50

Project: **Downtown SAM FE Phase** Prepared By: Various

Contract Number: **7578** Checked By: Donny Pfeifer

Fee Estimate - EXHIBIT B

12/3/2025

Labor Classifications	Senior Project Manager (Donny Pfeifer)	Project Manager II (Kyle Gauthier)	Project Manager I (Brendan Elkins)	Senior Project Engineer (Kirk)	Design Engineer I (Mehana Zetterberg)	Design Engineer II (Dan Lebsock)	Design Engineer III (Braden Burke)	Landscape Architect (Chris Brandriet)	Landscape Designer (Rachel Bakker)	Project Engineer (Tyler Pallen)	Survey Project Manager (Buck Rogers)	Survey CADD/Tech	Survey Crew (2-Person)	Right-of-Way Lead (Maureen Walsh)	Accounting	Administrative Support	HDR	BSPR	KITTLESON	TETRA TECH	GINNY TRIBE - FACILITATION	Total Hours Per Task	Total Cost Per Task
Average Hourly Rate	$72.00	$60.00	$54.50	$67.00	$30.00	$32.00	$40.46	$53.00	$35.00	$42.00	$48.00	$36.00	$77.00	$54.00	$37.00	$27.00							

TOTAL SUMMARY:																	HDR	BSPR	Kittleson	Tetra - Tech	Ginny
Total Hours Per Personnel	696	153	200	202	1311	1342	1675	40	200	335	120	300	60	325	36	23					
Total Labor Cost Per Personnel	$50,112.00	$9,180.00	$10,900.00	$13,534.00	$39,330.00	$42,944.00	$67,770.50	$2,120.00	$7,000.00	$14,070.00	$5,760.00	$10,800.00	$4,620.00	$17,550.00	$1,332.00	$621.00					
Subconsultant Fees (See attached for details)																	**$ 815,702**	**$50,000**	**$386,896**	**$114,989**	**$20,000**

Note:

1) Rates shown above are for budgeting purposes only. Additional staff may be billed and actual rates will reflect salaries at the time services are perfromed.

2) The original assumed period of performance for the Final Engineering Phase is 14 months. November 2025 through December 2026.

Total Direct Labor Hours	**7018**
Total Direct Labor Cost	**$297,644**
General Overhead (204.10%)	**$607,490**
DJ&A Direct Expenses	**$200**
DJ&A Profit (12%)	**$108,640**
Subtotal	**$1,013,974**
Subconsultants - Total Cost	**$1,387,586**
Subconsultant Fee (5%)	**$69,379**
Total Fee Estimate (This phase)	**$2,470,940**

CONTRACT SUMMARY:

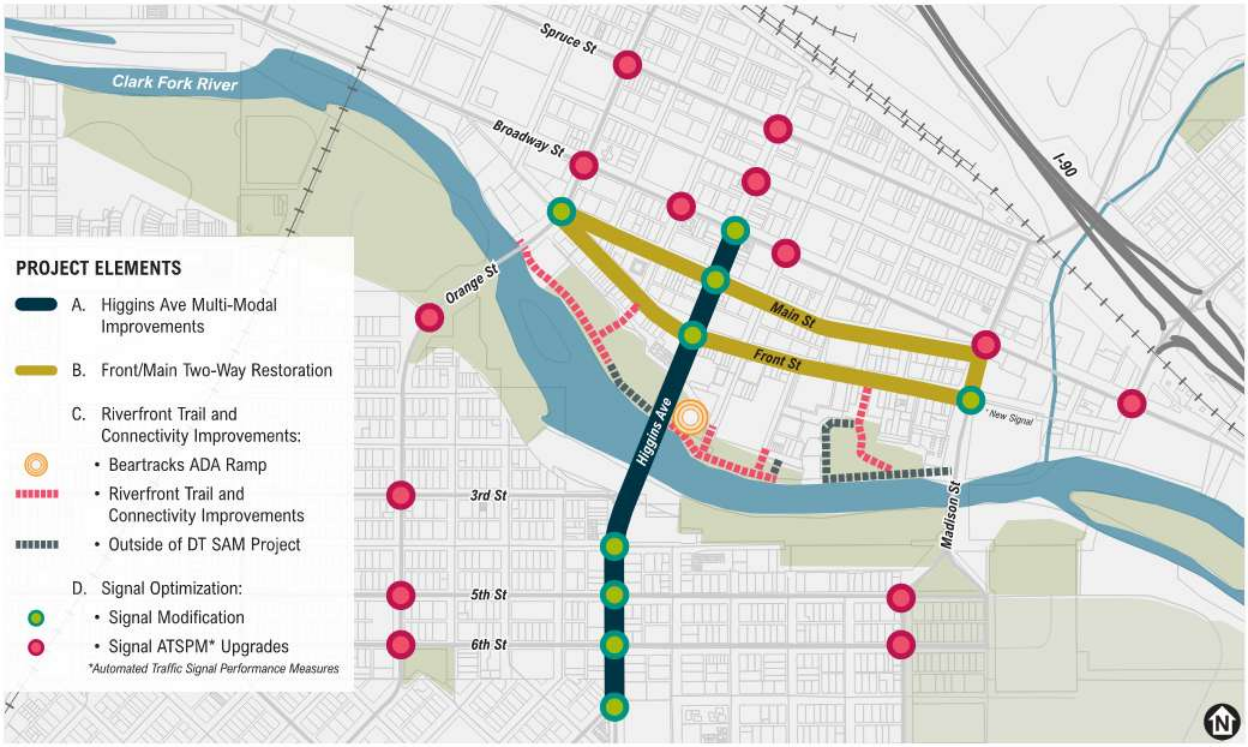
BASE CONTRACT	$ 248,757
AMENDMENT #1	$ 249,950
AMENDMENT #2	$ 1,165,672
PRELIMINARY ENGINEERING CREDIT	$ (247,000)
AMENDMENT #3	$ 2,470,940
TOTAL CONTRACT VALUE:	**$ 3,888,319**

Project Description

The City of Missoula received a 2023 Federal RAISE Grant that provided significant funding to advance a transformative project for Downtown Missoula. The project focuses on three major priorities, which are safety, access, and mobility (SAM). A DJ&A lead consulting team was selected through a competitive solicitation process to provide comprehensive design and construction administration services to deliver this project.

The project includes the following primary project elements:

A. Higgins Avenue Multi-Modal Improvements
B. Front/Main Two-Way Restoration
C. Riverfront Trail and Connectivity Improvements
    a. Beartracks Bridge ADA Ramp
    b. Trail Connections
    c. Riverfront Promenade Improvements
D. Signal Optimization (ATSPM & Detection)



The following scope of work is a comprehensive scope to generally include all necessary support for the City to complete the **Final Engineering Phase**. The engineering services for the project will be delivered in three phases (or contracts).

- Preliminary Engineering and Environmental
- **Final Engineering – this phase**
- Construction Administration

DJ&A has partnered with several team members to deliver all necessary services for the Downtown SAM Project. These teaming partners will provide a variety of services which are detailed below. It may become necessary to add additional specialty subcontractors for future work, however the following list contains our major teaming partners:

- Kittelson and Associates – traffic engineering
- HDR - structures
- Tetra Tech – geotechnical engineering
- Dixon Unlimited - parking
- Big Sky Public Relations (BSPR) – public involvement
- Ginny Tribe – working group facilitation

The scope of work for the Final Engineering Phase is detailed in this document. The project schedule will continue to be updated on a monthly basis, however, the Final Engineering Phase is **anticipated to run from October 2025 through December of 2026**.

1.0 Project Management:

Task 1.1: Project Management & Contract Administration

Description: DJ&A will provide project management and contract administration to support the overall task of managing the project. The size of this project requires managing several subconsultants and a large project team. This includes internal coordination and contract management activities.

Assumptions:

- The duration of this final phase is assumed to be 15 months.
- A project SharePoint site will be maintained by DJ&A; access rights will be limited and granted to the project team and others as appropriate and with City concurrence.
- DJ&A will perform quality control on all deliverables prepared by its subcontractors prior to submittal to the City.

Deliverables:

- None

Task 1.2: Billing and invoices

Description: The time required to manage the project is reflective of the complexity of the following tasks and the duration of the project as defined in the Project Schedule.

Assumptions:

- Invoices & progress reports will be submitted electronically to the City of Missoula (City) approximately every 30 days.
- Markup on subconsultants' scope of work to be limited to 5%.

Deliverables:

- Monthly progress reports and monthly invoices.

Task 1.3: Project Meetings & Coordination

Description: DJ&A staff will attend all relevant City/County/State agency meetings. This includes attending and leading a weekly project status meeting and other necessary coordination meetings throughout the duration of the FE phase. This includes time for meeting preparation, attendance, minutes, and other documentation.

Assumptions:

- The weekly meeting(s) will be held online via Microsoft Teams or in other locations convenient to the City/County/State as needed;
- DJ&A's primary attendee will be the Project Manager, with others attending as needed/available;
- Other meetings outside the weekly meeting will be necessary to properly coordinate and manage the project.
- DJ&A's Project Manager will also attend weekly coordination meetings with the City and FHWA
- Monthly updates and status to the CPM schedule

Deliverables:

- Meeting agendas and minutes.
- Working 3-week lookahead schedule

Task 1.4: Future Phase - Scoping

Description: DJ&A will provide additional scope development for future phases of this project prior to the completion of the FE phase.

Assumptions:

- Decisions made during the FE phase will further inform the extent of this SOW development. An amendment may be needed depending upon the amount of scope that is decided to be progressed onward to the Construction Administration phase. This scope currently just includes services to develop the Construction Administration phase SOW for the work outlined in the first deliverable for each project element.

Deliverables:

- Draft and Final SOW document for the subsequent Construction Administration Phase.
- Fee Estimate

2.0 Project Development and Planning:

Task 2.1: TRT Meetings (prep, attendance, follow-up)

Description: DJ&A will manage all activities necessary for the continued use and coordination with the Technical Review Teams that have been created for the Downtown SAM Project. These technical review teams will require ongoing coordination and design review/input, however, key engagements will be during formal design review periods.

Assumptions:

- Major coordination includes review, workshops, and comment resolutions during the 60%, 90%, and 100% milestone reviews (total of 3);
- The TRT makeup will not be significantly modified, and primarily consist of agency personnel from the City, MRA, and MDT;
- Reviews will be conducted using Bluebeam Studio;
- The overall period of coordination will not exceed the contract time;
- This work will also include any specific MDT coordination and requests including SIAP applications. This work to not exceed up to 10 individual MDT / SIAP coordination meetings; and
- Includes up to 3 2-hour mini-design charrettes per project element.

Deliverables:

- Comment reviews with documented resolutions on archived Bluebeam Studio Sessions;
- Review workshop meeting minutes; and
- SIAP approach/permit applications to be used in any MDT maintenance agreements.

Task 2.2: Working Group (prep, attendance, follow-up)

Description: DJ&A will prepare necessary materials and other preparation for monthly Working Group Meetings. DJ&A will also send up to two individuals to each working group meeting.

Assumptions:

- Up to 2 DJ&A personnel (including the Project Manager) to attend working group meetings on a monthly basis in-person;
- Includes printing of materials for handout at the working group meetings;
- Up to 12 – 3 hour working group meetings;
- Up to 1 ea 1-hr prep meeting for each working group;
- Up to 1 ea 1-hr follow-up meeting to resolve various requests from the Working Group prior to the next meeting; and
- DJ&A will not provide space or equipment for the meetings, they will be held by the City at First Interstate Bank.

Deliverables:

- Meeting materials (handouts and follow-up)

Task 2.3: CMGC Support

Description: DJ&A will provide coordination and support to resolve questions and comments from the Contractor (Jackson), as well as, provide technical advice and guidance to the City regarding the construction contracting, administration, and other support as necessary.

Assumptions:

- Includes a weekly coordination call for up to ½ hours.
- Includes responses and resolutions to technical, contractual, and logistical questions about plan reviews and other issues;

Deliverables:

- None, but may include written recommendations as required. Comment responses as required will be delivered using Bluebeam Studio Sessions.

Task 2.4: Design Quality Assurance and Quality Control – DJ&A

Description: DJ&A will provide senior level oversight of all technical design that is completed on the project. This will be provided throughout the delivery of the design and specifically will include QC/QA reviews prior to each deliverable.

Assumptions:

- Senior QC Reviewer / Manager will include Kirk Spalding unless otherwise approved.

Deliverables:

- None

Task 2.5: Design Quality Assurance and Quality Control – Kittelson

Description: Kittelson will provide senior level oversight of all technical design that is completed on the project. This will be provided throughout the delivery of the design and specifically will include QC/QA reviews prior to each deliverable.

Assumptions:

- Senior QC Review will include Hermanus Steyn and Nick Foster, unless otherwise approved.

Deliverables:

- None

Task 2.6: FHWA Funding Obligation Process (PS&E Checklist)

Description: DJ&A will lead the process of working to compile all required PS&E documents necessary to support FHWA's requirement for funding obligations. DJ&A will certify documents as necessary. These documents will include but not be limited to contract plans, special provisions, certified and accepted bid tabs, signed environmental document, signed permits, utility certification, and RW certification.

Assumptions:

- DJ&A will be able to coordinate directly with FHWA on any reviews and additional documentation needed;
- DJ&A will provide a detailed PS&E checklist in advance of the funding obligation. This checklist will include all documents and will be reviewed by the City and FHWA;
- DJ&A will coordination and/or create requirement documents for the packages.
- DJ&A is anticipating the PS& package requirements will be similar to FHWA requirements on past grant funded projects.

Deliverables:

- PS&E checklist with consolidation of all documents.

Task 2.7: Design Charrette (Prep, Facilitation, Follow Through)

Description: DJ&A will provide extensive staffing to prepare for, attend, and lead various Design Charrette meetings. These meetings will be on an as-needed basis and will focus on specific design details where stakeholders can provide input on specific design elements. This includes time for meeting preparation, attendance, minutes, and other documentation.

Assumptions:

- The meetings will be held online via Microsoft Teams or in other locations convenient to the City as needed;
- DJ&A's primary attendees will be the Project Manager and designer specifically involved in the design elements being discussed.
- All stakeholders who need to provide input regarding the specific design element being discussed will be invited and encouraged to attend and additional meetings will not be needed to accommodate different groups;
- This scope currently includes the time associated with five (5), 1.5-hour, Design Charrettes and the time needed for preparation, minutes, and other documentation. An amendment may be needed if additional meetings are necessary.

Deliverables:

- Meeting agenda and minutes
- Marked up exhibits from the meeting

3.0 Multimodal Design:

Task 3.1: Higgins Avenue – Final Design

Description: This work package focuses on advancing the design of Higgins Avenue, which includes 4-to-3 lane conversion, improved bicycle facilities, ADA access, bus stops and other street amenities. Building on the previously completed 30% design, DJ&A will provide engineering and design services for the roadway to advance the approved scope from a 30% design to a Ready-for-Construction (RFC) final design. The limits of the approved scope include:

- Higgins Avenue from Brooks Street to Broadway (approximately 3,500 feet)

The specific boundaries of the above scope elements are as specified in the 30% Design package.

DJ&A will continue to lead the design effort for this package, including coordination with HDR on the lighting design and intersections of Front & Main with Higgins as well as coordinating with Kittelson on the Signal and Signage design. The concept development up to this point has been informed by guidance from the Technical Review Team (TRT). These collaborative discussions have resulted in consensus on the current design direction, as documented in the 30% design

package. Under this scope, DJ&A will refine, develop, and finalize the detailed design of Higgins Avenue to the 100% RFC level, ensuring consistency with project goals, regulatory requirements, and stakeholder priorities.

Assumptions:

- The engineering design work will largely utilize the already completed 30% design as the starting point, including documented decisions made during the agency reviews.
- Substantial modifications will need to be made to the design on Higgins South based on decisions made during discussions with the project leadership team (PLT).
- Design will follow the Montana Public Works Standard Specifications (MPWSS), Missoula City Public Works Standards and Specifications manual, and other local, state, and federal requirements.
- Work within MDT routes (Higgins Ave) will also conform to MDT design standards.
- Design will also reference NACTO, Complete Streets, Bicycle Facilities Master Plan, and Pedestrian Facilities Master Plan.
- Road design will conform to AASHTO's policy on Geometric Design of Highways and Streets.
- Work will conform to the "Higgins Avenue Project Charter".
- Roadway typical section layouts will be based upon input from the Higgins Avenue Corridor Study, traffic projections, and stakeholder discussions.
- Standard specification format will be determined upon stakeholder input and discussion. Upon selected format, bid items will be developed using the selected format.
- Section depths will be based upon traffic projections and geotechnical investigation.
- Signal design work is included in task 3.5 as specified in that section of this document.
- Signing design work is included in task 3.6 as specified in that section of this document.
- Lighting design work is included in task 3.7 as specified in that section of this document.

Deliverables:

- All deliverables for this work package are listed in subtasks identified herein.

3.1.1 60% Design and Plan Production

Description: DJ&A will provide engineering and design services for the Higgins Avenue design to advance the approved scope from a 30% design to a 60% design. This will include furthering the design details and addressing comments from the Technical Review Team (TRT) and other stakeholders. This design stage review will include necessary information similar to what's required for City of Missoula's Stage 3 (Preliminary Construction Plan Review) but will be deemed an Informal Stage 3 submittal. The approved scope is for:

- Higgins Avenue from Brooks Street to Broadway

The specific boundaries of the above scope elements are as specified in the 30% Design package.

The 60% deliverable is intended to advance the following design items: typical sections, quantity summaries, plan and profiles, hydraulic and drainage concepts, landscaping concepts, curb and median island detail, temporary traffic control concepts, permanent pavement marking concepts, intersection layouts, ADA ramp design, erosion control concepts, and cross-sections.

Assumptions:

- See assumptions listed under task 3.1: Higgins Avenue – Final Design
- The 60% design will build directly upon the 30% design package, with the exception of substantial changes will be needed on South Higgins based on scoping decisions made by the PLT.
- A formal City stage review is not required at this milestone.
- All improvements will be designed within existing easements and rights-of-way; this scope does not include procurement of new easements, rights-of-way, or private property negotiations.
- All design progression will remain within existing survey mapping limits; no additional survey mapping will be required.
- All design deliverables will be submitted electronically.

Deliverables:

- See section 3.1.2 below.

3.1.2 60% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description: DJ&A will develop the plans based on the updated 60% design. This will build off the structure created as part of the 30% deliverable. This will also include coordination with Kittelson and HDR who are producing the Higgins Signal, Signing, and Lighting design that will be included as part of this package.

This task will also include further refinement of the specs and estimate. The estimate will be updated based on the 60% design. The specs will be advanced to include special provisions for areas that are deemed necessary.

Assumptions:

- Electronic surface files will be provided in a .XML format.
- Subgrade intersections surfaces will not be needed at this stage.
- Plan package will build upon the layout provided in the 30% package.

Deliverables:

- Preliminary design package (60% level of completion), including plan sheets, supplemental specifications, and preliminary quantity take-offs.
- Preliminary electronic design files and surfaces.

- Preparation of draft design exceptions, if necessary.

3.1.3 60% Design Review and Comment Resolution

Description: Following completion of the 60% design package, DJ&A will facilitate a coordinated review and decision-making process with the City of Missoula, the Technical Review Team (TRT), and Jackson Contractor Group. The purpose of this task is to review the 60% package in detail, resolve agency comments, evaluate construction cost estimates, and establish a consensus path forward to advance the project to the 90% design level. Specific activities will include:

- Distributing the 60% design packages for review and collecting comments in advance of the meeting (using Bluebeam for comment management).
- Hosting a 3-hour virtual review meeting with all participating agencies and project partners.
- Facilitating discussion to address and resolve agency comments, clarify scope issues, and align on project priorities.
- Reviewing the contractors updated construction cost estimate, identifying cost drivers, and exploring potential value engineering solutions.
- Building consensus on the preferred design approach to be carried into the 90% design phase.
- Documenting decisions and agreements in formal meeting minutes, distributed to all participants.

Assumptions:

- Review comments will be provided by agencies in advance of the scheduled review meeting, using Bluebeam as the primary tool for markups and comment tracking.
- A single 3-hour virtual meeting will be sufficient to review and resolve comments.
- DJ&A will facilitate the meeting, track decisions, and prepare meeting minutes, but will not be responsible for recording verbatim discussions.
- Contractor cost estimate support will be provided by Jackson Contracting Group under their separate contract.
- Consensus decisions reached in this meeting will serve as the approved basis for advancing to the 90% design.

Deliverables:

- Facilitated 60% review meeting (virtual, 3 hours) with City, TRT, and contractor.
- Consolidated Bluebeam comment log reflecting review input from all agencies.
- Meeting minutes documenting decisions, resolutions, and next steps, distributed to all stakeholders.
- Confirmed consensus design direction for progression to the 90% design milestone.

3.1.4 90% Design and Plan Production

Description: DJ&A will provide engineering and design services for the Higgins Avenue design to advance the approved scope from a 60% design to a 90% design. This will include furthering the design details and addressing comments from the Technical Review Team (TRT) and other stakeholders. This phase will produce a fully developed draft set of construction documents that will serve as the near-final basis for construction. This design stage review will include necessary information for what's required for City of Missoula's Stage 3 (Preliminary Construction Plan Review) but will be deemed an Informal Stage 3 submittal. The approved scope is for:

- Higgins Avenue from Brooks Street to Broadway

The specific boundaries of the above scope element will be as specified in the 60% Design package.

The 90% deliverable is intended to advance the following design items: draft technical specifications, updated quantities, typical sections, quantity summaries, plan and profiles, hydraulic and drainage concepts, landscaping concepts, curb and median island detail, temporary traffic control concepts, permanent pavement marking concepts, intersection layouts, ADA ramp design, erosion control concepts, cross-sections, and any other element identified during the review of the 60% design needing more detail.

Assumptions:

- See assumptions listed under task 3.1: Higgins Avenue – Final Design
- The 90% design will build directly upon the 60% design package.
- All comments from the 60% review will be provided to DJ&A in consolidated form prior to beginning the 90% design advancement.
- A formal City stage review is not required at this milestone.
- All improvements will be designed within existing easements and rights-of-way; this scope does not include procurement of new easements, rights-of-way, or private property negotiations.
- All design progression will remain within existing survey mapping limits; no additional survey mapping will be required.
- All design deliverables will be submitted electronically.

Deliverables:

- See section 3.1.5 below.

3.1.5 90% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description: DJ&A will develop the plans based on the updated 90% design. This will build off the structure that was refined as part of the 60% deliverable. This will also include coordination

with Kittelson and HDR who are producing the Higgins Signal, Signing, and Lighting design that will be included as part of this package.

This task will also include further refinement of the specs and estimate. The estimate will be updated based on the 90% design. The specs will be advanced to include special provisions for areas that are deemed necessary.

Assumptions:

- Electronic surface files will be provided in a .XML format.
- Subgrade intersections surfaces will not be needed at this stage.
- Plan package will build upon the layout provided in the 60% package.

Deliverables:

- Near-Final design package (90% level of completion), including plan sheets, supplemental specifications, and preliminary quantity take-offs.
- Electronic design files and surfaces.
- Draft design exceptions, if necessary.

3.1.6 90% Design Review and Comment Resolution

Description: Following delivery of the 90% design package, DJ&A will facilitate a review process with the project stakeholders to confirm alignment on the draft final design prior to advancing to the 100% RFC stage. This task will include scheduling and conducting a formal 90% review meeting with the project team and the Technical Review Team (TRT). Prior to the meeting, stakeholders and TRT members will be provided access to the 90% documents in Bluebeam for review and comment. DJ&A will collect and organize comments received in advance, and meeting discussions will focus on reaching consensus on the design approach, resolving comments, and confirming that no significant changes are anticipated moving forward. DJ&A will prepare and distribute meeting minutes summarizing decisions, consensus items, and outstanding issues. The outcome of this task will be a unified direction to finalize the design into the 100% RFC package.

Assumptions:

- Stakeholders and TRT members will provide comments in Bluebeam prior to the meeting.
- No major redesign or scope changes will result from this meeting; only refinements and clarifications will be required.

Deliverables:

- Meeting agenda and materials.
- 90% review meeting with stakeholders and TRT.
- Meeting minutes documenting decisions, consensus items, and action items.

- Compiled and reconciled 90% review comments (Bluebeam session log).

3.1.7 RFC% Design and Plan Production

Description: Based on consensus reached during the 90% review, DJ&A will advance the design to the final Ready for Construction (RFC) stage. This will include incorporating all resolved comments, preparing final drawings, and completing supporting design documentation to produce a coordinated set of construction documents. Plans will be checked for internal quality control and compliance with project standards, specifications, and design criteria.

Assumptions:

- All significant design decisions have been resolved during the 90% review.
- No scope changes or redesign outside of comment incorporation are anticipated.
- Project standards and formatting requirements for final deliverables will be confirmed prior to production.

Deliverables:

- See section 3.1.8 below.

3.1.8 RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description: DJ&A will develop the plans based on the updated RFC design. This will build off the structure that was refined as part of the 90% deliverable. This will also include coordination with Kittelson and HDR who are producing the Higgins Signal, Signing, and Lighting design that will be included as part of this package.

This task will also include further refinement of the specs and estimate. The estimate will be updated based on the RFC design. The specs will be advanced to include special provisions for areas that are deemed necessary.

Assumptions:

- Electronic surface files will be provided in a .XML format.
- Subgrade intersections surfaces will be developed as needed.
- Plan package will build upon the layout provided in the 90% package.

Deliverables:

- Final RFC-level drawings (electronic format).
- Updated supporting documentation incorporated into the plan set.
- QC-reviewed design files, ready for compilation into the final deliverable package.

3.1.9 RFC – Stamp, Seal, and Prints/Electronic Distribution

Description: DJ&A will provide final professional engineering stamps and seals on the RFC deliverables and prepare final copies for distribution. This will include electronic submission of signed/sealed PDFs, as well as printed copies as required. DJ&A will coordinate with the client to confirm distribution needs and ensure delivery of complete and certified documents suitable for construction.

Assumptions:

- Stamping/sealing will be completed by licensed Professional Engineers of Record in the appropriate disciplines.
- The number of printed copies required will be confirmed with the client prior to production.
- Electronic submittals will be provided in PDF format unless otherwise requested.

Deliverables:

- Final stamped and sealed RFC plans (electronic and hard copy).
- Final specifications (electronic).
- Final engineer's estimate (electronic).
- Printed sets of plans (as required by the City and Contractor).
- Certified electronic deliverables suitable for construction.

Task 3.2: Front/Main Two-Way Restoration – Final Design

3.2.1 60% Design and Plan Production

Description: HDR will provide engineering and design services for Front and Main Streets to advance the approved scope from the revised 15% design to a 60% design. This design stage review will include necessary information required for City of Missoula's Stage 3 (Preliminary Construction Plan Review) but will be deemed an Informal Stage 3 submittal. The approved scope is for:

- One-way to two-way conversion of Front and Main Streets from Orange Street to Madison Street beginning from approximately the curb returns/end of intersection ADA improvements. Including the design of Parsons Drive. See Figures 1-3 under the 60% Design Assumptions for approximate limits.

- Up to one working session to finalize intersections to be reconstructed are anticipated. Attendance of up to three HDR staff with a meeting duration of one hour is assumed. A preliminary list of intersections anticipated for reconstruction is as follows:
    - NE Quadrant of Front and Pattee
    - NW Quadrant of Main and Pattee
    - All Quadrants of Front and Ryman

- All Quadrants of Main and Ryman

The 60% deliverable is intended to advance the following design items: typical sections, quantity summaries, road and demo plans, speed reduction concepts, high level temporary traffic control concepts, permanent lighting and signing concepts, permanent pavement marking concepts, intersection layouts, and erosion control concepts.

Assumptions:

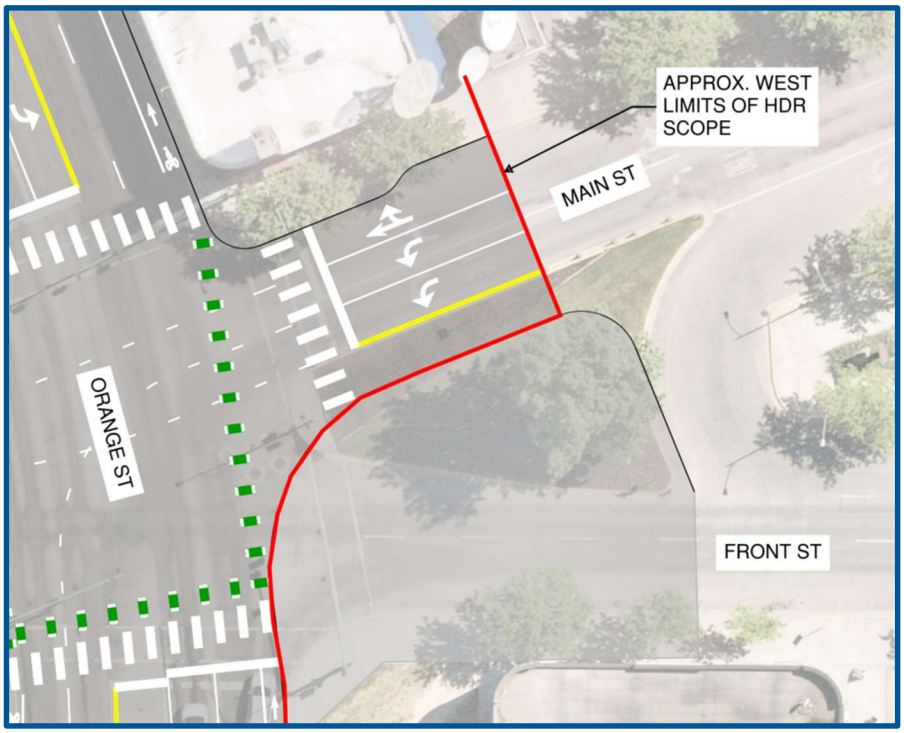


Figure 1: Approximate western limits of HDR scope. Proposed concepts shown subject to change.

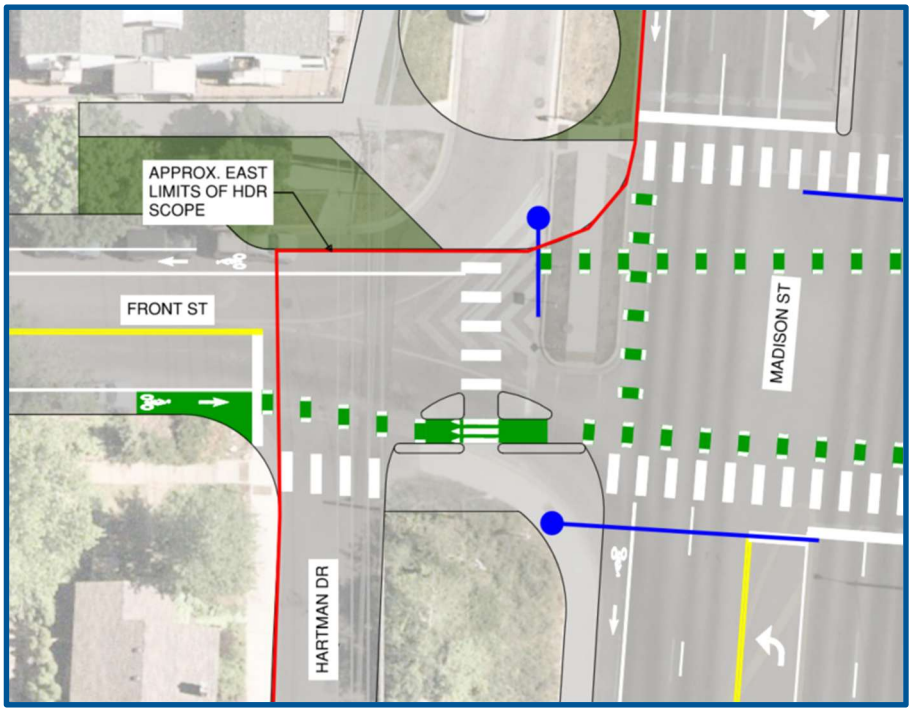


Figure 2: Approximate eastern Front St. limits of HDR scope. Proposed concepts shown subject to change.

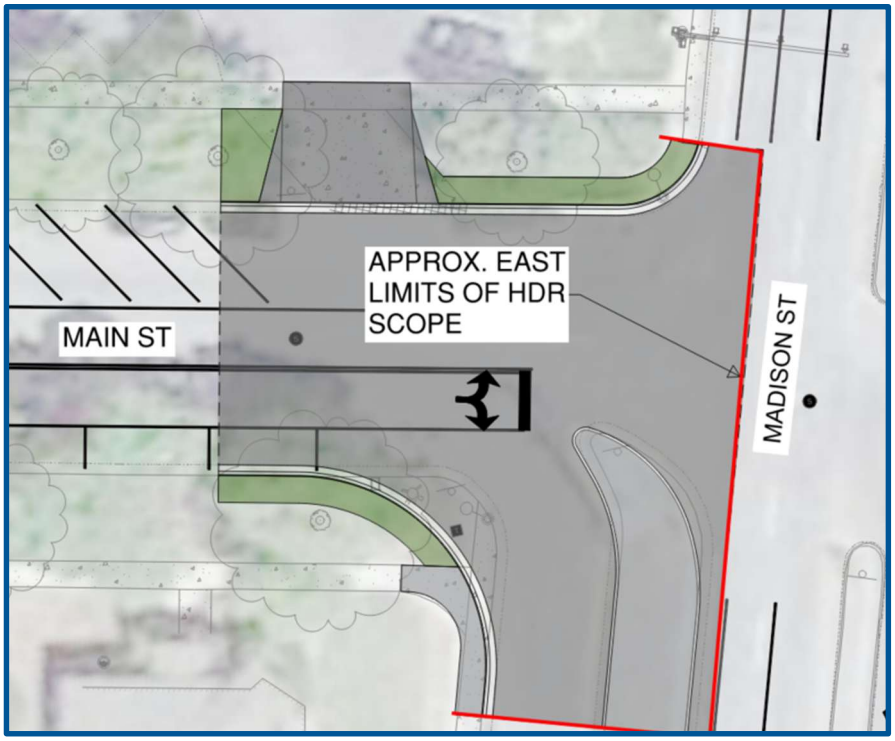


Figure 3: Approximate eastern Main St. limits of HDR scope. Proposed concepts shown subject to change.

- The engineering design work will largely utilize the already completed 15% design as the starting point including documented decisions made during the agency reviews.
- A single alternative that has been approved by the City will be progressed to 60% design.
- Roads will be designed to City of Missoula Standards and reference NACTO, Complete Streets, Bicycle Facilities Master Plan, and Pedestrian Facilities Master Plan.
- Road design will conform to AASHTO's policy on Geometric Design of Highways and Streets.
- Work within MDT routes (Orange and Madison Streets) will also conform to MDT design standards to the extent practical.
- Roadway typical section layouts will be based upon input from the TRT group.
- The roadway typical section(s) will not change after NTP is received for the 60% Submittal.
- Roadway reconstruction will be limited to intersections receiving ADA improvements and/or curb extensions. Areas outside of the identified roadway reconstruction areas are assumed to be limited to pavement preservation (chip/fog seal and signing/striping upgrades).
- Minor curb and sidewalk improvements are anticipated in areas needed to correct drainage and ADA. Up to two working sessions is assumed to be sufficient to identify limits. Attendance of up to two HDR staff with two-hour meeting durations for each session is assumed.
- Hydraulic design to be completed by others. HDR to provide coordination between road and hydraulic design teams.
- Up to two working sessions to identify bus stop locations is assumed. Attendance of up to two HDR staff with meeting durations of one hour for each session is assumed.
    - No new bus stops will be included along Main St.
    - Front St. will have up to four new bus stops included in the plans.
    - Ryman St. will have up to two new bus stops included in the plans.
- A field visit will be necessary to identify changes to existing features to accommodate the two-way conversion. One HDR staff from the Missoula office for one day (eight hours) is assumed to be sufficient. Such items include, but not limited to:
    - Signing
    - Inlet grate types
    - Parking meters
    - Loading zones
    - Accessible parking
- Impacts to the underground vaults and suspended pavement systems are anticipated. A single working session is anticipated to identify an acceptable level of impact to these features. Attendance of up to two HDR staff with meeting duration of one hour for each session is assumed.
- Construction phasing and traffic control plans will not be included. Traffic control and sequence of operation guidelines shall be covered in the special provisions.
- Pavement section thickness will be based upon traffic projections and geotechnical investigation.
- It is anticipated that the road design package will include approximately 60 drawing sheets. Assumed sheet list is as follows:

Title	Sheet Count
Title, TOC, & Notes	3
Typical Sections	3
Demo	16
RD Details	18
SI Plans	18
SI Details	2
Total	**60**

- Cross section sheets are not included with the plans.
- Signal and Electrical design work are included in separate tasks as specified elsewhere in this document.
- Tree impacts will be evaluated on a case-by-case basis. Up to two working sessions to identify acceptable impact levels are anticipated. Attendance of up to two HDR staff with meeting durations of one hour for each session is assumed.
- Landscaping concepts will be developed for bulb-outs and other key intersections only. Landscape concepts will be developed by others for inclusion in the Front/Main design package.
- Landscape work is included in separate tasks as specified elsewhere in this document.
- Signal layout and operation design to be provided by others.
- Utility coordination performed by others.
- Only utilities impacted by the proposed improvements will be included in the design.
- System Impacts submittal and coordination to be handled by others.

3.2.2 60% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description: HDR will provide a 60% plan, specifications and estimate package at the conclusion of this phase. This task includes the work to compile and submit for review the plans, specs, and construction cost estimate.

Assumptions:

- The actual content, organization, and details of this submittal will follow the organization of the previously submitted DT Sam 30% submittal package(s).

Deliverables:

- Stage 3 Checklist (pdf)
- Plan Package (pdf)
- Specifications outline with draft special provisions (pdf)
- Construction Cost Estimate (spreadsheet and pdf)

- Roadway design criteria memo (pdf)
- Supporting documents and files as requested

3.2.3 60% Design Review and Comment Resolution

Description: This task includes the work to review and respond to comments from the 60% (Stage 3) submittal.

Assumptions:

- Comments to be compiled in a Bluebeam Review from the TRT Group, City of Missoula, and MDT.
- Direct responses to comments made in the Bluebeam Review will suffice as the comment response document.
- Up to two comment reconciliation meetings are anticipated. Up to three HDR staff members are anticipated to attend with meeting durations of three hours for each session assumed.

Deliverables:

- Comment Response Document (pdf)

3.2.4 90% Design and Plan Production

Description: HDR will provide engineering and design services for Front and Main Street to advance the approved scope from the 60% design. This design stage review will include necessary information required for an intermittent review between Stage 3 and Stage 4 reviews. The approved scope is for:

- One-way to two-way conversion of Front and Main Streets from Orange Street to Madison Street. Including the design of Parsons Drive. See Figures 1-3 in the 60% Design assumptions for approximate limits.

Assumptions:

- The alternative(s) identified and developed for the 60% design, will be progressed to 90% design.
- Comments received during the 60% Review will not significantly alter the design.
- Intersections and other areas identified for reconstruction during the 60% Design submittal, will not significantly change as they progress to 90% Design.
- Roads will be designed to City of Missoula Standards and also reference NACTO, Complete Streets, Bicycle Facilities Master Plan, and Pedestrian Facilities Master Plan.

- Road design will conform to AASHTO's policy on Geometric Design of Highways and Streets.
- Work within MDT routes (Orange and Madison Streets) will also conform to MDT design standards to the extent practical.
- It is anticipated that the road design package will include approximately 60 drawing sheets.
- Cross section sheets will not be included with the plans.
- Hydraulic design to be completed by others. HDR to provide coordination between road and hydraulic design teams.
- Signal and Electrical design work are included in separate tasks as specified elsewhere in this document.
- Landscape work is included in separate tasks as specified elsewhere in this document.
- Signal layout and operation design to be provided by others.
- Utility coordination performed by others.
- Only utilities impacted by the proposed improvements will be included in the design.

3.2.5 90% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description: HDR will incorporate comments and design revisions from the Stage 3 submittal to provide a 90% plan, specifications and estimate package at the conclusion of this phase. This task includes the work to compile and submit for review the plans, specs, and estimate.

Assumptions:

- The actual content, organization, and details of this submittal will follow the organization of the previously submitted 60% submittal package(s).

Deliverables:

- Plan Package (pdf)
- Draft special provisions (pdf)
- Construction Cost Estimate (spreadsheet and pdf)
- Updated Roadway design criteria memo (pdf)
- Supporting documents and files as requested

3.2.6 90% Design Review and Comment Resolution

Description: This task includes the work to review and respond to comments from the 90% submittal.

Assumptions:

- Comments to be compiled in a Bluebeam Review from the TRT Group, City of Missoula and MDT.

- Direct responses to comments made in the Bluebeam Review will suffice as the comment response document.
- Up to two comment reconciliation meetings are anticipated. Up to three HDR staff members are anticipated to attend with meeting durations of three hours for each session assumed.

Deliverables:

- Comment Response Document (pdf)

3.2.7 RFC% Design and Plan Production

Description: HDR will provide engineering and design services for Front and Main Street to advance the approved scope from the revised 90% design to RFC (Stage 4). This design stage review will include necessary information required for City of Missoula's Stage 4 (Release for Construction Plan Review). The approved scope is for:

- One-way to two-way conversion of Front and Main Streets from Orange Street to Madison Street. Including the design of Parsons Drive. See Figures 1-3 under the 60% Design Assumptions for approximate limits.

The RFC deliverable is intended to advance the design to a 100% signed/sealed ready for construction set.

Assumptions:

- Comments and design revisions at this stage are assumed to be minor and will advance the design from the 90% submittal.
- Roads will be designed to City of Missoula Standards and also reference NACTO, Complete Streets, Bicycle Facilities Master Plan, and Pedestrian Facilities Master Plan.
- Road design will conform to AASHTO's policy on Geometric Design of Highways and Streets.
- Work within MDT routes (Orange and Madison Streets) will also conform to MDT design standards to the extent practical.
- It is anticipated that the road design package will include approximately 60 drawing sheets.
- Cross sections sheets are not included in the plans.
- Hydraulic design to be completed by others. HDR to provide coordination between road and hydraulic design teams.
- Signal and Electrical design work are included in separate tasks as specified elsewhere in this document.
- Landscape work is included in separate tasks as specified elsewhere in this document.
- Signal layout and operation design to be provided by others.
- Utility coordination performed by others.
- Only utilities impacted by the proposed improvements will be included in the design.

3.2.8 RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description: HDR will incorporate comments and design revisions from the 90% submittal to provide a 100% plan, specifications and estimate package at the conclusion of this phase. This task includes the work to compile and submit for review the plans, specs, and estimate.

Assumptions:

- The actual content, organization, and details of this submittal will follow the organization of the previously submitted package(s).

Deliverables:

- Stage 4 Checklist (pdf)
- Plan Package (pdf)
- Special provisions (pdf)
- Construction Cost Estimate (spreadsheet and pdf)
- Updated Roadway design criteria memo (pdf)
- Supporting documents and files as requested

3.2.9 RFC – Stamp, Seal, and Prints/Electronic Distribution

Description: This task includes the work to compile and submit stamped and sealed plans and bidding documents for electronic distribution.

Assumptions:

- Minor Comments from the Stage 4 submittal will be addressed prior to distribution.

Deliverables:

- Plan Package (signed/sealed by Engineer) (pdf)
- Special provisions (pdf)

Task 3.3: Beartracks ADA Ramp – Final Design

Description: HDR will advance the ADA ramp 30% design through final design including final plans and specifications development.

Assumptions: The following assumptions apply.

- The ‘Switchback’ ramp concept, Concept 1, is the final ramp style and configuration. Some minor geometric alterations, and architectural changes are expected as the design advances. Major changes to the ramp geometry or style are not included in the scope.
- Additional development of ramp alternatives is not included in the scope.

- The Technical Memorandum *Beartracks Bridge ADA Ramp Summary of Key Design Decisions, & Recommendations, July 10, 2025,* defines the approved criteria and ramp style that will advance through final design.
- Utility conflict evaluation and resolution will be completed by others.
- Landscaping details will be provided by others.
- MDT Standard Specifications apply. Materials and control of work will be in accordance with MDT specifications.
- The structural model is being developed in Revit for internal HDR workflow. HDR will issue any check sets and final plans in PDF format. DWG exports can be provided to support coordination with other disciplines and facilitate integration into non-Revit platforms.
- A 60% milestone submittal is not included. This project element will advance to the 90% milestone and subsequent 100% RFC milestone.
- The scope and fee are based on producing the following plans for the ramp structure:

Sheet	Title	Description	90% & 100% Pkg
H.1	Title Sheet		X
H.2	Sheet Index		X
H.3	Legend & Abbreviations		X
H.4	General Notes		X
H.5	Plan Quantities		X
H.6	Site Plan		X
H.7	Demo Plan		X
H.8	Demo Details		X
H.9	Bridge Modification Details (1 of 2)	Modifications to Beartracks Bridge	X
H.10	Bridge Modification Details (2 of 2)		X
H.11	Structure Layout	Overall structure layout and geometry	X
H.12	Foundation Plan	Foundation plan and boring logs	X
H.13	Ramp & Retaining Wall Details (1 of 3)	Ramp/wall details near trail connection	X
H.14	Ramp & Retaining Wall Details (2 of 3)	Ramp/wall details near trail connection	X
H.15	Ramp & Retaining Wall Details (3 of 3)	Ramp/wall details near trail connection	X
H.16	Bent No. 1 Layout	Overall Geometry details of the first bent near bridge.	X
H.17	Bent No. 1 Details (1 of 5)	Column and shaft details	X
H.18	Bent No. 1 Details (2 of 5)	Table top details	X

H.19	Bent No. 1 Details (3 of 5)	Bridge connection details	X
H.20	Bent No. 1 Details (4 of 5)	Misc details	X
H.21	Bent No. 1 Details (5 of 5)	Bill of Reinforcing	X
H.22	Typical Intermediate Bent Layout	Typical ramp supports - geometry	X
H.23	Typical Intermediate Bent Details (1 of 3)	Typical ramp supports - column and shaft details	X
H.24	Typical Intermediate Bent Details (2 of 3)	Typical ramp supports - cap details	X
H.25	Typical Intermediate Bent Details (3 of 3)	Bill of reinforcing	X
H.26	Switchback Landing Layout (1 of 2)	Landing Geometry	X
H.27	Switchback Landing Layout (2 of 2)	Landing Geometry	X
H.28	Switchback Landing Details (1 of 3)	sections and reinforcing details	X
H.29	Switchback Landing Details (2 of 3)	sections and reinforcing details	X
H.30	Switchback Landing Details (3 of 3)	Bill of reinforcing	X
H.34	Ramp Details (1 of 2)	Ramp sections	X
H.35	Ramp Details (2 of 2)	Ramp details and BOR	X
H.36	Drainage Details	Typical drain details at landings	X
H.37	Railing Details (1 of 2)		X
H.38	Railing Details (1 of 2)		X
H.39	Lighting & Electrical Plan		X
H.40	Lighting & Electrical Details (1 of 2)		X
H.41	Lighting & Electrical Details (2 of 2)		X
H.43	Architectural Details (2 of 3)	Formliners, RAB details	X
H.44	Architectural Details (3 of 3)	Elevated RAB details	X
H.45	Architectural Details (4 of 4)	Misc. architectural details	X

Deliverables:

- See below.
- Prior to advancing to 90% deliverable, an over-the-shoulder check point will be conducted with City and MDT staff.

3.3.4 90% Design and Plan Production

Description: Prepare the project design and plans to approximately 90% level of completeness.

Assumptions:

- The design and plans will be approximately 90% complete overall with some individual elements less or more complete.
- The design checking will be initiated at this milestone but incomplete. Final resolution of design checks, plan checking, and QC reviews will be closed out at the 100% milestone.
- Additional revisions to project renderings or development of new renderings is not included in the scope.

Deliverables:

- See below.

3.3.5 90% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description: This task includes preparing draft project specific special provisions, identifying standard special provisions, calculating preliminary quantities, preparing a preliminary construction cost estimate, and packaging the 90% PS&E for review. QC review of the 90% deliverable is included in this task.

Assumptions:

- The PS&E will be approximately 90% complete overall with some individual elements less or more complete.
- The design and plans are checked but final resolution of internal comments may not be complete until after resolution of client review comments.

Deliverables:

- 90% Plan Package (pdf)
- Draft special provisions (pdf)
- Construction Cost Estimate (spreadsheet and pdf)

3.3.6 90% Design Review and Comment Resolution

Description: This task includes attending a virtual review meeting and the work to review and respond to comments from the 90% submittal.

Assumptions:

- Compiled comments in a Bluebeam Review will be provided to HDR.

Deliverables:

- Comment Response Document (pdf)

3.3.7 RFC% Design and Plan Production

Description: Prepare the project design and plans to approximately 100% level of completeness. Incorporate comments from the 90% milestone. Close out internal final design checking and QC.

Assumptions:

- The design and plans will be approximately 100% complete at this milestone

Deliverables:

- See below.

3.3.8 RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description: This task includes updating project specific special provisions, calculating quantities, preparing a construction cost estimate, and packaging the RFC% PS&E for review.

Assumptions:

- The design and plans will be approximately 100% complete at this milestone

Deliverables:

- RFC% Plan Package (pdf)
- Special provisions (pdf)
- Construction Cost Estimate (spreadsheet and pdf)

3.3.9 RFC – Stamp, Seal, and Prints/Electronic Distribution

Description: This task includes the work to incorporate minor revisions to the PSE, compile and submit stamped and sealed plans and bidding documents for electronic distribution. Project closeout.

Assumptions:

- Minimal changes to the PSE are anticipated at this milestone.

Deliverables:

- Plan Package (signed/sealed by Engineer) (pdf)
- Special provisions (pdf)

Task 3.4: Riverfront Trail & Connectivity Improvements – Final Design

Description:

This work package focuses on advancing the Riverfront Trails & Connectivity improvements, providing extensive ADA-compliant and non-motorized connections throughout downtown Missoula to enhance safety, accessibility, and multimodal connectivity. Building on the previously completed 30% design, DJ&A will advance each project element through 100% Ready-for-Construction (RFC) final design. The scope of work includes the following key components:

- **Ron's River Trail Improvements (Orange Street to Caras Park):**
  Design will advance the widening of the trail corridor, surface improvements, and geometric refinements to address pinch points and enhance user safety. Upgrades will include ADA-compliant cross-slopes, and improved trail surfacing.

- **Ryman Street Gateway (Front Street to Caras Park):**
  Limited improvements will be designed to improve sidewalk accessibility with the gateway corridor connecting Front Street into Caras Park. Work will be limited to sidewalk ramp improvements to provide ADA-compliance. The gateway improvements will not include full roadway reconstruction, but will rather protect the existing roadway, curb, gutter, and streetscape elements to the greatest extent feasible. Additionally, wayfinding and other safety features that improve pedestrian and bicycle access will be excluded from this scope of work.

- **Pattee Street South Terminus Connectivity:**
  Improvements will focus on the dead-end configuration at the south end of Pattee Street, addressing limited connectivity. The scope includes limited sidewalk/trail upgrades to establish continuous multimodal access from the Ron's River Trail to the existing Pattee

Street sidewalk and therefore does NOT include any street improvements or reconstruction of Pattee Street.

- **Kiwanis Park Trail Reconstruction:**
  The existing trail within Kiwanis Park will be reconstructed to improve alignment, width, and ADA accessibility. Design will address drainage, surface material selection, and edge conditions to ensure a durable and user-friendly facility that better serves the high levels of pedestrian and bicycle traffic in this area.

- **Additionally,** based on input from the TRT during the Trails and Connectivity 30% plan review meeting, as well as the City's review comments, advancement of the design from the 30% to 60% level of completeness will include the following key scope-reduction and cost-saving measures:

  - Ron's River Trail Width: Consider reducing the width to 12'–14' to lower trail quantities, minimize construction impacts, and limit retaining wall extents.
  - Ron's River Trail Alignment Adjustments: Shift the alignment north in two areas (east of the retirement home and adjacent to the carousel) to decrease retaining wall quantities.
  - Ryman Street Gateway / Caras Parking Lot Impacts: By utilizing the existing roadway grade without impacts, the design shall exclude any modifications to the existing Caras Park parking lot.

DJ&A will continue to lead the design effort for this package. Concept development has been informed by guidance from the Technical Review Team (TRT) and Citizen Working Group, as well as key decisions by the Project Leadership Team , including City of Missoula departments (Public Works, Parks & Rec, Parking Commission, MRA). These collaborative discussions have resulted in consensus on the current design direction, as documented in the 30% design package. Under this scope, DJ&A will refine, develop, and finalize each subarea design to the 100% RFC level, ensuring consistency with project goals, regulatory requirements, and stakeholder priorities.

Assumptions:

The following design assumptions establish the basis of design for advancing the Riverfront Trails & Connectivity Work Package from the 30% design milestone to 100% Ready-for-Construction documents. These assumptions reflect key suggestions made by the Technical Review Team (TRT) and the Citizen Working Group, and decisions made by the Project Leadership Team, and design precedents established in the Downtown SAM Project. They are intended to guide refinement of each subarea, confirm project priorities, and provide consistency across the final design process.

Riverfront Trail & Connectivity Improvements

Work Package - General Assumptions (All Subareas)

- Design will advance from 30% design level to 100% Ready-for-Construction (RFC) in accordance with City of Missoula standards, ADA requirements, and AASHTO Guide for the Development of Bicycle Facilities.
- Trail widths, cross-slopes, and grades will meet ADA accessibility standards unless specifically constrained by site conditions.
- Coordination with City of Missoula agencies will continue throughout final design to confirm details such as materials, landscaping, and wayfinding.
- All improvements will be designed to minimize long-term maintenance while balancing aesthetics, safety, and functionality.
- Construction sequencing and phasing will account for high pedestrian/bicycle volumes and event traffic within Caras Park and adjacent downtown areas.

Ron's River Trail Improvements

- Design precedent: The Caras Park promenade section (18' trail width, concrete surface, high-use urban trail standards) will serve as the baseline.
- Trail width: Target design width is 18 feet to match the existing 18 feet width at Caras Park promenade. Trail sections westward will vary between 12 feet and 18 feet depending on adjacent property impacts and retaining wall needs. .
- Retaining walls: The design shall be refined to avoid the use of retaining walls by adjusting and narrowing the trail width where necessary.
- Property/easement impacts: All improvements will be designed within existing easements and rights-of-way; this scope does not include procurement of new easements, rights-of-way, or private property negotiations;
- West terminus: The project will extend to the MDT property line at the west side of the Orange Street Bridge undercrossing.
- Bridge undercrossing: The trail will pass under the bridge at 16 feet width without disturbing the existing riprap embankment.

Ryman Street Gateway

- Corridor width: Sidewalk improvements along Ryman Street shall not impact the existing roadway or curb and gutter. The corridor is constrained to less than 75 feet between adjacent buildings; final design will optimize available space for pedestrians, bicyclists, and vehicles within this envelope.

- Vertical profile: The sidewalk improvements will generally follow the existing steep grade of Ryman Street between Front Street and Carousel Drive, which exceeds 8%. Improvements will be limited to ramp configurations at both sides of Carousel Drive, providing ADA-compliant access.
- Vehicle access: Corridor must accommodate frequent truck turning movements (delivery vehicles, event service vehicles) through geometry and mountable curb sections.
- Multimodal circulation:
    - Reduce pedestrian–vehicle conflict points with clear circulation patterns, enhanced crosswalks, and defined pedestrian zones.
- Parking: Maintain public and private parking access as currently used. The scope progression will not impact the existing Caras Park parking lot.
- Signage/wayfinding: Excluded from the scope.
- Streetscape: Excluded from the scope.

Pattee Street Connectivity Improvements

- Basis of design: Improvements will address the existing dead-end configuration at the south end of Pattee Street to enhance connectivity. The scope includes roadway and limited sidewalk/trail upgrades to establish continuous multimodal access between Ron's River Trail and the existing Pattee Street sidewalk. No additional street improvements or full roadway reconstruction along Pattee Street are included in this scope.
- Landscaping: Excluded from the scope.
- Preservation: Existing Pattee Street sidewalks, street trees, and retaining wall will remain in place to reduce costs and impacts.
- Parking: Maintain existing on-street parking along Pattee Street.

Kiwanis Park Improvements

- Basis of design: Trail alignment and circulation will follow the Kent Watson conceptual design, as reviewed and accepted by TRT.
- Trail surfacing: All new trail segments will be asphalt, consistent with adjacent Riverfront Trail segments and to reduce construction/maintenance costs.
- Trail dimensions: Widened to meet ADA and AASHTO standards for shared-use paths (minimum 10', with wider segments where space allows).

- Accessibility: Cross-slopes, grades, and surface materials will comply with ADA requirements.
- Project limits: Improvements extend from Front Street into Kiwanis Park, tying into Ron's River Trail at the river edge.

Deliverables:

- All deliverables for this work package are listed in subtasks identified herein.

3.4.1 60% Design and Plan Production

Description:

DJ&A will advance the 30% design packages (completed and submitted to the City in August 2025), including the Value Engineering scope reductions, to the 60% design level for all work package focus areas: Ron's River Trail Improvements, Ryman Street Gateway, Pattee Street Connectivity Improvements, and Kiwanis Park Trail Improvements. This phase will develop preliminary designs into more refined, coordinated plans, providing sufficient detail for continued stakeholder review and CMAR cost estimating. Specific tasks include:

- Advancing demolition plans from 30% to 60% completion;
- Developing preliminary geometric layouts for trails, streets, connections, typical sections, and accessibility improvements;
- Advancing grading and drainage design;
- Continuing coordination with the Technical Review Team (TRT), Citizen Working Group and Project Leadership Team (as needed); and
- Preparing quantity take-offs as needed to assist Jackson Contractor Group (CMGC) with updated estimates of probable construction costs.

Assumptions:

- The 60% design will build directly upon the 30% design packages, including the Value Engineering scope reductions, the assumptions and decisions described herein, and within the already defined project limits;
- Preparation and submittal of the City of Missoula Public Works & Mobility Stage 3 package will be required and completed with this milestone;
- Landscape and irrigation design is excluded from this scope;

- All improvements will be designed within existing easements and rights-of-way; this scope does not include procurement of new easements, rights-of-way, or private property negotiations;
- Design will comply with Missoula Municipal Code Title 12 and City of Missoula Public Works Standards and Specifications;
- All design progression will remain within existing survey mapping limits; no additional survey mapping will be required;
- No additional geotechnical investigations are anticipated; and
- All design deliverables will be submitted electronically.

Deliverables:

- Preliminary design package (60% level of completion), including plan sheets, supplemental specifications, and preliminary quantity take-offs for use by the CMAR in preparing updated construction cost estimates.

3.4.2 60% Design Review and Comment Resolution

Description:

Following completion of the 60% design package, DJ&A will facilitate a coordinated review with the Technical Review Team (TRT), and Jackson Contractor Group (CMGC). The purpose of this task is to review the 60% package in detail, resolve agency comments, evaluate construction cost estimates, and establish a consensus path forward to advance the project to the 90% design level. Specific activities will include:

- Distributing the 60% design package for review and collecting comments in advance of the meeting (using Bluebeam for comment management);
- Hosting a 2-hour virtual review meeting with all participating agencies and project partners;
- Facilitating discussion to address and resolve agency comments, clarify scope issues, and align on project priorities;
- Reviewing the CMGC's updated construction cost estimate, identifying cost drivers, and exploring potential value engineering solutions;
- Building consensus on the preferred design approach to be carried forward into the 90% design phase; and
- Documenting decisions and agreements in formal meeting minutes, distributed to all participants.

Assumptions:

- Review comments will be provided by agencies in advance of the scheduled review meeting, using Bluebeam as the primary tool for markups and comment tracking;
- A single 2-hour virtual meeting will be sufficient to review and resolve comments;
- DJ&A will facilitate the meeting, track decisions, and prepare meeting minutes, but will not be responsible for recording verbatim discussions;
- CMGC cost estimating support will be provided by Jackson Contractor Group under their separate contract;
- Consensus decisions reached in this meeting will serve as the approved basis for advancing to 90% design.

Deliverables:

- Facilitated 60% review meeting (virtual, 2 hours) with City, TRT, and CMGC;
- Consolidated Bluebeam comment log reflecting review input from all agencies;
- Meeting minutes documenting decisions, resolutions, and next steps, distributed to all stakeholders;
- Confirmed consensus design direction for progression to the 90% design milestone.

3.4.3 90% Design and Plan Production

Description:

Building on the 60% design review and consensus direction, DJ&A will advance the Riverfront Trail & Connectivity Improvements Work Package to the 90% draft final design milestone. This phase will address all comments received from the 60% deliverable and produce a fully developed draft set of construction documents that will serve as the near-final basis for construction. The 90% submittal will include refined plans, draft technical specifications, and updated quantities sufficient for detailed constructability review and cost estimating by the CMAR. Specific tasks include:

- Incorporating and addressing all review comments from the 60% design package;
- Advancing demolition and site clearing plans;
- Refining and finalizing geometric layouts and design of sidewalks, trail connections, and other site improvements;

- Advancing grading and drainage design to near-final detail;
- Preparing draft technical specifications to govern construction; and
- Updating preliminary quantity take-offs for use by Jackson Contractor Group (CMGC) in preparing their estimate of probable construction costs.

Assumptions:

- All comments from the 60% review will be provided to DJ&A in consolidated form prior to beginning the 90% design advancement;
- No new survey data or expanded survey mapping limits will be required;
- No additional geotechnical investigations are anticipated;
- Draft technical specifications will be prepared in CSI format, consistent with City of Missoula requirements and CMGC input; and
- All design deliverables will be submitted electronically.

Deliverables:

- Draft final (90%) construction documents including plans and draft specifications;
- Updated preliminary quantity take-offs;
- Submittal package sufficient for CMGC cost estimating and constructability review.

3.4.4 90% Design Review and Comment Resolution

Description:

Following delivery of the 90% design package, DJ&A will facilitate a review process with the project stakeholders to confirm alignment on the draft final design prior to advancing to the 100% RFC stage. This task will include scheduling and conducting a formal 90% review meeting with the project team and the Technical Review Team (TRT). Prior to the meeting, stakeholders and TRT members will be provided access to the 90% documents in Bluebeam for review and comment. DJ&A will collect and organize comments received in advance, and meeting discussions will focus on reaching consensus on the design approach, resolving comments, and confirming that no significant changes are anticipated moving forward. DJ&A will prepare and distribute meeting minutes summarizing decisions, consensus items, and outstanding issues. The outcome of this task will be a unified direction to finalize the design into the 100% RFC package.

Assumptions:

- Stakeholders and TRT members will provide comments in Bluebeam prior to the meeting.
- No major redesign or scope changes will result from this meeting; only refinements and clarifications will be required.

Deliverables:

- Meeting agenda and materials.
- 90% review meeting with stakeholders and TRT.
- Meeting minutes documenting decisions, consensus items, and action items.
- Compiled and reconciled 90% review comments (Bluebeam session log).

3.4.7 RFC Design and Plan Production

Description:

Based on consensus reached during the 90% review, DJ&A will advance the design to the final Ready for Construction (RFC) stage. This will include incorporating all resolved comments, preparing final drawings, and completing supporting design documentation to produce a coordinated set of construction documents. Plans will be checked for internal quality control and compliance with project standards, specifications, and design criteria.

Assumptions:

- All significant design decisions have been resolved during the 90% review.
- No scope changes or redesign outside of comment incorporation are anticipated.
- Project standards and formatting requirements for final deliverables will be confirmed prior to production.

Deliverables:

- Final RFC-level drawings (electronic format).
- Updated supporting documentation incorporated into plan set.
- QC-reviewed design files, ready for compilation into the final deliverable package.

3.4.8 RFC Deliverable Package and Handoff (Plans, Specs, Estimate)

Description:

DJ&A will compile the complete RFC deliverable package for client handoff, including final plans, project specifications, and an updated engineer's estimate of probable construction cost. The deliverable will be packaged in both electronic and hard-copy formats, as required. A transmittal memo will summarize the package contents, and the package will be formally submitted for client acceptance.

Assumptions:

- Final project specifications will follow client-approved formats.
- Cost estimate will be updated from the 90% design to reflect all changes incorporated into the RFC package.
- Client will confirm the preferred method(s) of handoff (electronic vs. printed).

Deliverables:

- Final RFC design package, including:
    - Stamped plans (electronic PDF and hard copy).
    - Project specifications (electronic format).
    - Final engineer's estimate of probable construction cost (Excel and PDF).
- Transmittal memorandum.

3.4.7 RFC – Stamp, Seal, and Prints/Electronic Distribution

Description:

DJ&A will provide final professional engineering stamps and seals on the RFC deliverables and prepare final copies for distribution. This will include electronic submission of signed/sealed PDFs, as well as printed copies as required. DJ&A will coordinate with the client to confirm distribution needs and ensure delivery of complete and certified documents suitable for bidding and construction.

Assumptions:

- Stamping/sealing will be completed by licensed Professional Engineers of Record in the appropriate disciplines.
- The number of printed copies required will be confirmed with the client prior to production.
- Electronic submittals will be provided in PDF format unless otherwise requested.

Deliverables:

- Final stamped and sealed RFC plans (electronic and hard copy).
- Final specifications (electronic).
- Final engineer's estimate (electronic).
- Printed sets of plans (as required by the City and CMGC).
- Certified electronic deliverables suitable for construction bidding.

Task 3.5: Signal Optimization (ATSPM & Detection) – Final Design

Description:

Kittelson will advance the signal and ATSPM detection design from the 30% stage through the 60%, 90%, and RFC design levels for the 9 signal modification locations and the 14 ATSPM-only upgrade locations. This task includes preparing full plan sets at each submittal stage for the 9 signal modifications and simplified "no-plan plans" for the ATSPM-only locations. All design updates will incorporate feedback from prior submittals, field findings, and coordination with MDT and the City of Missoula.

Assumptions:

- ATSPM design will follow and reference MDT's ATSPM Concept of Operations.
- Signal design will follow MDT Traffic Signal Design Guidelines and applicable MUTCD standards.
- Conduit routing will be based on field verification as no as-builts were available
- Detection layouts will be designed to meet MDT detection requirements for ATSPM data collection and signal operations.

Deliverables:

- Draft signal design plans – 9 intersections
- "No-plan plans" for ATSPM-only upgrades – 14 intersections
- Updated cost estimate and updated specifications
- Comment summary documenting how each review comments were addressed

3.5.1 60% Design and Plan Production

Description:

Prepare refined signal design plans for the 9 signal modifications and updated "no-plan plans" for the 14 ATSPM-only locations. Incorporate field verification and design refinements from the 30% review, including preliminary conduit routing and sizing, refined detection layouts, signal

equipment details, and updated phasing diagrams. Revise the 30% cost estimate based on updated quantities and design refinements. Update the 30% specifications to reflect revised equipment and installation requirements.

- Conduct a site visit with two Kittelson staff and MDT to open junction boxes at selected intersections and confirm available conduit capacity. This will address uncertainty due to unavailable as-builts at 7 intersections and allow the team to assess whether detection design needs to change to match existing routing.

Assumptions:

- All 30% comments will be resolved prior to this stage

Deliverables:

- Comment summary documenting how the 30% review comments were addressed

3.5.2 60% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description:

Kittelson will assemble and submit the 60% design deliverable package for agency review. This includes all draft plans, an updated cost estimate, and draft specifications reflecting design refinements and updates.

Assumptions:

- Plans will be delivered electronically.

Deliverables:

- 60% signal design plans – 9 intersections
- 60% “No-plan plans” for ATSPM-only upgrades – 14 intersections
- 60% refined cost estimate and revised specifications

3.5.3 60% Design Review and Comment Resolution

Description:

Kittelson will review agency comments received on the 60% submittal, attend a comment resolution meeting (if needed), and update the design accordingly. Clarifications will be provided where requested.

Assumptions:

- MDT/City will provide consolidated review comments
- One comment resolution cycle is included

Deliverables:

- Comment summary documenting how the 60% review comments were addressed

3.5.4 90% Design and Plan Production

Description:

Kittelson will prepare near-final signal design plans incorporating all comments from the 60% review. Plans will include finalized conduit routing, detection layouts, and signal equipment callouts for all 9 intersections, along with updated “no-plan plans” for ATSPM-only locations.

Assumptions:

- All 60% comments will be resolved prior to this stage
- Equipment selections will be finalized through coordination with MDT and the City

Deliverables:

3.5.5 90% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description:

Kittelson will compile the 90% submittal package for agency review, including near-final plans, updated cost estimate, and updated specifications.

Assumptions:

- Plans will be delivered electronically.

Deliverables:

- 90% signal design plans – 9 intersections
- 90% “No-plan plans” for ATSPM-only upgrades – 14 intersections
- 90% refined cost estimate and revised specifications

3.5.6 90% Design Review and Comment Resolution

Description:

Kittelson will respond to MDT and City review comments on the 90% submittal and incorporate final changes prior to RFC. A comment log will track all resolutions.

Assumptions:

- MDT/City will provide consolidated review comments
- One comment resolution cycle is included

Deliverables:

- Comment summary documenting how the 90% review comments were addressed

3.5.7 RFC% Design and Plan Production

Description:

Prepare final signal design plans for the 9 signal modifications and final "no-plan plans" for the 14 ATSPM-only locations. Complete final plan sets incorporating all 90% review comments, final quantities, and construction notes.

Assumptions:

- Comment summary documenting how the 90% review comments were addressed
- No major redesign required between 90% and RFC

Deliverables:

3.5.8 RFC% Deliverable Package and Handoff (Plans, Specs, Estimate)

Description:

Kittelson will assemble and deliver the RFC bid package, including final plans, specifications, and engineer's estimate.

Assumptions:

- Any final coordination will be limited to packaging and formatting
- Plans will be delivered electronically.

Deliverables:

- RFC signal design plans – 9 intersections
- RFC "No-plan plans" for ATSPM-only upgrades – 14 intersections
- RFC refined cost estimate and revised specifications

3.5.9 RFC – Stamp, Seal, and Prints/Electronic Distribution

Description:

Kittelson will prepare and distribute stamped and sealed final signal design plans, estimates, and specifications.

Assumptions:

- Plans will be delivered electronically.

Deliverables:

- Final signal design plans – 9 intersections
- Final "No-plan plans" for ATSPM-only upgrades – 14 intersections
- Final refined cost estimate and revised specifications

Task 3.6: Signing Design and Plan Production

Description:

Kittelson will develop signing design plans for the project corridor, including all signs associated with the signalized intersections and corridor signing along Higgins Avenue. Signing design will be advanced through the 60%, 90%, and RFC stages, coordinated with signal and roadway design, and prepared in accordance with MUTCD, MDT, and City of Missoula standards.

The signing design effort will include documentation of existing signs, evaluation of sign reuse, identification of new or revised signs due to design changes, and development of plan sheets showing sign types, placements, and post assumptions.

Assumptions:

- Sign panel design and layouts will follow MUTCD and City/MDT standards
- Sign post structural design is not included; standard mounting details will be assumed
- Signing plans will be submitted as a separate sheet set but fully coordinated with signal and roadway design

Deliverables:

- 60%, 90%, and RFC signing plan sets for the corridor and signalized intersections
- Signing notes and standard mounting references
- Comment response summaries for each design milestone

3.6.1 - 60% Design, Production, Plan Submittal

Description:
Kittelson will develop 60% signing plans using available survey, streetview data, and a field review. The plan set will reflect updated roadway and signal layouts and identify all proposed sign removals, additions, and relocations.

Assumptions:

- Existing sign locations will be documented using available survey and Google Earth
- A field visit will be conducted by two Kittelson staff to confirm existing signing in the field and assess reusability

Deliverables:

- 60% signing plan set
- Draft sign summary or inventory table

3.6.2 - 90% Design, Production, Plan Submittal

Description:
Kittelson will develop 90% signing plans based on review comments and coordination with the City and MDT. The 90% signing plan set will incorporate final sign locations, panel types, post assumptions, and mounting references, ensuring consistency with the updated roadway and signal design.

Assumptions:

- Consolidated 60% comments will be provided by the City and MDT
- No major revisions to signal or roadway layout are anticipated between 60% and 90%
- Final sign panel details and MUTCD codes will be confirmed through coordination

Deliverables:

- 90% signing plan set
- Updated sign summary or inventory table

3.6.3 - RFC Design, Production, Plan Submittal

Description:
Kittelson will finalize the signing plans and complete the RFC submittal. The plans will reflect all comments from the 90% review and be coordinated with final signal and roadway designs for bid-readiness.

Assumptions:

- 90% comments will be resolved prior to RFC production
- No changes to geometry or signal layout will occur after 90%

Deliverables:

- RFC signing plan set
- Final sign summary or inventory table

Task 3.7: Electrical and Lighting Final Design and Analysis

Description: Complete street lighting and electrical design for Downtown Missoula. This project includes roadway lighting for Front Street, Main Street, and Higgins Avenue. Trail lighting analysis and design will also be completed for the Riverfront Trail, Ryman Gateway, and the Beartracks pedestrian Ramp connecting Beartracks Bridge to the Riverfront Trail. Lighting analysis and electrical design will be completed for the following projects:

1. Front Street and Main Street lighting improvements
2. Higgins Avenue Multi-Modal Improvements
3. Riverfront Trail Improvements
4. Ryman Gateway
5. Beartracks Bridge ADA Ramp Trail Connection

The lighting and electrical will be installed in multiple phases as funding allows. Critical lighting infrastructure that is required for the proposed Front Street and Main Street two-way conversion portion of the project will be highlighted for priority installation.

Assumptions:

- Lighting analysis will not be included on side streets outside the immediate intersections with Higgins Avenue, Front Street, or Main Street.
- The Higgins Ave Bridge lighting and electrical was recently installed and will not require upgrades.
- Two decorative LED luminaires meeting City of Missoula standards will be developed, One for roadway lighting the second for pedestrian trail lighting.
    - One alternative dual head roadway luminaire pole detail may be required.
- Electrical Plans will identify locations of new services and/or improvements to existing services. Conduit schedules, voltage drop calculations, electrical details, and service diagrams will be included in deliverables.
- A combined four (4) new electrical services are anticipated for Front St and Main St lighting, up to two additional optional services may be added based on coordination with the City for convenience receptacles. One for Front St, the second for Main St. Up to three (3) new electrical services are anticipated for the Riverfront Trail and Ryman Gateway trail lighting and receptacles. Up to two (2) new electrical services are anticipated for the Higgins Multimodal lighting and receptacles.
- Utility/Agency coordination for services and lighting to be provided by others.

Deliverables:

- Roadway lighting and electrical plans and estimate of probable cost.
- Lighting plans for Front Street, Main Street, Higgins Avenue, Riverfront Trail Connections, the Beartracks Bridge ADA Ramp Trail Connection and the Ryman Gateway sections of the project.

3.7.1 60% Design, Production, Plan Submittal – all elements

Description: Prepare the roadway and trail lighting design and plans to approximately 60% level of completeness. At this milestone the electrical service locations will be determined and preliminary electrical design including conduit schedule, conductor size, conduit fill, and voltage drop calculations.

Assumptions:

- The engineering design work will largely utilize the already completed 30% design as the starting point including documented decisions made during the agency reviews.
- Design elements from the previously submitted FMC Stage 3 package will be included to the extent practical to mitigate potential rework.
- Lighting layout will be updated per the revised roadway typical section layouts developed through the TRT group.
- Roads will be designed to City of Missoula Standards and reference NACTO, Complete Streets, Bicycle Facilities Master Plan, and Pedestrian Facilities Master Plan.
- Work within MDT routes (Orange, Madison, and Higgins) will also conform to MDT design standards to the extent practical, or as directed by the City.
- Signal layout and operation design to be provided by others.
- Utility coordination performed by others.
- Only utilities impacted by the proposed improvements will be included in the design.
    - Lighting electrical service locations to accommodate phased installation will be considered.
- City of Missoula will provide as built plans for City owned lighting installed on the block bordered by E Main, N Higgins Ave, N Pattee St, and E Front Street. These luminaires appear to have been installed as part of the Residence Inn, AC Hotel, and The Wren Hotel projects that were recently completed.
- Up to two workshops with the City of Missoula are anticipated (two hours each with up to two HDR employees) to determine the proposed phasing, anticipated service drop locations, and pole type/attachments.
    - HDR to provide roll plot and anticipated construction cost(s) of proposed lighting layout for use during workshop(s).
- Pole base receptacle design will not be included in the electrical design plans. One meeting with the City of Missoula to discuss the purpose of the requested pole base receptacles and alternative convenience receptacle options at select intersections. (one (1) hour up to 2 HDR Employees)
    - Preliminary total cost and cost per pole for the installation of pole base receptacles and convenience receptacles will be calculated. Including conductor and installation of pole base receptacle. Convenience receptacles are assumed to be

on a separate electrical service from roadway lighting and holiday lighting receptacles.

- "Missoula Parks and Recreation Pedestrian Poles" will be utilized for pedestrian trail lighting.
- Pole top "Holiday Lighting" receptacles will be proposed on all luminaire poles, Roadway and Pedestrian.
    - Preliminary total cost and cost per pole for the installation of pole top receptacles will be calculated. Including conductor and installation of pole top receptacle.

Deliverables:

- 60% Electrical Plan Package – Roll Plots (pdf)
    - Higgins Avenue Multi-Modal Improvements
    - Riverfront Trail Improvements
    - Ryman Gateway
    - Beartracks Bridge ADA Ramp Trail Connection
- Front Street and Main Street Specifications outline with draft special provisions (pdf)
- Construction Cost Estimate (spreadsheet and pdf)
- Voltage drop and conduit fill calculations (pdf)
- Preliminary pole top and pole base receptacle estimate and memo (pdf)
- Supporting documents and files as requested

3.7.2 90% Design, Production, Plan Submittal – all elements

Description: HDR will provide engineering and design services to advance the approved scope from the 60% design. This design stage review will include necessary information required for an intermittent review between Stage 3 and Stage 4 reviews.

Assumptions:

- A single alternative, that has been approved by the City, will be progressed to 90% design.
- Lighting layout will be finalized based on revisions to the typical section, sidewalk, and shared use path design.
- Signal layout and operation design to be provided by others.
- Utility coordination performed by others.
- Only utilities impacted by the proposed improvements will be included in the design.
- "City of Missoula Downtown" luminaire poles are anticipated to be used throughout the project extents for roadway lighting.
- "Missoula Parks and Recreation Pedestrian Poles" will be utilized for pedestrian trail lighting.
- Pole top "Holiday Lighting" receptacles will be proposed on all luminaire poles, Roadway and Pedestrian.

Deliverables:

- 90% Lighting Electrical Plan Package (pdf)
  - Higgins Avenue Multi-Modal Improvements
  - Riverfront Trail Improvements
  - Ryman Gateway
  - Beartracks Bridge ADA Ramp Trail Connection
- Draft special provisions (pdf)
- Construction Cost Estimate (spreadsheet and pdf)
- Voltage drop and conduit fill calculations (pdf)
- Supporting documents and files as requested

3.7.3 RFC Design, Production, Plan Submittal – all elements

Description: HDR will provide engineering and design services to advance the approved scope from the 90% design to RFC (Stage 4). This design stage review will include necessary information required for City of Missoula's Stage 4 (Release for Construction Plan Review).

Assumptions:

- Comments and design revisions at this stage are assumed to be minor and will advance the design from the 90% submittal.
- Lighting layout will be finalized based on revisions to the typical section and sidewalk design.
- Signal layout and operation design to be provided by others.
- Utility coordination performed by others.
- Only utilities impacted by the proposed improvements will be included in the design.
- "City of Missoula Downtown" luminaire poles are anticipated to be used throughout the project extents for roadway lighting.
- "Missoula Parks and Recreation Pedestrian Poles" will be utilized for pedestrian trail lighting.
- Pole top "Holiday Lighting" receptacles will be proposed on all luminaire poles, Roadway and Pedestrian.

Deliverables:

- Lighting Electrical Plan Package (pdf)
- Special provisions (pdf)
- Construction Cost Estimate (spreadsheet and pdf)
- Voltage drop and conduit fill calculations (pdf)
- Supporting documents and files as requested

Task 3.8: Landscape Architectural Design

Description: DJ&A will coordinate all applicable design work with the City of Missoula Parks and Rec and Public Works. This work includes site furnishing selection and layout design, planting design, and irrigation design for the Higgins Ave, Trail Connections & Widening, and the Front/Main sections. Associated work with this area includes design plans, estimating, and specifications. Submittals for this work will be included at the 60%, 90% and 100% (PS&E) deliverables. Additional Landscape design work would be included with an amendment.

Assumptions:

- City of Missoula Park and Rec will provide detailed comments and direction, if desired.
- City will provide information on existing irrigation systems, system requirements, and connection points.
- This work will only be for the Higgins, Front/Main, and Trail elements of the project.
- The Front and Main reconstruction work will be limited. As such, it is assumed that the landscape architectural design will focus on the Orange and Madison Interesections.
- Team will review and incorporate suspended pavement systems for the project based on a standard basis of design product or plan.
- No evaluation by others for existing trees will be included in this scope.

Deliverables:

- Landscape Site Plan, where applicable.
- Landscape Planting Plan
- Landscape Irrigation Plan
- Estimate
- Specifications Sections for Landscape work

Task 3.9: Orange/Main & Front/Madison Intersection Design

3.9.1 60 % Roadway Design and Plan Production

Description: Kittelson will provide roadway engineering and design services for the intersections of Front St./Orange St./Main St. and Front St./Madison St. to advance the approved scope from the revised 15% design to a 60% design. Kittelson's design scope is limited to 75' from the center of each intersection. This design stage review will include necessary information required for City of Missoula's Stage 3 (Preliminary Construction Plan Review) but will be deemed an Informal Stage 3 submittal. Kittelson's scope for this task includes the following:

- Obtain and review past project files to familiarize the team with the current design and decisions made to date.

- Refine the intersection designs based on input from City staff and the rest of the consultant design team. The design will integrate multi-modal elements.

- Develop alignments, profiles, and a finished grade surface model for the intersections that integrates with the corridor model prepared by others.
- Conduct one site visit to verify existing features and review proposed design elements, circulations patters, and site constraints. Assumes 2 staff attend for a 1 night trip.
- Participate in up to four (4) virtual meetings with the project team to coordinate cross-discipline design elements.
- Prepare 60% design plans for the intersections including a plan & profiles, intersection grading details, curb ramp grading details, and median island details.
- Prepare a roadway construction quantities for inclusion in a cost estimate prepared by HDR.

Assumptions:

- Preparation of construction specifications for roadway design is not included in Kittelson's scope. Specifications are assumed to be completed by HDR.
- Additional design elements plan sheets not included above are assumed to be completed by others.
- The engineering design work will largely utilize the already completed 15% design as the starting point including documented decisions made during the agency reviews.
- Design elements from the previously submitted FMC Stage 3 package will be included the extent practical to mitigate potential rework.
- A single alternative, that has been approved by the City, will be progressed to 60% design.
- Roads will be designed to City of Missoula Standards and also reference NACTO, Complete Streets, Bicycle Facilities Master Plan, and Pedestrian Facilities Master Plan.
- Road design will conform to AASHTO's Policy on Geometric Design of Highways and Streets (refered to as the Green Book).
- Work within MDT routes (Orange and Madison Streets) will also conform to MDT design standards to the extent practical.
- Section depths will be based upon traffic projections and geotechnical investigation.
- Signal and Electrical design work are included in separate tasks as specified elsewhere in this document.

- Utility coordination performed by others.

3.9.2 60% Deliverable Package and Handoff Plans (Plans, Specs, Estimate)

Description: Kittelson will provide a 60% plans package to be integrated into DJ&A's plan set at the conclusion of the PE phase. This task includes the work to compile and submit for review PSE.

Assumptions:

- The actual content, organization, and details of this submittal will follow the organization of the previously submitted 30% submittal package(s).

Deliverables:

- Plan Package (pdf)
- Road Construction Quantities (xlsx.)

3.9.3 60% Design Review and Comment Resolution

Description: This task includes the work to review and respond to comments from the 60% (Stage 3) submittal.

Assumptions:

- Comments to be compiled in a Bluebeam Review from the TRT Group, City of Missoula, and MDT.

Deliverables:

- Comment Response Document (pdf)

3.9.4 90% Design and Plan Production

Description: Kittelson & Associates (Kittelson) will provide roadway engineering and design services for the intersections of Front St./Orange St./Main St. and Front St./Madison St. to advance the approved scope from the 60% design to a 90% design. Kittelson's design scope is limited to 75' from the center of each intersection. This design stage review will include necessary information required for an intermittent review between Stage 3 and Stage 4 reviews. Kittelson's scope for this task includes the following:

- Revise the intersection design based on 60% comments from City staff and the rest of the consultant design team.
- Refine alignments, profiles, and a finished grade surface model for the intersections that integrates with the corridor model prepared by others.
- Participate in up to two (2) meetings with the project team to coordinate cross-discipline design elements.
- Prepare 90% design plans for the intersections including a plan & profiles, intersection grading details, curb ramp grading details, and median island details.
- Calculate roadway construction quantities for inclusion in a 90% cost estimate prepared by HDR.

Assumptions:

- Preparation of construction specifications for roadway design is not included in Kittelson's scope. Specifications are assumed to be completed by HDR.
- Additional design elements plan sheets not included above are assumed to be completed by others.
- A single alternative, that has been approved by the City, will be progressed to 90% design.
- Roads will be designed to City of Missoula Standards and also reference NACTO, Complete Streets, Bicycle Facilities Master Plan, and Pedestrian Facilities Master Plan.
- Road design will conform to AASHTO's policy on Geometric Design of Highways and Streets.
- Work within MDT routes (Orange and Madison Streets) will also conform to MDT design standards to the extent practical.

3.9.5 90% Deliverable Package and Handoff Plans (Plans, Specs, Estimate)

Description: Kittelson will incorporate comments and design revisions from the Stage 3 submittal to provide a 90% plans package to be integrated into DJ&A's plan set at the conclusion of the PE phase. This task includes the work to compile and submit for review PSE.

Assumptions:

- The actual content, organization, and details of this submittal will follow the organization of the previously submitted 60% submittal package(s).

Deliverables:

- Plan Package (pdf)

- Road Construction Quantities (xlsx.)

3.9.6 90% Design Review and Comment Resolution

Description: This task includes the work to review and respond to comments from the 90% submittal.

Assumptions:

- Comments to be compiled in a Bluebeam Review from the TRT Group, City of Missoula, and MDT.

Deliverables:

- Comment Response Document (pdf)

3.9.7 RFC Design and Plan Production

Description: Kittelson & Associates (Kittelson) will provide roadway engineering and design services for the intersections of Front St./Orange St./Main St. and Front St./Madison St. to advance the approved scope from the revised 90% design to 100% RFC (Stage 4). Kittelson's design scope is limited to 75' from the center of each intersection. This design stage review will include necessary information required for City of Missoula's Stage 4 (Release for Construction Plan Review). Kittelson's scope for this task includes the following:

- Revise the intersection design based on 90% comments from City staff and the rest of the consultant design team.
- Refine alignments, profiles, and a finished grade surface model for the intersections that integrates with the corridor model prepared by others.
- Participate in up to two (2) meetings with the project team to coordinate cross-discipline design elements.
- Prepare 100% design plans for the intersections including a plan & profiles, intersection grading details, curb ramp grading details, and median island details.
- Calculate roadway construction quantities for inclusion in a 100% cost estimate prepared by HDR.

The RFC deliverable is intended to advance the design to a 100% signed/sealed ready for construction set.

Assumptions:

- Preparation of construction specifications for roadway design is not included in Kittelson's scope. Specifications are assumed to be completed by HDR.
- Additional design elements plan sheets not included above are assumed to be completed by others.
- Comments and design revisions at this stage are assumed to be minor and will advance the design from the 90% submittal.
- A single alternative, that has been approved by the City, will be progressed to 90% design.
- Roads will be designed to City of Missoula Standards and also reference NACTO, Complete Streets, Bicycle Facilities Master Plan, and Pedestrian Facilities Master Plan.
- Road design will conform to AASHTO's policy on Geometric Design of Highways and Streets.
- Work within MDT routes (Orange and Madison Streets) will also conform to MDT design standards to the extent practical.

3.9.8 RFC Deliverable Package and Handoff Plans (Plans, Specs, Estimate)

Description: Kittelson will incorporate comments and design revisions from the 90% submittal to provide a 100% plans package to be integrated into DJ&A's plan set at the conclusion of the PE phase. This task includes the work to compile and submit for review PSE.

Assumptions:

- The actual content, organization, and details of this submittal will follow the organization of the previously submitted 90% submittal package(s).

Deliverables:

- Plan Package (pdf)
- Road Construction Quantities (xlsx.)

3.9.9 RFC – Stamp, Seal, and Prints/Electronic Distribution

Description: This task includes the work to incorporate minor revisions to the PSE, compile and submit stamped and sealed plans and bidding documents for electronic distribution.

Assumptions:

- Minimal changes to the PSE are anticipated at this milestone.

Deliverables:

- Plan Package (signed/sealed by Engineer) (pdf)

4.0 Public Involvement:

Task 4.1: Public Meetings Support and Content

Description:

DJ&A and Big Sky PR will support public meeting attendance, content creation, and outreach efforts during the design phase of work.

Assumptions:

- Big Sky PR will work in partnership with DJ&A on all deliverables prior to submitting to the City.
- A Big Sky PR and DJ&A staff member will attend public meetings to support public engagement activities and answer questions.
- Two public meetings are assumed.
- Content creation including copy drafting and graphic design deliverables will be created in collaboration between Big Sky PR, DJ&A, and City of Missoula staff.
- Media outreach will occur through the City of Missoula.

Deliverables:

- Business resource guide
- Brochure, or other construction phasing related document
- Mailers for open house invitations (x2 open houses)
- Open House Display boards for each open house, reusing as much content as possible.
- Advertising materials: to be determined on a case by case basis.
- BSPR to provide general feedback on overall project communications plan.

Task 4.2: Public Meetings and Comment Tracking

Description:

Big Sky PR to track comments from survey and open house boards and create a communications database to log comments received during public open house.

Assumptions:

- Big Sky PR and DJ&A will support the City of Missoula by tracking comments received at any public open house.
- Attendance by BSPR at open houses

Deliverables:

- Communications database
- Summarize survey responses and open house feedback/comments

4.2.1 Final Design Public Meeting (Spring 2026)

Description:

Public meeting deliverables, staffing, and facilitation support for an in-person open house prior to construction. This includes virtual participation opportunities on the Engage Missoula website in partnership with the City of Missoula.

Assumptions:

DJ&A and Big Sky PR will support the City of Missoula with deliverable creation, webpage copy updates, advertising copy and deliverable creation and distribution, and open house attendance.

Deliverables:

- Advertising copy and design for open house outreach
- Updated brochure and business resource guide, if needed
- Website and FAQ updates

4.2.2 Construction Kickoff Public Meeting

Description:

Open house and/or accompanying pop-up events to inform the public and business of construction beginning.

Assumptions:

- This event (or multiple small events) will be held a few weeks prior to the kickoff of construction to ensure the public and businesses are reminded as to where resources are located and what to expect in the initial phase of roadwork.
- DJ&A and Big Sky PR will support the City of Missoula in content drafting, advertising, and deliverable design and distribution.

Deliverables:

- Advertising copy and design for open house outreach
- Updated brochure and business resource guide, if needed
- Website and FAQ updates

Task 4.3: Working Group Facilitation

Description:

Virginia Tribe's scope of work includes ongoing participation in the City's SAM Team particularly as it relates to planning for, and facilitating the SAM Working Group and any other public involvement strategies/activities requested by the Team.

Assumptions:

- Although sub-contracting under DJ&A, Ms. Tribe will continue to work through the SAM Project Manager and Team in terms of developing and finalizing Working Group processes and materials and other requested public involvement.
- Ms. Tribe's sub-contract assumes 7 to 11 calendar year 2025/2026 Working Group meetings and defined pre and post responsibilities per meeting. Ms. Tribe will continue to assist the Team in evaluating and determining specific Working Group tasks.
- The City will continue to arrange Working Group logistics per meeting and communicate with Ms. Tribe accordingly.

Deliverables:

- Initial development of draft Working Group agendas and pre-work for review and finalization by the SAM Team.
- Distribution of finalized agenda to Working Group members and City administration to be posted on City sites.
- Facilitation and meeting documentation to be reviewed by the SAM Project manager. Upon approval, distribution to Working Group members and City administration according to the facilitator's communication framework.
- Availability for ongoing communication and process management with SAM Project Manager and DJ&A.
- Other deliverables as requested throughout the 2025/2026 calendar year.

5.0 Environmental:

Task 5.1: Section 408 Approval

5.1.1 Levee Modification Analysis

Description:

The Area III levee is located along the north bank of the Clark Fork River within the project area. The proposed ADA ramp will involve one or more support structures (bent) located within the levee prism. Proposed trail enhancements may involve changes to the levee prism. Perform engineering analysis to demonstrate the proposed modifications do not adversely affect the levee. Work includes:

1. Coordinate with the City to obtain information regarding the levee construction and maintenance.
2. Coordinate with geotechnical engineers and USACE to assist in obtaining Drilling and Invasive Program Plan (DIPP) approval for geotechnical investigative work.
3. Evaluate subsurface materials based on existing boring reports and preliminary geotechnical reports completed for the project.
4. Prepare CAD details showing the limits of work within the levee. This will consist of a plan, elevation, and typical section.
5. Verify that the proposed modifications meet the USACE guidelines and standards for slope stability and underseepage. Conduct evaluations on slope stability and underseepage based on the subsurface investigation and subsequent laboratory testing for pertinent information required to evaluate geotechnical properties within a levee project.
6. Conduct hydrology and hydraulics evaluation to analyze effect of the proposed condition on surface water elevations, velocities, scour depths/extents, and riprap stability.
7. Prepare discipline specific reports documenting the analyses conducted to evaluate the existing and proposed conditions associated with the project area..

Assumptions:

- The DIPP will be completed in accordance with the requirements of the USACE Engineering Regulation (ER) 1110-2-1807 *Drilling and Invasive Activities at Dams and Levee Systems* (1 June 2023). It is assumed the driller will prepare the DIPP and provide all required attachments such as resumes for key personnel, data sheets for equipment to be used, and an Emergency Action Plan (EAP). HDR will provide supplemental environmental documentation, review, and submit to the levee owner and USACE.
- It is assumed HDR will coordinate with the levee owner to obtain a Statement of No Objection for the DIPP prior to submittal to USACE.
- It is assumed that HDR will provide the DIPP in electronic copy only through the USACE DOD Safe online transfer portal.
- It is assumed that HDR will coordinate comments from USACE to the driller.

- All proposed construction disturbances within the 100-year floodplain will be replaced to match existing conditions, preventing the need for a floodplain permit.
- The floodplain model used for the 2019 Higgins Avenue Bridge Rehabilitation Project 408 approval is available and will be used as the basis for hydraulic modeling in this project.
- Hydraulic conditions will be defined by the current FEMA Flood Insurance Rate Map (FIRM) Study.
- Foundation and structural support section will be solidified at the 60% design condition and revisions of the hydraulic analysis will not be required for the subsequent design deliverables.

Deliverables:

- USACE DIPP for geotechnical boring

5.1.2 Section 408 Request

Description:

Based on the preliminary design, a USACE Section 408 approval is required for this work. Federal guidance provides direction for the Section 408 Request submittal by the enclosure titled “Section 408 Submittal Package Guide” and in accordance with the requirements stipulated in USACE Engineering Circular (EC) 1165-2-220 *Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408* (10 September 2018). The following items are included in the scope as part of the Section 408 Request:

1. Sponsor Coordination: HDR will coordinate with the levee sponsor to discuss the proposed project, determine what levee impacts the sponsor would like to discuss and mitigate, and confirm what operations and maintenance modifications may be required as a result of the proposed project. It is assumed that the HDR Project Manager and the Section 408 lead will attend this meeting. The Section 408 lead will attend virtually.
2. USACE Coordination: HDR will coordinate with the USACE Seattle District to initiate the approval process and to discuss review comments on the draft submittal. Two formal meetings with USACE are included in the scope and assumed to occur by conference call. The meetings will be attended by the HDR Project Manager and 1 additional staff member. The scope includes preparing exhibits, attending the meetings and providing documentation.
2. Prepare the formal Section 408 Request to include the following items
    a. Request for Approval of Levee Modification: HDR will prepare a written request for the levee modification project. The letter will be submitted through the levee sponsor (City)

b. Technical Analysis and Design Adequacy: Include technical information from the Levee Modifications Analysis
c. Real Estate Analysis: Real estate information will comply with ER 405-1-12 and include needed acquisitions, documentation, and the real estate process. It is assumed that the levee owner will provide easement or fee title documentation of the property associated with the levee system, if requested by USACE Seattle District.
d. Discussion of Residual Risk: Proposed modifications will be evaluated for potential to cause the Existing Project to incur more frequent damage as a result of flooding and consequently require Federal Assistance. Coordination will be performed with USACE to determine whether a Risk and Uncertainty Analysis with Flood Damage Assessment (R/U with FDA) is needed. It is assumed that for the purpose of this scope that an R/U with FDA would not be necessary.
e. Administrative Record: The approval request will chronologically document key deliverables, actions, and decisions related to the applicants proposed modifications to include environmental reports, judge's decisions, permits, etc
f. Executive Order 11988 Considerations: Executive Order (E.O.) 11988, Floodplain Management, requires Federal agencies to consider potential alternatives to proposed actions within floodplains to avoid adverse impacts and incompatible development in a floodplain. The approval request will include justification for construction of the modification within the floodplain in accordance with requirements of EO 11988.
g. Environmental Protection Compliance: Section 408 actions must be in full compliance with NEPA and applicable laws, executive orders, rules and regulations. The approval request will document considerations regarding NEPA compliance.
h. Operations and Maintenance. Identify operation and maintenance requirements needed throughout the life of the proposed alteration and whether modifications to the levee operations and maintenance strategy are required.

3. Levee Special Provisions. Three project special provisions are anticipated for levee construction: for the Emergency Action Plan (EAP), for Levee Construction Requirements, and for the required Contractor's DIPP for the drilled shaft pier in the levee slope. Coordination of these special provisions will be covered in the meetings with the levee owner and the pre-submittal meeting with USACE.
4. Document and respond to USACE comments; provide additional information as necessary.

Assumptions:

- It is assumed that the proposed construction will alter the civil works project and the civil works project right-of-way (ROW). The associated impacts will be evaluated and presented within the Section 408 Request.
- Minor impacts to the levee are anticipated. Section 408 Approval will be at the District Level. If USACE determines that the impacts to be more significant, additional scope will be required to prepare and process the approval.
- The discipline specific reports from Task 5.1.1 will be included in the Section 408 Request and not submitted separately.

- A Hydraulics Report is not included in the scope and will not be included with the draft permit information
- Changes to the existing levee operations and maintenance manual will not be required. Providing an updated O&M is not included in the scope.
- Efforts associated with recertification of the levee is not included in the scope of services.
- The HDR Project Manager and one additional staff member will meet with the local floodplain administrator in Missoula to discuss the EAP.
- The Section 408 Request will be prepared in accordance with USACE Engineering Circular (EC) 1165-2-220 *USACE Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408* (effective September 10, 2018).
- Construction phase services and post-construction support of the Section 408 authorization, including compliance with any post-construction terms and conditions associated with the Section 408 authorization, is not included with this Scope of Services.
- USACE is currently working on a Section 408 rulemaking. It is not currently known the timeline or the exact language being used for the rulemaking at this time. It is anticipated that EC 1165-2-220, as referenced above, will be effective for the duration of this Project. Should the rulemaking become effective prior to the end of the Project or prior to the Section 408 authorization request, an amendment for additional services may be required.
- In accordance with EC 1165-2-220, risk assessments are a potential part of the Section 408 Request process, as deemed appropriate by the USACE District. It is assumed, for the purposes of this Scope of Services, that no risk assessment or failure mode analysis will be required. If a risk assessment, or some version thereof, becomes required an amendment for additional services may be required.
- USACE EM 1110-2-1913 *Design and Construction of Levees* currently has an effective date of April 30, 2000. The USACE Levee Safety Center is working on an updated version of this EM. It is not known at this time the specific updates that are being made from historic draft versions available for review or when the new version will be effective. At this time, the aforementioned effective version is being assumed for design, analysis, and compliance with Section 408 criteria. If the new version becomes effective during the course of the Project, an amendment for additional services may be required.
- USACE ER 1110-2-1806 *Earthquake Analysis, Evaluation and Design for Civil Works Projects* became effective June 29, 2024. It is not clear how these requirements will be implemented during the Section 408 process. At this time, these updated requirements are not included in this Scope of Work. Should this be a requirement during the course of the Section 408 process and become required for design, an amendment for additional services may be required.
- The USACE Seattle District will lead NEPA compliance for the requested action affecting the levee. HDR will provide the environmental impact analysis to support USACE's NEPA decision making.
- It is assumed that one set of comments will be received from USACE Seattle District. These comments will be incorporated in a revised version of the Section 408 Request that will be coordinated with the levee sponsor prior to redelivery to USACE.

- Based on the preliminary design, a drilled shaft is planned to be constructed on the riverward slope of the levee. As a result, the contractor will be required to prepare a DIPP associated with the Section 408 Request for the drilled shaft specifically. A special provision will be prepared advising the contractor of their requirements associated with the documentation and analysis. Hours have been added for the review of the contractor's EAP and DIPP, coordination of those comments back to the contractor, and coordination of revised corrected documents to the levee owner and USACE.

Deliverables:

- Levee Sponsor Coordination Meeting Notes (PDF)
- USACE Section 408 Coordination Meeting Notes (PDF) for Two Meetings
- Comment/Response Matrix (PDF)
- Draft and Final Section 408 Approval Request (PDF)

Task 5.2: Final Environmental Matters and NEPA Support

5.2.1 Final Environmental/Biological Review

Description:

This task involves a final review of plans and specifications to capture environmental special provisions, commitments, and mitigation, and includes the following tasks:

1. Review project plans specifications and special provisions to review environmental matters have been addressed and that agreed to mitigation measures and environmental commitments, including erosion control, seeding and noxious weed control are included or addressed in the completed project contract bid package.
2. Coordinate and review environmentally related changes to the plans, special provisions, or environmental documentation.

Assumptions:

- None

Deliverables:

- None

5.2.2 Categorical Exclusion Re-evaluation

Description:

Prepare one re-evaluation of the final Categorical Exclusion environmental document to document changes in project scope or regulations that have occurred after approval of the environmental document and prior to construction.

Assumptions:

- One re-evaluation of the approved Categorical Exclusion environmental document will be required due to either changes in project scope/design, impacts, or environmental regulations. The re-evaluation will be documented using the Montana Department of Transportation's current Categorical Exclusion form.

Deliverables:

- Draft and Final Categorical Exclusion Re-evaluation (electronic)

6.0 Stormwater and Drainage:

Task 6.1: 60% Design, Production, Plan Submittal – all elements

Description: DJ&A will provide engineering and design services for the design of the stormwater infrastructure to advance the approved scope from a 30% design to a 60% design. This design stage review will include necessary information required for City of Missoula's Stage 3 (Preliminary Construction Plan Review) but will be deemed an Informal Stage 3 submittal. The approved scope is for:

- Higgins Avenue from Broadway to Brooks Street
- Front & Main Street from Orange to Madison (intersections).

The specific boundaries of the above scope elements are as specified in the 30% Higgins design package and 15% Front & Main design package.

The 60% deliverable is intended to advance the following design items: Storm drain plans, storm drain profiles, storm drain details, Stormwater Management Control plans and details, and the draft stormwater report.

Assumptions:

- The engineering design work will largely utilize the already completed designs as the starting point including documented decisions made during the agency reviews.
- Proposed stormwater designs will be designed according to City of Missoula Standards
- The draft stormwater report will be utilized as a working document and modified accordingly to capture design decisions and intent.
- Assume that the Front & Main designs will be limited with the only major reconstruction occurring at the Orange and Madison Intersections.

- Assume that the Higgins Avenue reconstruction will be limited to the roadway. Sidewalk and curb work will be limited. Associated stormwater infrastructure modifications are expected to be restricted in scope. Stormwater design will be performed as necessary to support the revised roadway improvements, but overall drainage improvements are anticipated to be minor and localized.
- The South 4th Street Clark Fork Outfall Water Quality Improvements Capital Improvements Plan will no longer be considered or incorporated into the stormwater design unless it aligns with the Higgins scope.

Deliverables:

- Completed 60% storm drain plans
- Completed 60% storm drain details
- Completed 60% bid item list with specification designations
- Completed 60% engineer's costs based upon elements identified above
- Completed 60% stormwater details
- Completed City of Missoula standard drawing list
- Draft Stormwater Drainage Report

Task 6.2: 90% Design, Production, Plan Submittal – all elements

Description:

The 90% deliverable is intended to advance the following design items: Storm drain plans, storm drain profiles, storm drain details, Stormwater Management Control plans and details, and the draft stormwater report.

Assumptions:

- The engineering design work will largely utilize the already completed 60% design as the starting point including documented decisions made during the agency reviews.
- Proposed stormwater designs will be designed according to City of Missoula Standards
- The draft stormwater report will be utilized as a working document and modified accordingly to capture design decisions and intent.

Deliverables:

- Completed 90% storm drain plans
- Completed 90% storm drain details
- Completed 90% bid item list with specification designations
- Completed 90% engineer's costs based upon elements identified above
- Completed 90% stormwater details
- Completed City of Missoula standard drawing list

- Draft Stormwater Drainage Report

Task 6.3: RFC Design, Production, Plan Submittal – all elements

Description:

The RFC deliverable is intended to finalize the following design items: Storm drain plans, storm drain profiles, storm drain details, Stormwater Management Control plans and details, and the draft stormwater report.

Assumptions:

- The engineering design work will largely utilize the already completed 90% design as the starting point including documented decisions made during the agency reviews.
- Proposed stormwater designs will be designed according to City of Missoula Standards
- The finalized stormwater report will document design decisions and intent made throughout the project.

Deliverables:

- Completed RFC storm drain plans
- Completed RFC storm drain details
- Completed RFC bid item list with specification designations
- Completed RFC engineer's costs based upon elements identified above
- Completed RFC stormwater details
- Completed City of Missoula standard drawing list
- Stormwater Drainage Report

7.0 Geotechnical:

Description:

A preliminary geotechnical investigation and report was conducted as part of the preliminary engineering work. Tetra Tech will provide necessary geotechnical consultation to DJ&A to advance the design plans. Following the field investigation and laboratory testing, Tetra Tech will prepare a project geotechnical report to advance the project to 60%, 90% and RFC plans and specifications.

Assumptions:

- The field investigation and laboratory testing will be completed prior to the plans and specifications being advanced to the 60% design phase.
- Tetra Tech will incorporate modified or updated traffic counts from DJ&A for the 60%, 90%, and RFC plans and specification.

Deliverables:

- Provide geotechnical report that incorporates geotechnical and soils information, and recommended pavement sections for Front Street, Main Street, Higgins, Ryman Street, and the Caras Park parking area.
- Review the 60%, 90%, and RFC plans and specifications.

Task 7.1: Field Investigation and Lab Testing

Description:

Tetra Tech will coordinate and oversee drilling of geotechnical borings at the following estimated locations:

Front Street (extending from Orange Street to Madison Street), reconstruct section:

4 borings from Orange to Higgins, 6 borings from Higgins to Madison Street (every 400 feet).

Main Street (extending from Orange Street to Madison Street), bulb outs and bike lanes:

4 asphalt cores or borings from Orange to Higgins, 6 asphalt cores or borings from Higgins to Madison Street (every 400 feet), or a combination of cores and borings.

Higgins Avenue (extending from Broadway Street to Brooks Avenue):

4 borings from Broadway to Higgins Bridge, 5 borings from Higgins Bridge to Brooks Street.

Ryman Steet (extending from Front Street to the bottom of the hill):

2 borings to deeper depths to advance through the fill.

Beartracks ADA Ram Area:

3 borings. One through the levee and two in the park area.

Pavement borings will generally extend to a depth of 10 feet, with the exception of the two Ryman Street borings, which will be advanced up to 25 feet deep to determine the fill properties for roadway or retaining wall design.

Tetra Tech will perform Dynamic Cone Penetrometer (DCP) testing in all of the geotechnical boring locations, starting at a depth just below the pavement and extending to a depth of a minimum of 5 feet, depending on the density of the soils.

Tetra Tech will perform infiltration testing as requested by the design team, and will utilize the geotechnical borings to the extent possible to perform the tests.

Assumptions:

- Tetra Tech will ensure all utility locations are marked and clear prior to drilling.
- Tetra Tech will secure traffic control and flaggers for all drilling locations.
- Tetra Tech will backfill all borings utilizing a product approved by the City of Missoula, including asphalt cold patch or a flowable grout cement.

Deliverables:

- Geotechnical boring logs and laboratory testing to utilize in preparation of the initial and final geotechnical reports.

Task 7.2: Final Geotechnical Report

Description:

A final geotechnical memo or amended report will be prepared following a review of the geotechnical report by the design team, and edits made in the RFC plans and specifications review.

Assumptions:

- Design team and RFC comments will have been made prior to submittal of the final geotechnical report.

Deliverables:

- Final geotechnical memo or report incorporating design team comments to the report, and comments to RFC plans and specifications.

Task 7.3: Construction QA Testing Plan

Description:

Tetra Tech will develop a comprehensive Construction QA Testing Plan, incorporating guidelines set by the City of Missoula, the Montana Department of Transportation, and the Federal Highway Administration. The plan will outline testing frequencies and sample quantities for the various construction materials being utilized on the project; soils, asphalt, and concrete.

Assumptions:

- Tetra Tech will follow guidelines set by the City of Missoula, the Montana Department of Transportation, and the Federal Highway Administration.

Deliverables:

- Comprehensive Construction Quality Assurance Plan, including frequencies and sampling quantities.

8.0 Survey: (HOLD)

Description:

Assumptions:

Deliverables:

9.0 Right-of-Way:

Task 9.1: Prepare R/W Documents

Description:

- Prepare Right-of-Way (R/W) exhibits in accordance with City of Missoula and/or MDT R/W Design Manual and CADD Standards.
- Create bargain and sale deeds and associated exhibits.

Assumptions:

- There will be 6 parcels subject to R/W acquisition and/or construction permits.
- There will be approximately 50 parcels subject to approach transition (ONO) with no need for R/W acquisition.
- This scope does also include any Temporary Construction Easements (TCE's) as identified with the 30% plan package. If additional TCE's are identified or requested by the CM, they can be added with an amendment.
- This includes time for the Parsons Street Easement
- DJ&A will send easement / ONO to the parcels. All coordination and follow-up discussion will be included under task 9.3.

Deliverables:

- R/W plan set.
- Bargain and sale deed and associated exhibit for each affected parcel.

Task 9.2: Appraisals

Description:

Use a certified general appraiser to provide an opinion of value using accepted standards of professional appraisal practice as outlined in the MDT Appraisal Manual, UASFLA, and FHWA

guidelines. Appraisals will be completed for all parcels for which R/W acquisition and/or construction permits are required.

Assumptions:

- Appraisals will be provided for a maximum of 5 parcels.

Deliverables:

- An appraisal report for each subject parcel.

Task 9.3: Negotiations & Acquisitions

Description:

- Prepare necessary acquisition documents and acquisition packages, make all reasonable efforts to contact the owner or the owner's representative, make appointments, initiate correspondence, update title information, meet with owners, and resolve any outstanding items.
- Responsible for all activities associated with the R/W acquisition process, including providing necessary documents to show ownership of property to be acquired; obtaining adequate interest in property; clearing all encumbrances; preparation of timely and adequate written records; providing recommendations for settlements; and direct negotiations with property owners and/or their attorneys.

Assumptions:

- Will make a good faith effort to negotiate mutually agreeable terms between parcel owner and City of Missoula. There are no guarantees that the negotiations will result in acquisition. Failure to not acquire a parcel will not be the responsibility of DJ&A so long as a good faith effort is made.
- There will be four (4) parcels subject to acquisition.

Deliverables:

- Comprehensive R/W packets that include parcel acquisition histories and all documents needed to execute the desired acquisitions.

10.0 Traffic and Safety:

Description:

Assumptions:

Deliverables:

Task 10.1: Final Traffic Modeling and Technical Support

Description:

Assumptions:

Deliverables:

11.0 Utilities:

Description: This work package focuses on advancing the existing utility analysis and addressing potential utility conflicts associated with the Downtown SAM project. It includes extensive coordination between utility owners and the design team. Building upon the previously completed 30% design utility coordination and planning, DJ&A will progress utility analysis and coordination for each project element through to the 100% Ready-for-Construction (RFC) final design.

Scope of Work includes utility analysis of the Following Key Components:

- **Trail Connection and Widening:**
  Enhancements include Ron's Riverfront Trail, Ryman Street Gateway connectivity, Pattee Street south terminus connectivity, and reconstruction of the Kiwanis Park Trail.

- **Higgins Avenue Improvements:**
  This component advances the design of Higgins Avenue, including a 4-to-3 lane conversion, improved bicycle facilities, ADA access, bus stops, and other street amenities. Building on the 30% design, DJ&A will provide engineering and design services to reach RFC final design. The project limits extend from Brooks Street to Broadway (approximately 3,500 feet).

- **Front/Main Two-Way Restoration:**
  Conversion of Front and Main Streets from one-way to two-way traffic between Orange Street and Madison Street. This includes ingress and egress design for Hartman Street and Parsons Drive.

- **Beartracks ADA Ramp:**
  Provides ADA-compliant connectivity between Higgins Avenue Bridge, Ron's Riverfront Trail, and Caras Park.

DJ&A will continue to lead utility coordination efforts throughout this package. Ongoing coordination to resolve utility conflicts will occur as interim and final design packages for each key component are developed. Under this scope, DJ&A will refine, develop, and finalize the utility coordination findings of each component to the 100% RFC level.

Assumptions: Utility coordination for the Downtown SAM project assumes that existing utility mapping and records obtained during the 30% design phase are sufficiently accurate to inform continued design development. It is anticipated that all known utility owners will remain engaged and responsive throughout the coordination process, and that no major relocations will be required outside the current project limits.

- **Trail Connection and Widening:**
  Due to the trail's alignment within existing public right-of-way and parkland, utility conflicts are assumed to be minimal, and any necessary adjustments will be limited to shallow utilities such as irrigation or lighting.

- **Higgins Avenue:**
  Coordination assumes that utility infrastructure, including water, sewer, gas, electric, and telecommunications, will be evaluated for potential conflicts with the proposed lane reduction, ADA improvements, and transit enhancements. Utility relocations, if needed, are expected to be feasible within the existing corridor and will not require significant service interruptions.
- **Front/Main Two-Way Restoration:**
  It is assumed that utility infrastructure beneath both corridors is adequately documented and that any modifications to ingress/egress at Hartman Street and Parsons Drive will not impact major utility lines.
- **Beartracks ADA Ramp:**
  It is assumed that utility conflicts will be limited to surface-level infrastructure and that coordination with utility owners will allow for minor adjustments to accommodate ADA-compliant grades and connections.

Across all components, DJ&A assumes that utility coordination will be iterative and collaborative, with timely input from utility owners to support the advancement of each design element to the 100% Ready-for-Construction level.

Deliverables:

- All deliverables for this work package are listed in subtasks identified herein.

Task 11.1: Conflict Matrix

Description: The conflict matrix serves to systematically document and analyze potential conflicts between existing utilities such as natural gas, electric, telecommunications, water, sewer, and stormwater as well as the proposed project elements like roadways, sidewalks, trees and drainage systems. The conflict matrix allows for early identification of conflicts, enabling the design team and its partners to propose design modifications or utility relocations to mitigate issues before construction begins. The matrix serves as a formal record that can be referenced throughout the project lifecycle, ensuring all stakeholders are aware of potential issues and the strategies in place to address them.

Assumptions:

- Utility Location Accuracy: It is assumed that the existing utility locations are accurately represented based on available records and surveys.
- Design Standards: The conflict matrix assumes adherence to local and national design standards, which dictate minimum clearances and safety requirements between utilities and other infrastructure.

- Stakeholder Input: It is assumed that input from utility companies and other stakeholders has been incorporated into the matrix, ensuring all relevant parties are aware of potential conflicts.
- Dynamic Nature: The conflict matrix is a living document that will be continuously updated as the design progresses and new information becomes available. It assumes that ongoing communication will be maintained among the project team and utility providers.
- Risk Assessment: Assumptions regarding the likelihood and impact of conflicts should be included, allowing for prioritization of issues based on their potential to disrupt project efforts.
- Regulatory Compliance: It is assumed that all proposed solutions will comply with local regulations and permitting requirements, which may affect how conflicts are resolved.
- Weekly utility review and coordination meetings will begin to take place around the 90% design and continue through utility relocates.

Deliverables:

- Living Utility Conflict Matrix Document

Task 11.2: SUE II Plan and Coordination with Jackson

Description: This task includes the development and execution of a Subsurface Utility Engineering (SUE) Level II investigation for the project area in downtown Missoula. The objective is to identify, locate, and map existing underground utilities with a high degree of horizontal and vertical accuracy (± 0.1 ft). Coordination with Jackson, the general contractor, will be integral to align the SUE investigation with construction phasing, access constraints, and risk mitigation strategies. This task will involve potholing, utility owner coordination, and integration of findings into the project's design base mapping.

Assumptions:

- Jackson will provide current construction phasing plans and access requirements to inform SUE prioritization.
- Traffic control for field investigations will be coordinated with the City of Missoula and Jackson, with support from the design team as needed.
- Utility owners will respond to coordination requests in a timely manner and provide available records.
- Potholing is included in this task; Potholes will be performed by Blue Mountain Directional Drilling (BMD) to verify bury depths of utilities that are potentially in conflict.
- Existing utility records and previous SUE data (if any) will be made available to the design team.

Deliverables:

- SUE Level II utility base map (CAD and PDF formats), showing horizontal locations of identified utilities, and bury depths of utilities potholed.
- Utility conflict matrix identifying potential conflicts with proposed improvements.
- Meeting notes and coordination logs from discussions with Jackson and utility owners.
- Updated utility composite plan integrated into the final design base files.
- Summary memo documenting SUE methodology, findings, and recommendations.

Task 11.3: Final Utility Plans and Comment Resolutions

Description: Final Utility Plans are essential documents that outline the proposed layout and design of utility infrastructure for the project. These plans will be shared with all involved utility companies alongside official notification letters to ensure all stakeholders are informed, ensuring timely relocations.

Assumptions: Key components of the Final Utility Plan include;

- Utility Engagement: Continued utility coordination and consultation through the duration of the final utility plans.
- Utility Layout: Detailed drawings showing proposed locations of the various utilities involved.
- Conflict Identification: Final assessment of potential conflicts with existing utilities, including the conflict matrix described above. Conflict identification will also include proposed solutions that include adjustments to mitigate identified conflicts.
- Regulatory Compliance: Assurance that all plans adhere to local codes, regulations, and utility company standards. Documentation of any required permits and/or approvals needed for utility installations.
- Construction Considerations: Notes on construction methods, timelines, and any anticipated disruptions to existing services. Recommendations for coordination with involved utility companies during construction to minimize service interruptions.
- Stakeholder Engagement: Including a section outlining how feedback from utility companies will be incorporated into the final design and contact information for project leads to facilitate necessary communications and address concerns.
- Presentation & Production: The Utility Plans will be a standalone plan set utilizing the surface improvement files and basemap. The utility plans will call out all impacted utilities requiring relocation and propose a location for them. The individual utility companies will provide their own design plans for their individual relocations; however, the utility plans will convey the proposed relocated locations of all utilities. All relocated utilities shown on the plans will be tied to the conflict matrix.

Deliverables:

- 60% through RFC – Utility Conflict Matrix

- 60% through RFC Design Level Memo outlining the required permits and/or approvals needed for utility installations/relocations
- Final Relocation Plans: Detailing anticipated conflicts
- Official Notification Letters: Sent alongside Relocation Plans to utility companies

Task 11.4: Dry Utility Relocation

11.4.1: Formal Utility Notifications (1st and 2nd notifications)

Description: Upon completion of the utility design plans, formal notifications will be issued to all affected utility owners to inform them of the proposed improvements and potential impacts to their infrastructure. The first notification will serve as an initial alert and request for review, while the second notification will confirm final design details and request any final input or coordination needs. These notifications are critical for ensuring utility owner awareness, facilitating timely responses, and minimizing construction conflicts.

Assumptions:

- Notifications will be sent via email with attached PDF memorandums and plan sheets; hard copy letters may be used upon request or if email is unavailable.
- The first notification will be issued immediately following the completion of 90% utility plans; the second notification will follow at 100% plan completion.
- Utility owners will be given a minimum of 15 business days to respond to each notification.
- Jackson will be copied on all correspondence to maintain alignment with construction coordination.
- A follow-up phone call or meeting may be scheduled if no response is received within the designated timeframe.

Deliverables:

- First notification memorandum (PDF) with 90% utility plans, emailed to all utility owners.
- Second notification memorandum (PDF) with 100% utility plans, emailed to all utility owners.
- Distribution log documenting recipients, dates sent, and responses received.
- Coordination summary memo outlining utility owner feedback and any required design adjustments.

11.4.2: Negotiate for Utility Agreements

Description: Complete final utility agreements by submitting applications to the affected utility companies, review and negotiate the estimates from the utility companies and finalize the

agreements with the utility companies. MDT permitting will be required for dry utility relocates happening in MDT Right-of-Way (R/W).

Assumptions:

- Utility Companies will relocate their utilities in conflict.
- Utility Companies will stake out their own relocation work (recommended relocation alignment approval provided by DJ&A).
- MDT Utility Occupancy and Location Agreement will be the only permit needed for utility relocates happening in MDT R/W.
- Utility Companies will provide a schedule for their utility relocates showing completion before the start of road construction.

Deliverables:

- Executed Utility Agreements with all utility companies in conflict.
- Executed Permitting through the MDT's Utility encroachment process for on-system locations.

11.4.3: Relocate Utilities

Description: Administer agreements and provide for adjustment of utility facilities. Review and research agreements and other pertinent information, have contact with land owners being affected by utility relocates, stake utility relocates, and review and approve utility occupancy forms and authorize utility companies to commence relocation.

Assumptions:

- All dry utilities will be relocated within the existing R/W, acquired R/W for the road construction for this project, or a private existing easement. Drafting new easements, solely for dry utilities, will not be part of this scope.
- DJ&A will stake the utility relocations. If the utilities need to be restaked for any reason, the associated cost will be the responsibility of the Utility Company.
- All utilities will be relocated prior to the start of construction.

Deliverables:

- None

Task 11.5: Sanitary Sewer Utility Design (60% though RFC)

Description: The design of roadways, sidewalks, boulevards, and multimodal infrastructure will result in grade adjustments throughout the project corridor. These changes will directly impact the elevation of existing sanitary sewer appurtenances such as manhole rims and cleanouts. This

task includes the identification and adjustment of surface-level sanitary sewer features to match proposed grades. The design will be carried through the 60% submittal and refined through the RFC phase to ensure compatibility with final surface improvements and ADA compliance.

Assumptions:

- Adjustments will be limited to surface features only, including manhole rims and cleanouts.
- No new subsurface sanitary sewer infrastructure (e.g., main lines, service lines, or new manholes) will be designed as part of this task.
- Existing sanitary sewer infrastructure data will be available and verified prior to design.
- Coordination with the City of Missoula's Public Works Department will be required to confirm acceptable adjustment methods and materials.
- All adjustments will comply with local standards and specifications, including accessibility and maintenance requirements.

Deliverables:

- Sanitary sewer improvements showing adjusted rim elevations and cleanout locations will be shown on the utility plans.
- Tabulated list of adjusted sanitary sewer features with proposed elevations.
- Coordination summary with City of Missoula confirming design approach.
- RFC-ready utility sheets incorporating final adjustments and annotations.

Task 11.6: Water Utility Design (60% though RFC)

Description: The design of surface infrastructure—including roadways, sidewalks, boulevards, and multimodal facilities—will result in grade changes throughout the project corridor. These changes will necessitate adjustments to surface-level water utility appurtenances such as valve boxes, curb stops, and hydrant bases. This task includes identifying impacted water utility features and designing grade adjustments to ensure proper function, accessibility, and compliance with city standards. The design will progress from the 60% submittal through RFC with coordination to ensure compatibility with final surface grades and construction sequencing.

Assumptions:

- Adjustments will be limited to surface-level water utility features only, including valve boxes, curb stops, and hydrant bases.
- No new subsurface water infrastructure (e.g., water mains, service lines, or new hydrants) will be designed as part of this task.
- Existing water utility data will be available and verified prior to design.
- Coordination with the City of Missoula's Public Works Department will be required to confirm acceptable adjustment methods and materials.

- All adjustments will comply with local standards and specifications, including accessibility and maintenance requirements.

Deliverables:

- Water distribution improvements showing adjusted elevations and locations of surface features will be shown on the utility plans.
- Tabulated list of adjusted water utility appurtenances with proposed elevations.
- Coordination summary with City of Missoula confirming design approach.
- RFC-ready utility sheets incorporating final adjustments and annotations.

12.0 Construction Administration:

Description: DJ&A will provide necessary setup, communication, and guidance to prepare for successful Construction Contract Administration of the project.

Assumptions:

- This task includes Construction Administration activities necessary to arrive at a successfully executed construction contract;
- Includes the establishment of construction contract administration procedures, roles and responsibilities, and authority/approval limits necessary for the level of construction administration on a federal-aid construction contract, following FHWA 1273 and other requirements set forth by FHWA;
- This does not include unforeseen or FHWA requirements that have recently changed or will change. DJ&A will make all efforts to keep up with currently changing federal rules, however, this scope can't include rule changes that have limited or no policy guidance to follow;
- Will include a final review and formal recommendation of the final contractor bid tabs; and
- Will include establishment and tracking of post-RFP plan revisions log, RFI log, submittal log, and Change Order log. DJ&A can either host these on SharePoint OR utilize software provided by the City or Jackson; and
- Includes the purchase of LCP Tracker for Certified Payroll.

Deliverables:

- None

Task 12.1: Constructability and Cost Reconciliation Workshops (3 ea)

Description: DJ&A will prepare, facilitate, and host cost reconciliation workshops.

Assumptions:

- This task includes up to 3 workshops for the 60%, 90%, and 100% review periods. This would be up to 9 ea 2-hour workshops.
- DJ&A can host these workshops at the 2000 Maple Office.

Deliverables:

- Cost Reconciliation workshop, meeting minutes, and action items.

Task 12.2: Independent Cost Estimate (ICE) – 60% / 90% / TCC

Description: This task will be performed by HDR. HDR to coordinate with the CM/GC Contractor and provide independent cost estimating for the Owner's use in evaluation of the CM/GC's project pricing. Provide assistance to DJ&A and the City of Missoula in their communications with the CM/GC Contractor.

- Provide cost estimation services for 60%, 90% and 100% milestones.
- Attend approach to price meetings and estimate reconciliation meetings at each milestone.

Assumptions:

- Estimates will be prepared as production-based estimates including materials, equipment, labor rates, and production rates.
- Estimates will be prepared and submitted in software capable of export to excel spreadsheet format for comparison with contractor.
- Non-Key Subcontractor and suppliers will be entered as plug numbers in the estimates
- Key Subcontractors work (identified as 20% or more of the project cost) will be prepared with production-based estimates.
- A single approach to price meeting will be held for each milestone.
- A single estimate reconciliation meeting will be held for each milestone.
- Revised milestone estimates will not be prepared after estimate reconciliation meetings.

Deliverables:

- Production based estimate for each milestone (Excel spreadsheet format)