

4065 Saint Cloud, Suite 201 Loveland, C0 80538 970 834 6364 p wilsonco.com

June 2, 2023

Erika Rasmussen, PE Town Engineer / Public Works Director Town of Mead 1341 CR 34 Mead, CO 80542

Re: Town of Mead I-25 / WCR38 Interchange - 1601 Process (22-100-019-03)

Dear Erika -

Wilson & Company is pleased to submit our final scope and fee to provide 1601 System Level Services for the I-25 / WCR38 Interchange. This information is supplemental to our initial proposal submitted on October 7, 2022, Town of Mead RFP # 2022-001-A.

On April 6, 2023, Wilson & Company met with Town staff to discuss the development of a final scope and fee for the Colorado Department of Transportation (CDOT) 1601 process for the proposed interchange project. Shortly after this meeting, we were made aware that Muller Engineering Company was awarded the engineering design for I-25 segment 5 (Mead to Berthoud). Over the past few weeks our team has been collecting and reviewing data from CDOT and Muller to better understand what information exists and to minimize the scope overlap between the two projects. To date our team has received environmental, survey, traffic, subsurface utility engineering (SUE), and conceptual roadway plans for I-25.

It should be noted that the WCR38 bridge is expected to be removed and replaced as part of the I-25 segment 5 project. At this time CDOT is expecting a "like for like" replacement of the WCR38 bridge and CDOT understands that the Town is embarking on a 1601 process to gain approval for a new interchange. CDOT's segment 5 construction schedule is expected to begin in Q2 of 2024 and completed in Q1 of 2028. The Wilson & Company team realizes the sense of urgency for this project and the tremendous opportunity to have this proposed interchange designed and constructed in collaboration with the I-25 segment 5 project.

Another major coordination item that we have been working on over the past few weeks is to bring closure to the question of which planning organization has oversite over the project since WCR38 is the border between the Denver Regional Council of Governments (DRCOG - covering WCR38 and the area to the south) and the North Front Range Metropolitan Planning Organization (NFRMPO – covering WCR38 and the area to the north). Our original proposal submittal assumed coordination and oversite from DRCOG. During recent conversations and a meeting with NFRMPO on May 31, 2023, it has been determined that we will be using the 2050 NFRMPO Travel Demand Model since WCR38 is covered in this model and the model extends south to SH66. A Project Sponsor Letter was submitted to NFRMPO on June 1, 2023 which will ensure the new interchange project will be included in the NFRMPO 2050 Regional Transportation Plan (RTP). The DRCOG 2050 RTP is already complete, so the project will be added to this RTP through an amendment process sometime in 2024.

The CDOT Procedural Directive 1601.1 "Requests for Interchange Access and Modifications to Existing Interchanges on the State Highway System", dated June 13, 2022, will be used as the framework to assess the new I-25 interchange at WCR38. The 1601.1 procedural directive is a 7-step process. Wilson & Company has refined our original proposal to follow this "step-by-step" format so that we can match scope and fee to each step and allow for "hold points" in the process. The Executive Summary is first, followed by detailed backup information for each step in the process.



Executive Summary

Step 1 – Project Kick-Off Phase and 1601 Pre-Application Meeting(s)

The main component of this phase is the review of information from CDOT and Muller Engineering (survey, environmental, utilities, and traffic data / projections). The Wilson & Company team will assess the existing information, summarize our findings, and supplement the data, as needed, for the proposed interchange.

Step 1 Fee: \$197,800

Step 2 - Initial Intergovernmental Agreement (IGA) Approval

The Region Transportation Director must approve the progression of any application to step 2. The Step 2 scope consists of a signed agreement intended to address responsibility for project components.

Step 2 Fee: \$18,000

Step 3 - System Level Study (SLS) and Interchange Management Plan

The SLS and Interchange Management Plan are required for Type 1 proposals. The purpose of the SLS is to identify the short-term and long-term environmental, community, safety, and operational impacts of the proposed interchange on the state highway system and surrounding transportation system to the degree for the Transportation Commission, Chief Engineer, and / or the FHWA, to make an informed decision whether a proposed new interchange is in the public interest.

Step 3 Fee: \$509,500

Step 4 – Approval of System Level Study

Approval of the SLS does not pre-determine a preferred alternative or screen out other alternatives before the supporting analyses are presented for comment to the public through the appropriate NEPA process.

Step 4 Fee: \$8,000

Step 5 – MPO Board Approval

The applicant will provide a copy of the SLS to the affected MPO upon completion, for consideration during the regional plan amendment process. The proposed interchange must be consistent with the applicable fiscally constrained RTP and Transportation Improvement Program (TIP) in air quality non-attainment areas before the environmental decision document can be signed by FHWA or the Chief Engineer.

Step 5 Fee: \$6,000

Step 6 – Design and NEPA Approval Process

Conceptual design and environmental documents must be approved by the Chief Engineer and FHWA.

Step 6 Fee: \$292,000

Step 7 – Final IGA

Upon completion and approval of the final IGA, CDOT will issue a CDOT state highway access permit and a notice to proceed given by the Regional Transportation Director.

Step 7 Fee: \$53,800



1. Project Kick-Off Phase and 1601 Pre-Application Meeting(s)

The project kick-off phase will begin upon Notice to Proceed (NTP) which is assumed to be June 26, 2023. The main component of this phase is the review of information from CDOT and Muller Engineering (survey / mapping, environmental, subsurface utility engineering (SUE), and traffic counts / crash data). The Wilson & Company team will assess the existing information, summarize our findings, and supplement the data, as needed, for the proposed 1601 process. We are conservative with our fee adjustments at this time and would expect to see budget savings in the survey and environmental scopes and fees as we progress through Step 1. The current scope includes the following:

- Review of the Quality Level D (QLD) SUE plans provided by others. We are assuming that no additional SUE work will be needed for the 1601 process.
- Supplemental survey and ROW mapping to establish a Project Control Diagram and existing ROW lines; along with aerial imagery (we are lacking aerial imagery at this time and expect to be able to get this from the CDOT team).
- Traffic counts, data collection, and processing. The current traffic counts on I-25 are from 2017 so a determination will need to be made by CDOT regarding if new counts are needed for the I-25 project. We are assuming WCR38 counts will need to performed.
- Our team will review all available environmental information through previous studies/reports, online resource databases, and environmental data provided by CDOT Region 4 for recent projects along the I-25 corridor in this area.

The first step in the 1601 process is the requirement is to have a pre-application project scoping meeting with the appropriate CDOT Region representatives to determine the scope, anticipated process, and schedule for the proposed interchange project. The scope for Step 1 includes the following:

- Confirm type of improvement This will be a "Type 1 Improvement" which is a proposal for a new interchange on the state highway system with a functional classification of Interstate. Type 1 improvements must be approved by the Transportation Commission.
- Identify plans and coordination necessary with other agencies Evaluation of the general feasibility of the proposed project including early identification of any anticipated operational, environmental, air quality conformity, access management, public concern, and other technical and / or controversial issues.
- Consistency with the Regional Transportation Plan (RTP) and the Statewide Long Range Transportation Plan (LRTP). WCR38 needs to be identified as a Regionally Significant Corridor (RSC) in the Town of Mead transportation plans and updated accordingly with DRCOG and NFRMPO.
- Initial determination of NEPA category CDOT staff will provide an initial assessment of the National Environmental Policy Act (NEPA) classification. Through recent conversations with Vanessa Santistevan, CDOT R4 Environmental Program Manager, we anticipate a low-level Environmental Assessment (EA) or a high-level Categorical Exclusion (CATEX) for this project. The initial assessment is subject to revision and modification if additional environmental issues arise.
- Likely permitting required for the project This will include access permitting requirements with emphasis placed on Access Code requirements and an Interchange Management Plan (approval required from the Chief Engineer).
- Cost responsibilities The applicant is responsible for all costs associated with the preparation and processing of the application. An initial estimate of CDOT costs associated with application review and processing will be prepared by Region 4 and provided to the applicant following this step in the process.
- Discuss how to consult with Federal Highway Administration (FHWA) The FHWA representative will be consulted to determine if the proposal requires federal involvement and if so, the necessary level of detail and the most appropriate time to submit a formal request for a determination of



engineering and operations acceptability. Additionally, regarding access control to the interstate and its right-of-way (ROW), CDOT staff will determine FHWA involvement.

• Transportation Demand Management (TDM) Strategy Goals – TDM requirements apply to new Type 1 interchange proposals. The proposed TDM improvements will be included for analysis in the System Level Study. The recommended TDM strategies should result in a 3% or greater average daily traffic (ADT) reduction for the preferred alternative in MPO boundary areas. For this project, it is a Type 1 improvement, within an MPO boundary area and the scoring goal is between 80-100.

Step 1 Fee: \$197,800

2. Initial Inter-Governmental Agreement (IGA) Approval

The Region Transportation Director must approve the progression of any application to step 2. The Step 2 scope consists of a signed agreement intended to address responsibility for the following:

- Type 1 Improvement
- Administrative and application costs
- Analytical procedures and existing study constraints
- Level of design detail (assumed to be 20%)
- Anticipated schedule
- NEPA category
- Consistency with regional and statewide plans
- Access permitting requirements
- Responsible party and funding sources for TDM implementation

Step 2 Fee: \$18,000

3. System Level Study (SLS) Preparation and Interchange Management Plan

The SLS and Interchange Management Plan are required for Type 1 proposals. The purpose of the SLS is to identify the short-term and long-term environmental, community, safety, and operational impacts of the proposed interchange on the state highway system and surrounding transportation system to the degree for the Transportation Commission, Chief Engineer, and / or the FHWA as appropriate, to make an informed decision whether a proposed new interchange is in the public interest. The Step 3 scope consists of the following:

- For the travel demand model "existing conditions calibration", Wilson & Company will review the current land use assumptions, trip generation, and centroids. Any suggested changes, or updates to the existing conditions model, will be documented for review and approval by the NFRMPO and Town before proceeding.
- Study of the area transportation system with and without the proposed interchange
- 2050 North Front Range Metropolitan Planning Organization (NFRMPO) Travel Demand Model
 - Micro simulation methods and assumptions with model calibration
 - o Existing AM, PM, and VISSIM models
 - Methos and assumptions memo
 - Existing and future "no action" condition report
 - Future alternatives condition report
 - TDM scorecard and TDM plan support
- Address FHWA Interstate Access Request (IAR) criteria to ensure future steps will not fail
- Screening of alternatives
 - o Level 1 approximately 10 alternatives
 - Level 2 approximately 5-6 alternatives



- Level 3 approximately 3 alternatives
- Pre-NEPA Environmental Analysis
 - Environmental Desktop Review Wilson & Company will complete a desktop review to identify presence/absence of environmental resources and determine environmental constraints in support of the alternatives screening process and selection of a recommended alternative to advance to preliminary design and NEPA. Our team will review all available information through previous studies/reports, online resource databases, and environmental data provided by CDOT Region 4 for recent projects along the I-25 corridor in this area. Wilson & Company will conduct a focused fieldwork investigation to confirm results of the desktop analysis and collect data relevant to the alternatives screening process. An *Environmental Existing Conditions Report* will be developed and submitted as the deliverable for this phase of the project.
 - Draft Purpose and Need Statement Wilson & Company will assist the Town and partnering agencies in development of a draft purpose and need statement (P&N). The draft P&N will inform the evaluation criteria used in the alternatives development and screening process and ultimately the selection of a recommended alternative to advance to preliminary design and NEPA. The draft P&N will be refined and finalized during the NEPA phase.
- Public involvement
- Access code assessment
- Financial plan
- Interchange management plan
- TDM
- Greenhouse gas (GHG) mitigation strategies
- The Chief Engineer and / or the Transportation Commission will inform the applicant if the SLS contains sufficient data to make an informed decision

Step 3 Fee: \$509,500

4. Approval of System Level Study

Approval of the SLS does not pre-determine a preferred alternative or screen out other alternatives before the supporting analyses are presented for comment to the public through the appropriate NEPA process. The Step 4 scope consists of the following:

- Type 1 proposal requires Transportation Commission approval
- NEPA process must have already begun
- 3-year lapse requirement

Step 4 Fee: \$8,000

5. MPO / Transportation Planning Region (TPR) Board Approval

The applicant will provide a copy of the SLS to the affected MPO upon completion, for consideration during the regional plan amendment process. The proposed interchange must be consistent with the applicable fiscally constrained RTP and Transportation Improvement Program (TIP) in air quality non-attainment areas before the environmental decision document can be signed by FHWA or the Chief Engineer. Wilson & Company recommends coordination with both the NFRMPO and DRCOG at this stage of the process. The Step 5 scope consists of the following:

• Coordination with NFRMPO and DRCOG to consider regionally significant interchange modifications to the system



• The plan amendment process may be initiated prior to the approval of the application by the Transportation Commission or the Chief Engineer, however the final MPO Board action should not occur until the proposal has been acted on by the Transportation Commission or Chief Engineer.

Step 5 Fee: \$6,000

6. Design and NEPA Approval Process

Conceptual design and environmental documents must be approved by the Chief Engineer and FHWA. The Step 6 scope consists of the following:

- Type 1 proposal requires Transportation Commission approval
- NEPA Process
 - The goal of the NEPA phase is to conduct appropriate analysis of the Proposed Action and No Action alternatives in a manner that meets state and federal requirements, demonstrates readiness to enter final design and construction, and can be included in the TIP. The Proposed Action is assumed to be the recommended build alternative from the Pre-NEPA phase. The No Action will also be defined in the Pre-NEPA phase. While it is anticipated in this scope of work that an Environmental Assessment (EA) will be required and that CDOT's Template EA can be used for documentation, NEPA class of action will be determined in consultation with CDOT and FHWA. The NEPA process will follow the current CDOT NEPA Manual, including but not limited to the following steps:
 - <u>Scoping</u> consultation with CDOT and FHWA
 - <u>Purpose and Need</u> revise and finalize draft P&N from the pre-NEPA phase
 - <u>Alternatives</u> summary of the alternatives considered but not recommended and the recommended build alternative from the pre-NEPA phase
 - <u>Impact Analysis</u> assess environmental impacts associated with implementing the Recommended Proposed Action and No-Action alternatives
 - <u>NEPA Documentation</u> prepare the NEPA documentation in accordance with the current laws, regulations, and standards; coordinate submittal of the NEPA document to the Town for internal and public reviews; coordinate submittal of the NEPA document to CDOT and FHWA for review and concurrence.
 - <u>NEPA Decision Document</u> prepare the decision document, including responses to public and agency comments, and coordinate submittal of the decision document to CDOT and FHWA for review and concurrence.
 - <u>Project File</u> create and maintain a Project File for the project, including hard copies and/or electronic versions of major deliverables, mapping, meeting minutes, public involvement materials and documentation of major decisions and findings.
- Design must be to a level that can support the NEPA analysis and supported by the Chief Engineer to ensure the safe and functional operation of the interchange through the design year
- Construction, mitigation, operations, maintenance, and ownership agreements are clearly analyzed and documented at a level so support the Design and Operations IGA in Step 7
- Assuming 20% design is required to arrive at a NEPA decision document

Step 6 Fee: \$292,000

Final IGA

Upon completion and approval of the final IGA, CDOT will issue a CDOT state highway access permit and a notice to proceed given by the Regional Transportation Director. The Step 7 scope consists of the following:

- The IGA must define a funding plan which identifies all sources of funding necessary to construct the proposed interchange, the costs and responsibilities for design, ROW acquisitions, construction, mitigation, operations, maintenance, replacement of all components of the proposed interchange, and proposed ownership of all components associated with the proposal
- The final IGA will address the following:
 - Designation of ownership of all physical features and related facilities including but not limited to:
 - The interchange structure including associated signage, lighting, culverts, etc.
 - ROW, access management, and ramps associated with the interchange
 - Signals, traffic control devices, bike paths, pedestrian facilities, park-n-ride facilities, environmental mitigation, etc.
 - The costs associated with the development and construction of the interchange to standards prescribed by the Chief Engineer, including but not limited to the following:
 - Completion of all environmental studies and permits
 - Costs for any environmental mitigation
 - Access permit fees
 - Preliminary design
 - Purchase of any required ROW
 - Utility relocation costs
 - Final design
 - Actual construction costs
 - Construction management costs
 - Landscaping costs
 - Lighting costs
 - Traffic control signals and signs
 - Transit related improvements
 - Upgrades or redesigns of the structure in the future
 - CDOT staff costs for design reviews, construction inspection, and oversight

Step 7 Fee: \$53,800

The total fee proposed for this work order is a "not to exceed" fee of \$1,085,100. As noted above, our fee estimates are conservative at this time to ensure that all scope items are covered. Adjustments will be made as we further define scope overlap usable data from the CDOT project.

A breakdown of the step-by-step fee and revised schedule are attached. Thank you for your time in reviewing our revised scope and fee. Please call me if you have any questions.

Sincerely,

Homothy Den

Tim Kemp, PE Senior Project Manager

Supplate

Scott Waterman, PE Vice President



	Town of Mead - WCR 38 / I-25 Interchange (RFP #2022-001-A)	<u> </u>							
	(1601) System Level Study and IAR	w	VILSON &			Line Item		Dr	oject Phase
	Wilson & Company Work Breakdown Structure		OMPANY	Sub	consultants		Subotoal	110	Total
Task	Description			Gub	consultants		Subotoai		10121
1	Project Kick-Off Phase / 1601 Pre-Application Meeting							\$	197,800
1	Existing Data Collection	\$	166,600	\$	25,200	\$	191,800	Ψ	177,000
	Project Management, Meetings, and Coordination	\$	6,000	\$	25,200	\$	6,000		
2	Initial IGA Approval	ş	0,000	Ŷ	-	ې	0,000	\$	18,000
2	Prepare Draft Intergovernmental Agreement	\$	10,000	\$	6,000	\$	16.000	Þ	10,000
	Project Management, Meetings, and Coordination	ې \$	2,000	\$ \$	0,000	ې ۲	2,000		
3	System Level Study and Interchange Management Plan	ş	2,000	å	-	ş	2,000	\$	509,500
3		\$	17,500	\$		s	17,500	Þ	509,500
	Travel Demand Model - Existing Conditions Calibration Model System with and without Interchange (2050)	5 5	185,000	₽ \$	-	\$ \$	185,000		
			88,500	э \$	-	ş S	100,500		
	Development and Screening of Alternatives	\$)		12,000				
	Pre-NEPA Environmental Analysis Public Investment Plan Coordination, Outwork Martings	\$ ¢	66,000	\$ \$	63,000	Ş ¢	129,000		
<u> </u>	Public Involvement Plan, Coordination, Outreach Meetings	\$	20,000		-	\$	20,000		
<u> </u>	Financial and Management Plans	\$	4,000	\$	-	\$	4,000		
	Transportation Demand Management (TDM) Strategies Plan	\$	16,500	\$	14,500	\$	31,000		
	Project Management, Meetings, and Coordination	\$	22,500	\$	-	\$	22,500	^	0.000
4	Approval of System Level Study	-						\$	8,000
	Submit System Level Study to Transportation Commission for Approval	\$	8,000	\$	-	\$	8,000		
5	MPO Board Approval							\$	6,000
	Provide System Level Study to MPO	\$	6,000	\$	-	\$	6,000		
6	Design and NEPA Approval Process							\$	292,000
	NEPA to a Decision Document Level	\$	245,000	\$	26,000	\$	271,000		
	Designs to a 20% Level and Documentation to Support Final IGA	\$	7,000	\$	14,000	\$	21,000		
7	Final IGA							\$	53,800
	Design Reports / Documentation and Submit IAR to FHWA	\$	16,500	\$	5,800	\$	22,300		
	Provide Costs of Development and Construction of Interchange	\$	24,500	\$	-	\$	24,500		
	Project Management, Meetings, and Coordination	\$	7,000	\$	-	\$	7,000		
	GRAND TOTAL	\$	918,600	\$	166,500			\$	1,085,100
ASSUN	IPTIONS and EXCLUSIONS:								
Survey	Assumption - Wilson & Company will produce an Ownership map, ROW plans are exe	clude	d from this ph	ase of	work				
Utility .	Assumption - Review of the QLD SUE plans already completed for I-25 (future utility i	nvest	tigations will o	ccur in	subsequent p	hases	of work)		
Geotec	hnical Assumption - Preferred structure will be a 2-span bridge over I-25 and no retaining	ing w	alls						
Geotec	hnical Assumption - We will be conduct a Geologic Hazards Search in Step 1 (future G	eotec	ch investigation	ns will o	occur in subs	equen	t phases of wo	ork)	
Traffic	Assumption - 4 intersections assumed on CR38 (on / off ramps east and west, Margil I	Road,	, and High Plai	ns Bou	ılevard)				
TDM /	assumptions - TDM strategies will be evaluated in accordance with CDOT Procedural l	Direc	tive 1601.1						
Potenti	al TDM strategies may include BRT, Park and Ride, Mobility Hub, and localized transit	; curi	ently these iter	ns are	not included	in the	30% design		
Two (2	Public Outreach / Engagement Meetings are assumed during the 1601 / Alternatives	Phas	e						
	ed that BHA scope for renderings / graphics includes 2 alternative concepts in Step 6								
Assum	ed that CDOT will provide geometric design for I-25 widening project for coordination	and	use by Wilson	& Cor	npany team				
	ed that High Plains Boulevard is a "separate action", High Plains Boulevard concept des	0				lysis a	re excluded		
Assum	ed that we will be using the NFRMPO model and the project will be added to the NFR	MPO	2050 RTP in	Septen	nber 2023				
Assum	ed that a future amendment will be needed to add the proejet to the DRCOG 2050 RT	Р							

D	0	Task	Task Name	Duration	Start	Qtr 2, 2023	Qtr 3, 2023	Qtr 4, 2023	Qtr 1, 202
1			Contract Execution / NTP (Assumed)	1 day	Mon 6/26/23		Ч		
2			Overall 1601 Schedule	360 days	Mon 6/26/23				
3			1. Project Kick-Off Phase / 1601 Pre-Application Meeting	40 days	Mon 6/26/23				
4			Existing Data Collection	50 days	Tue 6/27/23				
5			Travel Demand Model - Existing Conditions Calibration	30 days	Tue 6/27/23				
6		-	Project Management, Meetings, and Coordination	35 days	Tue 6/27/23				
7			2. Initial IGA Approval	15 days	Mon 8/21/23				
8			Prepare Draft Intergovernmental Agreement	15 days	Mon 8/21/23				
9			Project Management, Meetings, and Coordination	15 days	Mon 8/21/23				
10			3. System Level Study and Interchange Management Plan	90 days	Mon 9/11/23		1	*	
11		-	Travel Demand Model - Existing Conditions Calibration	30 days	Mon 9/11/23		1		
12			Model System with and without Interchange (2050)	60 days	Mon 10/23/23				
13			Development and Screening of Alternatives	90 days	Mon 9/11/23		1		
14			Pre-NEPA Environmental Analysis	40 days	Mon 11/13/23				
15			Public Involvement Plan, Coordination, Outreach Meetings	20 days	Mon 11/6/23				
16		-	Financial and Management Plans	15 days	Mon 12/11/23			1	
17			Transportation Demand Management (TDM) Strategies Plan	15 days	Mon 12/11/23			1	
18			Project Management, Meetings, and Coordination	90 days	Mon 9/11/23		1	*	
19			4. Approval of System Level Study	10 days	Mon 1/15/24				
20			Submit System Level Study to Transportation Commission for Approval	10 days	Mon 1/15/24				
21		-	5. MPO Board Approval	20 days	Mon 1/29/24				
22			Provide System Level Study to MPO	20 days	Mon 1/29/24				
23			6. Design and NEPA Approval Process	165 days	Mon 2/26/24				
24			NEPA to a Decision Document Level	165 days	Mon 2/26/24				
25			Designs to a 20% Level and Documentation to Support Final IGA	20 days	Mon 7/15/24				
26		-	7. Final IGA	20 days	Mon 10/14/24				
27			Design Reports / Documentation and Submit IAR to FHWA	20 days	Mon 10/14/24				
28			Provide Costs of Development and Construction of Interchange	20 days	Mon 10/14/24				
29			Project Management, Meetings, and Coordination	20 days	Mon 10/14/24				
	1	1		-	1				

	Task		Project Summary	[]	Manual Task		Start-only	C	Dea
Project: 2110021800 Proposal S	Split		Inactive Task		Duration-only		Finish-only	C	Prog
Date: Fri 6/2/23	Milestone	•	Inactive Milestone	\diamond	Manual Summary Rollup		External Tasks		Man
	Summary	00	Inactive Summary	[Manual Summary	1	External Milestone	\diamond	
					Page 1				

