

May 22, 2008

SCOPE OF WORK

PLANNING AND ENVIRONMENTAL LINKAGE STUDY FOR US 50 WEST AREA

CONTRACT DATE: _____

CONTRACT TYPE: Project Specific /Non Task Specific

PROJECT NUMBER: NH C020-027

PROJECT CODE: 16379

PROJECT LOCATION: US 50 West, Pueblo to Pueblo West
(Pueblo Metropolitan Planning Area)

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SECTION 1

PROJECT DESCRIPTION AND INFORMATION

1 PROJECT INFORMATION AND LOCATION

The Colorado Department of Transportation (CDOT), Region 2, is seeking professional services for a planning study for US 50 from Pueblo to Pueblo West. This project has been established to determine possible future improvements to address capacity and safety issues on US 50 between Swallows Road in the Pueblo West Metropolitan District and Baltimore Avenue in the City of Pueblo. The Pueblo Area Council of Governments (PACOG) has identified a General Area for Highway 50 West Study in the PACOG 2035 Regional Long Range Transportation Plan (described and illustrated in Chapter 6 of the LRTP).

This collaborative planning study is intended to document the specific purpose and need for improvements, develop and screen a range of reasonable alternatives, and identify a preferred alternative. CDOT anticipates that the outcome of this study will be the adoption by the Pueblo Area Council of Governments (PACOG) of a Purpose and Need statement developed during the study and the incorporation of the Preferred Alternative in the unconstrained 2035 Regional Transportation Plan. This study will document relevant decisions and processes that can be utilized during the scoping process for subsequent NEPA documents.

US 50 is classified as a freeway from Swallows Road to Baltimore Avenue. However, there are no existing interchanges within the proposed study area, and US 50 operates like an expressway from Pueblo West all the way to I-25; however, the Access Classification changes from E-X to NR-A (Principal Arterial) at milepost 312.95 (327 feet East of the BNSF Railroad structure). The highway consists of two eastbound and two westbound travel lanes, separated by either raised or depressed medians. The section of US 50 located between Baltimore Avenue and the railroad overpass due west of Wills Boulevard is within the Pueblo City limits. The portion between the railroad overpass and the west side of Pueblo Boulevard (SH 45) is in unincorporated Pueblo County. The remaining section of US 50 from the west side of Pueblo Boulevard to Swallows Road is within the Pueblo West Metropolitan District.

Respondents should view this Scope of Work as an outline. More detailed and defined Task Specific Scopes of Work will be negotiated with the successful project team as a Work Plan is formulated and elements are evaluated. The Scope of Work may be expanded at a later date to encompass all the NEPA activities that are required to complete a Categorical Exclusion or an Environmental Assessment for improvements to sections of independent utility within the project area. The Scope of Work may also be supplemented for unanticipated work that may arise during the course of the planning study. Supplementing this Contract will depend on available funding and CDOT personnel resources. CDOT reserves the right to assign planning, environmental and design work to other consultants or to CDOT staff, as it deems appropriate.

The Contract type will be Project Specific - Non Task Specific. Work will be performed on an “as needed basis”, meaning that neither CDOT nor the Consultant has any obligations under the Contract until a task order is issued. This Contract may be supplemented for the following: Preliminary design; NEPA documentation; final design; or design services under construction.

The major elements of this Contract may include the following services: development of a Work Plan that documents the approach, processes, procedures, strategies, and methodologies for preparation of the US 50 West Planning and Environmental Linkage (PEL) Study; data collection; corridor traffic study / travel demand forecast; public communication process and outreach; development and screening of alternatives (including the No-Action); planning-level costs; general right-of-way analysis; land use evaluation; environmental data collection for alternative development and screening, and for selection of the preferred alternative; Access Control Plan; identification and prioritization of segments of independent utility documented in a Project Implementation Plan; final report; and preparation of resolutions and other documentation needed for adoption of a Purpose and Need statement and for amending the adopted 2035 Regional Transportation Plan.

This study will not result in a NEPA decision. Rather, its purpose is to provide the necessary transportation planning and early decision-making for the US 50 West corridor that can provide the basis for future projects and NEPA studies within the study area. It is therefore a step between the 2035 Long Range Transportation Plan developed by PACOG and subsequent NEPA documents.

This study should be considered a part of a continuous process starting with planning at the MPO and Statewide levels and continuing through programming, NEPA studies, and environmental permitting. As a “bridge” between planning and NEPA, this study will focus only upon the development of a specific purpose and need and on sufficient environmental and cost analyses as well as public and agency involvement to evaluate and eliminate alternatives and arrive at a preferred alternative.

2 PROJECT GOAL

The project goal is to develop a plan that can be approved and adopted by local entities (Pueblo Area Council of Governments, Pueblo County, City of Pueblo and Pueblo West Metropolitan District), the Federal Highway Administration and CDOT that identifies the capacity and safety issues on US 50 and results in the selection of a preferred alternative that addresses those issues. .

The planning study will:

- Document a Purpose and Need for improvements
- Develop, evaluate, and screen a range of alternatives as discussed in Task G (Development of Alternatives) and contain a preferred alternative(s) to best improve safety, mobility, and traffic flow
- Establish priorities for improvements

- Document each step in the collaborative planning process so that decisions made during this study will not need to be reevaluated during subsequent NEPA studies

This study will address safety, mobility, and traffic flow problems on US 50 West within the study area. It will clearly define a corridor Purpose and Need, project termini, segments of independent utility, traffic operations improvements, and an access control plan. The Consultant will examine a reasonable range of alternatives for improvements, including the No-Action Alternative.

3 WORK DURATION

The time period for the work described in this scope is approximately 450 calendar days. Work shall not commence until a Notice-To-Proceed (NTP) is issued by CDOT.

4 CONSULTANT RESPONSIBILITIES AND DUTIES

This Contract will be a Task Order format with the Consultant performing services on various elements as required by CDOT. The Consultant may be responsible for full planning, coordination, and public relations during the planning study with individual scopes to be defined in each future task order.

The Consultant is responsible for:

- A. Determining transportation needs for the area and affected communities.
- B. Providing continuous communications with affected agencies.
- C. Developing a series of proposed alternatives, analyzing the feasibility of proposed alternatives, refining the most feasible proposed alternatives and determining impacts of the proposed alternatives if they are implemented.
- D. Preparing a preliminary report of all environmental studies that will be required.
- E. Developing traffic projections for US 50 and major arterials and intersections that connect to it. This work may include activities related to traffic engineering, intersection evaluation and concept design, traffic flow management, access evaluation, and traffic control plan development.
- F. Assisting CDOT in coordinating the planning study with affected local entities, such as, but not limited to: City of Pueblo, Pueblo West Metropolitan District, Pueblo County and the Pueblo Area Council of Governments (PACOG).
- G. Progress meetings and other pertinent meetings.
- H. Small group meetings with local entities, developers, and affected citizens and business owners, if needed.
- I. Public meetings during the public involvement process.
- J. Project documentation and document control as it pertains to that portion of the design and environmental work which the Consultant performs.
- K. Coordinating with the CDOT Project Manager (CDOT/PM) and others for all activities, tasks, meetings and deliverables.

5 WORK PRODUCTS

The expected and potential Consultant work products are:

- A. Written record of overall project administration, schedule, management, and coordination
- B. Work Plan
- C. Purpose and Need Statement
- D. Graphic displays and materials used for the public participation process
- E. Technical reports and support documents and data used to develop the planning study
- F. Draft planning study
- G. Final planning study
- H. Project Implementation Plan
- I. Access Control Plan

All work required to complete the Scope of Work requires the use of English Units. Reports and submittals must be accepted by the CDOT Contract Administrator or designee prior to the content being utilized in follow-up work efforts.

The Consultant shall provide work products and electronic mail and messaging in formats that are compatible with CDOT's software and hardware.

Detailed work product requirements are described in the following sections.

6 WORK PRODUCT COMPLETION

All submittals must be accepted by the CDOT Contract Administrator or designee.

SECTION 2

PROJECT MANAGEMENT AND COORDINATION

1 CDOT CONTACT

The Contract Administrator for this project is Doug Lollar, Region 2 Resident Engineer.

Active day-to-day administration of the Contract will be delegated to:

Joe Garcia, Project Manager

905 Erie Avenue

Pueblo, CO 81001

Phone: (719)546-5727

Fax: (719)546-5414

2 PROJECT COORDINATION

Coordination will be required with, but not limited to, the following known agencies:

- Federal Highway Administration (FHWA)
- Colorado Department of Transportation (CDOT)
- Pueblo Area Council of Governments (PACOG)
- Pueblo County
- City of Pueblo
- Pueblo West Metropolitan District
- Utility Companies
- Local Neighborhoods and Businesses
- BNSF Railway Company

Submittals to affected agencies will be coordinated with CDOT. The above list of known agencies should not be considered as complete.

SECTION 3

PROJECT SCOPE OF WORK

1 SCOPE OF WORK ORGANIZATION

The Project Scope of Work is divided into several tasks for the initial project planning study portion.

This draft Scope of Work has been carefully reviewed by the Department and reflects a plan of approach based on the known goals. Factors determining the selection of a Consultant include the ability of that Consultant to analyze the project goals, evaluate the work elements, develop strategies, and formulate a Work Plan. This process may produce new approaches or modifications to the project work elements. Because of that, all consultants should be aware that the Final Scope of Work for a project will be produced with input from the selected Consultant.

2 TASK A - PROJECT INITIATION AND CONTINUING REQUIREMENTS

The Consultant shall coordinate all activities, tasks, meetings (either CDOT or local agency), communications and deliverables with the CDOT Project Manager, for this project Joseph P. Garcia, Region 2 South Program, (719) 546-5727, 905 Erie Avenue, Pueblo, Colorado 81001. The Consultant Project Manager will provide to the CDOT Project Manager all written synopses or copies of his telephone, in-person or written contacts or communications with others. All submittals shall be through the CDOT Project Manager, who will make appropriate distribution.

1) Initial Project Meeting: An initial project kick-off meeting will be held with CDOT and FHWA. The meeting may include an on-site inspection to familiarize the entire project team with the character and conditions of the area. The Consultant shall coordinate the meeting, send notices with a draft agenda, and provide meeting minutes to all those invited.

2) Project Management Plan: The Consultant will submit a plan for managing the project, including task orders, a modified schedule, document quality assurance program and other project needs.

3) Resource Review: Consultant shall review relevant standards and specifications and document environmental requirements applicable to the project. This task shall include meetings with CDOT and the City of Pueblo, Pueblo West Metropolitan District, and Pueblo County representatives to discuss the initial work efforts of the project.

4) Project Study Area Boundary: Project logical termini will be established by the Consultant in coordination with CDOT staff for recommendation to FHWA for approval. PACOG has identified a General Area for Highway 50 West Study in the PACOG 2035 Regional Long Range Transportation Plan (described and illustrated in Chapter 6 of the LRTP).

5) Project Schedule: The initial project schedule, to be prepared by the Consultant, will be reviewed with the CDOT Project Manager and project team, and refined to provide detail as requested. The schedule will be reviewed and discussed at regular intervals and updated as necessary.

6) Plan and Arrange Required Traffic Control: Consultant prepare and submit appropriate traffic control plans for CDOT approval for work tasks within the traveled roadway.

7) Progress Meetings: CDOT and the Consultant will meet at regular intervals, to coordinate and track work efforts, progress and issues, and to work towards resolution of potential problems.

The Consultant Project Manager shall coordinate with the CDOT Project Manager regarding preparation of meeting notices, agendas and handout materials, and preparation and distribution of meeting minutes within five working days following the meetings. A total of 12 meetings are assumed. The minutes of each meeting shall track and report progress on action items identified during previous meetings.

3 TASK B – PUBLIC INVOLVEMENT PLAN AND PROJECT SCOPING

1) Public Involvement Plan - The Consultant shall prepare a Public Involvement Plan for communicating with the public and other interested parties during the planning study process. The Public Involvement Plan should be generally consistent with the Public Involvement Program adopted by PACOG in 2004. This plan shall include recommendations for disseminating information to agencies and the public, including meetings, workshops, printed materials and displays, and communication tools such as newsletters and media advertisements. The Public Involvement Plan will identify the target audience at each stage during the planning study, and will recommend the appropriate outreach effort.

2) Project Planning and Scoping Meeting with CDOT and FHWA - The Consultant shall schedule, prepare a scoping packet for, and conduct one CDOT Project Planning and Scoping meeting to:

A) Discuss and answer questions about the US 50 Planning and Environmental Linkage Study process;

B) Set out the known resources, issues and concerns of the agencies, the general public and local officials;

C) Discuss how the project elements for this planning study will proceed; and

D) Discuss and identify a potential project study area.

This scoping meeting may include a field visit. The Consultant shall prepare and distribute official meeting minutes of this scoping meeting and summarize the comments received and actions identified. All available project information will be reviewed with the meeting attendees.

- 3) Project Planning and Scoping Meeting with Local Agencies - The Consultant shall schedule, prepare for, and conduct individual Local Agency Scoping meetings to:
 - A) Discuss and answer questions about the US 50 Planning and Environmental Linkage Study process;
 - B) Discuss the known issues and concerns of the agencies, the general public and local officials;
 - C) Discuss how the project elements for this planning study will proceed;
 - D) Discuss possible transportation alternatives that may be considered, including the No-Action alternative; and,
 - E) Discuss and identify a project study area.

The Consultant shall prepare and distribute official meeting minutes of these scoping meetings, and summarize the comments received and actions identified. All available project information will be reviewed with the meeting attendees. These meetings may also include a field visit.

- 4) Public Meetings - The Consultant shall schedule, prepare for, and conduct one public scoping meeting to generally discuss the planning study, discuss how the project elements may proceed, present the possible conceptual project elements, and identify public issues and concerns.
- 5) Small Group Meetings - The Consultant shall conduct small group meetings with business groups, special interest groups, and elected officials to apprise them of the project progress and to gather comments. The Consultant shall prepare graphics, attend the meetings, and prepare meeting minutes.

4 TASK C - WORK PLAN

The Consultant shall develop a Work Plan in coordination and consultation with CDOT and FHWA that will provide the necessary guidance to assure that this project remains focused on the appropriate level of decisions for a planning study. It will identify key milestones and the approaches, strategies, measures, and controls need to meet the project goal within the agreed upon schedule. The Work Plan is not a more detailed scope of work or the Project Management Plan identified in Task A. It is a detailed “roadmap” or guide for the development of this planning study.

The Work Plan will include the following elements:

- Key milestones during the planning study, such as workshops, public meetings, and key work products
- Proposed approaches for gathering, sharing, and disseminating data, including workshops, meetings, and paper or electronic communications

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- Proposed number and frequency of meetings and workshops with technical staff of the planning partners (PACOG, City of Pueblo, Pueblo West Metropolitan District, and Pueblo County)
- Proposed organizational structure for technical or advisory committees or other groups involved in decision-making
- Recommended strategies for developing concurrence or consent from planning partners, decision-makers, and the public within the project schedule
- Proposed measures to ensure open communication, a problem-solving environment, and collaborative decision-making
- Recommendations for involvement of state and federal participating agencies and consulting parties
- Recommended processes, procedures, and controls -- including the development of agreements (MOUs) or “charters”-- to maintain focus on planning-level data, decisions, and products by all involved parties, to prevent “scope creep”, and to make lasting decisions that can be carried forward into future NEPA documents. Agreements or charters will include a description of the roles and responsibilities of planning partners; a plan for working together; an agreement to provide necessary staff resources throughout the study process; guiding principles; and a commitment to provide information, comments, and decisions at key milestones within established timeframes. These agreements will focus upon cooperation and coordination, rather than detailed regulatory processes. However, if disputes arise, these agreements will include processes and procedures to resolve them.

The Work Plan shall also address the following:

- Issues that can be decided and finalized during the planning study
- Challenges for this study and proposed measures to overcome them
- Measures to ensure agreements and decisions made today will withstand organizational changes and be honored by institutions over time

The Consultant shall propose and define within the Work Plan a sequence of events that are necessary to accomplish this planning study within the proposed schedule. The events are expected to include:

- Project planning and pre-scoping with CDOT and FHWA
- Project introduction and development of agreements with planning partners
- Approval of agreements
- Project introduction to participating agencies, consulting parties, and the public
- Study scoping with planning partners and agencies
- Discussion of preliminary resource methodologies with planning partners and agencies
- Collection of data and development of study products (e.g., Purpose and Need, traffic and environmental studies, results of workshops and meetings, etc.)
- Agency and public workshops and meetings
- Preparation of the final report and documents required for adoption of the preferred alternative

Because the Work Plan provides a guide to the overall development of the planning study, it is anticipated that preparation of the Work Plan and its approval by CDOT and FHWA will be one of the first tasks undertaken by the Consultant.

5 TASK D - PURPOSE AND NEED

The Consultant shall develop a Purpose and Need statement supported by sufficient data to serve as a chapter, section, or component of a subsequent NEPA document. It is expected that the purpose and need developed for this study will be based upon information and decisions contained in the PACOG 2035 Long Range Transportation Plan, as well as data and studies developed for this planning study. Preparation of the purpose and need for this planning study should utilize the key principles and requirements from the Council on Environmental Quality (CEQ) NEPA regulations, 40 C.F.R. Part 1500; FHWA NEPA regulations, 23 C.F.R. Part 771; and CEQ and FHWA guidance documents. The Consultant should review the AASHTO Practitioner's Guide, "Defining the Purpose and Need and Determining the Range of Alternatives for Transportation Projects," particularly Section 2, "Determining the Need," under "Practical Tips."

6 TASK E – TRAFFIC STUDY

- 1) Traffic Modeling and Projections and the Analysis of Traffic Operations - The Consultant shall obtain from available sources (CDOT, City of Pueblo, Pueblo County, and Pueblo West Metropolitan District) present day traffic counts and other traffic data for the corridor and surrounding roadway network to evaluate existing traffic operations. For 2035 traffic, the Consultant shall obtain the PACOG traffic model developed for the adopted 2035 Long Range Transportation Plan. This model may require refinement, adjustment, and balancing at a sub-area level to accurately reflect future year traffic projections. The consultant shall develop projections for 2035 for the No-Action Alternative and for proposed alternatives, using the refined 2035 Long Range Transportation Plan model and other appropriate traffic models and simulation techniques. The Consultant shall balance model assignments, develop traffic volumes (ADT and AM and PM peak hours) for major roadway segments within the study area, and generate intersection levels of service for major intersections affected by each roadway alternative.

Based upon existing and projected traffic volumes developed by the Consultant, the Consultant shall determine the number of through-traffic and intersection turn lanes required for acceptable traffic operations on US 50 and its connecting roadways. For the analysis of alternative modes, the Consultant shall develop appropriate assumptions for the diversion of trips from the roadway mode to alternatives modes and evaluate their effectiveness for reducing traffic congestion on US 50 and its connecting roadways. The data from these analyses shall be used to aid in the screening of alternatives and the selection of the preferred alternative.

The consultant shall also perform an analysis on the effects of proposed alternatives, including the No-Action Alternative, to the surrounding roadway network and intersections using existing and 2035 projected volumes. This analysis shall consider traffic volumes, travel access patterns, LOS, delays, and travel times and speeds in neighborhoods and other areas of anticipated traffic congestion.

For preparation of the traffic study, the Consultant shall consider traffic studies and analyses prepared for other transportation projects within the study area. In the development of alternatives, the Consultant shall consider the context of the study area and shall recommend traffic and operations improvements that would potentially avoid or mitigate adverse impacts to residential and commercial neighborhoods. Finally, the Consultant shall also identify and evaluate potential traffic impacts that may result from the prioritized projects included in the Project Implementation Plan.

2) Safety Assessment Report - The Consultant shall obtain Safety Assessment Reports prepared by CDOT which identify existing safety problems on US 50. PACOG also maintains a repository of traffic counts and crashes that the Consultant should consult. The Consultant shall address these issues for alternatives on US 50. For other alternatives, the Consultant shall consider appropriate measures to mitigate potential safety issues, including conflicts with pedestrians and bicycles.

7 TASK F – ENVIRONMENTAL DATA COLLECTION FOR ALTERNATIVE DEVELOPMENT, SCREENING, AND SELECTION OF A PREFERRED ALTERNATIVE

The Consultant shall utilize existing data to determine environmental issues and constraints that will be used to help

- determine a social, economic, and environmental context;
- develop alternatives;
- screen the range of alternatives; and
- arrive at a preferred alternative.

This data may be drawn from public comment and from existing GIS and other available sources. PACOG maintains an extensive environmental database that was developed in conjunction with its PEL program and the 2035 Regional Transportation Plan. Most of the PACOG information is available in GIS formats. Original field data collection will be limited to the verification of data, if necessary, for the development and screening of alternatives. The following indicates the potential environmental resources and issues that may be utilized in the development of a project context, the development and screening of alternatives, and the selection of the preferred alternative:

1) **Archaeology** - The Consultant shall obtain information regarding archaeological sites recorded at the state Office of Archaeology and Historic Preservation. This information will remain confidential as required by state and federal regulations. Recorded archaeological sites will not be identified on displays or other public exhibits or documents.

- 2) ***Paleontology*** - The Consultant shall obtain information regarding recorded paleontological sites from the CDOT staff paleontologist.
- 3) ***Water Quality*** - The Consultant shall identify any potential water quality issues, including potential runoff effects on surface and ground water and any extraordinary measures that would be required to manage and mitigate runoff pollutants.
- 4) ***Ecological Assessment (including wildlife and vegetation)*** - The Consultant shall consult with the U.S. Fish and Wildlife Service, the Colorado Division of Wildlife, and other sources to identify animal and plant species and their potential habitat that are present in the study area, including those species listed as threatened and endangered, candidates for listing, or species of state concern.
- 5) ***Historic Sites, Districts, and Bridges*** - The Consultant shall identify any historic sites, districts, and bridges that have been previously recorded with the State Historic Preservation Office, including those sites that are listed on or eligible for the National Register of Historic Places. The Consultant shall coordinate with local history groups and consulting parties to gather local issues, data, and comments.
- 6) ***Floodplain and Drainage Assessment*** – The Consultant shall obtain FEMA flood plain data and mapping and other available drainage studies and plans that may be available from the Region Flood Plain Administrator or other relevant sources.
- 7) ***Right-of-way (ROW)*** - The Consultant shall identify potential right-of-way requirements including potential residential relocation and business acquisition. The Consultant shall provide a right-of-way cost estimate for each alternative.
- 8) ***4(f)/6(f) Activity*** - The Consultant shall identify potential properties that may be protected under the provisions of Section 4(f) and Section 6(f) (e.g., publicly owned parks and recreation areas, historic sites, and wildlife and waterfowl refuges, and public outdoor recreation areas that received Land and Water Conservation Funds).
- 9) ***Wetlands*** - The Consultant shall obtain information, if any, regarding previously mapped and recorded wetlands. If no information is currently available, the Consultant shall determine the presence of wetlands and estimate their size based upon a windshield survey of each alternative.
- 10) ***Hazardous Materials Sites*** – The Consultant shall identify any known hazardous material sites from available data sources and determine if any presents a "fatal flaw" for any alternative.
- 11) ***Existing Roadway Structures*** – The Consultant shall determine from available records the existing condition of roadway structures and whether their replacement would be required for any alternative.

12) **Utilities** - The Consultant shall identify utilities from a windshield survey or other readily available sources, and determine the potential for exorbitant costs or other factors that would represent a fatal flaw for any alternative.

13) **Economics** - The Consultant shall identify the direct and indirect effects of the project alternatives on commercial and industrial enterprises, and using available data, determine the potential impact on employment, local tax base, regional earnings, etc. The Consultant shall use this information to determine the potential for unusual economic impacts associated with any alternative.

14) **Social Considerations and Environmental Justice Requirements** -The Consultant shall identify potential effects of project alternatives on low income and minority populations, community cohesion, safety and security, neighborhood impacts, and accessibility of public facilities and services.

15) **Traffic Noise** - The Consultant shall identify sensitive receptors and outdoor uses for the Land Use Categories identified in the CDOT *Noise Analysis and Abatement Guidelines*, December 2002, and shall apply the appropriate noise abatement criteria to identify potential receivers. Using the TNM model, the Consultant shall determine the number of potential receivers impacted for each alternative, if any, by generating noise contours and using these contours to further determine the potential for noise abatement.

The information described above for this task shall be used to determine issues and constraints for the development of alternatives. To the maximum extent practicable, alternatives shall be developed that avoid and minimize potential impacts and reflect the issues and concerns expressed by the public. If impacts can not be avoided or minimized, strategies will be developed to mitigate them. The likelihood that these strategies could be implemented in the future shall be considered in the screening of alternatives and the selection of a preferred alternative. (For example, are there likely to be institutional or financial barriers, such as legal and jurisdictional issues or exorbitant cost, which might prevent future implementation.)

It is recognized that for this study, those impacts identified at this planning level will be imprecisely defined and more qualitative than quantitative. However, it is the goal of this study that these social, economic, and environmental issues and constraints will provide a context that will help determine and shape the proposed alternatives. After alternatives have been developed that meet the Purpose and Need, these social, economic and environmental factors will be used to screen and rank alternatives and select a preferred alternative.

This task could be supplemented for additional as-yet unidentified work tasks if CDOT determines additional work is warranted or needed.

8 TASK G – DEVELOPMENT OF ALTERNATIVES

The goal of this project as described in Section 1, Part 2, is to thoroughly examine the transportation needs of US 50 West and its vicinity, to develop a transportation solution that meets the Purpose and Need while reflecting the social, economic, and environmental context of the study area, and to generate a plan of action for future implementation, irrespective of potential funds and sources for any identified improvements. The development of alternatives shall occur through a collaborative process and in coordination and consultation with FHWA, CDOT and the City of Pueblo, Pueblo West Metropolitan District, and Pueblo County. The Consultant shall not consider alternatives until there is an agreed upon Purpose and Need for the project and the context of the study area is thoroughly understood.

The Consultant shall consider current and 2035 traffic projections and operations, the Purpose and Need for the project, and the context of the study area, including land use, roadway network, social, economic, and environmental factors, in order to develop a range of reasonable alternative. The range of alternatives shall consider potential transit, bicycle, and pedestrian use, as well as Transportation System Management/Transportation Demand Management and other congestion management options and strategies that not only could totally or partially meet the Purpose and Need, but also could result in solutions to the capacity and safety problems on US 50. These modes, strategies, and options shall be developed and evaluated based upon the extent they capture or divert trips from US 50 or other roadways. Data and assumptions used in the 2035 Regional Transportation Plan, including proposed transit, bicycle, and pedestrian facilities, as well as ridership and use factors, shall be used to evaluate potential trip diversion.

In the process of developing conceptual alternatives, the Consultant shall consider, among other factors, the context of the study area, alternative routes, alternatives that avoid or minimize community and environmental impacts, accident history, the potential effects on congestion to the existing and proposed roadway system (i.e., potential traffic diversion to other roadways and “cut-through” traffic), and right-of-way impacts. The alternatives must address current as well as projected 2035 traffic volumes as documented by PACOG for the 2035 Long Range Transportation Plan as refined through the Consultant’s adjustments to the adopted 2035 transportation plan model and other traffic modeling or forecasting methodologies.

The Consultant shall develop criteria for the evaluation and screening of alternatives. The Consultant shall present the evaluation criteria both schematically and in narrative form to the planning partners, participating agencies, consulting parties, and the public. The rationale for the elimination or advancement of alternatives based upon the screening process, shall be thoroughly documented. The No-Action Alternative must be defined and carried forward through the entire alternative evaluation and assessment process.

9 TASK H -- DOCUMENTATION FOR APPROVAL OF THE PREFERRED ALTERNATIVE AND THE ACCESS CONTROL PLAN

The Consultant, in consultation with CDOT, FHWA, and the planning partners, shall develop all documents, exhibits, resolutions, and agreements necessary for the approval of the preferred alternative and for its incorporation by amendment into the unconstrained PACOG 2035 Long Range Transportation Plan and the Statewide Transportation Plan. The Consultant shall also prepare appropriate documents, exhibits, and resolutions for adoption of the Access Control Plan. It is expected that resolutions together with supporting documentation will be required for approval by the state Transportation Commission, the PACOG Board of Directors, the Pueblo City Council, the Pueblo West Metropolitan District Board of Directors, and the Pueblo County Board of Commissioners. Resolutions shall be prepared in a legal form and format appropriate to and required by the governing body and shall be supported by appropriate exhibits and other documentation resulting from this planning study. The Consultant shall coordinate with the staff of the boards and commissions to schedule and arrange briefings and meetings with their policy body and to present information and address questions and issues required for the adoption of resolutions to amend the PACOG 2035 Long Range Transportation Plan, support the preferred alternative, and to adopt the Access Control Plan.

SECTION 4

DESIGN CRITERIA

1 DESIGN STANDARDS AND GUIDES

All work will conform to the applicable standards of the Colorado Department of Transportation (CDOT) unless directed otherwise by the Colorado Department of Transportation Project Manager (CDOT/PM). The alternatives for this project will use English standards. The most recent editions in effect as of the date of this Scope of Services of the following criteria will be utilized:

- AASHTO - A Policy on Geometric Design of Highways and Streets
- CDOT Design Manual
- CDOT Survey Manual
- CDOT Right of Way Manual
- CDOT Drafting Manual
- CDOT Standard Specifications for Road and Bridge Construction
- CDOT M & S Standards
- CDOT Bridge Design Manual
- CDOT Bridge Detailing Manual
- CDOT Bridge Rating Manual
- CDOT Bridge Standard Plans and Details as applicable
- CDOT Construction Manual
- FHWA Manual on Uniform Traffic Control Devices

It is anticipated that for work outside the proposed US 50 Right-of-Way, specifically regarding improvements to the local roadway network and utilities, the Consultant will utilize the respective City of Pueblo, Pueblo County, and Pueblo West Metropolitan District Standards and Specifications as the basis for concept design.

2 ITEMS TO BE FURNISHED BY CDOT

The following items will be available for reproduction upon request:

- CDOT accident history data
- CDOT Safety Report
- Aerial photography and planimetric mapping, where available
- As-constructed roadway, structure, and existing right-of-way plans of state highway facilities, as contained in existing archive

SECTION 5

GENERAL INFORMATION

1 NOTICE TO PROCEED

Work will not commence until the written Notice-to-Proceed is issued by the State with certification from the Consultant that the work will be completed within the allotted time. Work may be required night or day, on weekends, on holidays and/or on split shifts. Time will be charged for scheduled work activities within the control of the consultant. Poor supervision, inefficient or unskilled workers, or inadequate equipment will not be sufficient grounds for a time extension.

CDOT must concur in time lost reports prior to the time lost delays being subtracted from time charges. Subject to CDOT prior approval, the time charged may exclude time lost for:

- Reviews and Approvals
- Delays caused by lack of response or direction from CDOT

2 PROJECT COORDINATION

The routine working contact will be between the CDOT Project Manager (CDOT/PM) and the Consultant Project Manager (C/PM). Each Project Manager will provide the others with the following:

- Written synopses of their respective contacts (both by telephone and in person) with others
- Copies of pertinent written communications

3 ROUTINE REPORTING AND BILLING

The Consultant will provide the following on a routine basis and prior to interim payments:

- A. Coordination
 - All contract activities by the C/PM
- B. Periodic reports and billings
 - As required by CDOT Procedural Directive 400.2 (Monitoring Consultant Contracts)
- C. Minutes of all Meetings. Updated meeting and work schedules and method statements.
 - The minutes will be completed and provided to the CDOT/PM within five (5) working days after the meeting. When a definable task is discussed during a meeting, the minutes will identify the "Action Item", the agency responsible for accomplishing it, and the proposed completion date.

D. General Reports and Submittals

- In general, all reports and submittals must be accepted by CDOT prior to their content being utilized in any follow-up work effort.

The Consultant will provide Interim payment support documentation as requested by the CDOT/PM.

4 AUTHORITY OF THE CDOT PROJECT MANAGER

The CDOT/PM will decide all questions regarding the quality and acceptability of the work performed, the rate of progress and any questions about interpretation of this contract or the work product created as a result of this contract. The CDOT/PM will decide all questions pertaining to plans, specifications and contracts in which CDOT enters into as a result of this Contract. The acceptance and payment of the consultant for his work does not relieve the consultant of the responsibility or liability for his work product.

5 PERSONNEL QUALIFICATIONS

The Consultant Project Manager (C/PM) must be approved by the CDOT Contract Administrator. Certain tasks must be done by Licensed Professional Engineers or Professional Land Surveyors who are registered with the Colorado State Board of Registration for Professional Engineers and Land Surveyors. Environmental surveys and tasks must be completed by personnel with experience in those resource areas.

6 CDOT COMPUTER/SOFTWARE INFORMATION

The consultant shall utilize the most recent CDOT adopted software. The primary types of software used by CDOT are:

Earthwork	InRoads
Drafting	MicroStation
Survey	InRoads TMOSS (developed by CDOT)
Geometry	CDOT COGO (Coordinate Geometry)
Bridge	Staff Bridge software shall be used in either design or design check
Estimating	Trns*port (to be handled by CDOT)
Specifications	Microsoft Word
Scheduling	MS Project
Miscellaneous	MS Excel, Power Point

7 COMPUTER DATA COMPATIBILITY

CDOT presently utilizes two data formats which Consultants shall be required to use for submitting survey, photogrammetry, and design data: InRoads and InRoads TMOSS (Topography Modeling Survey System). The data format used by the Consultant to submit surveying and photogrammetric data shall be as determined by the CDOT/PM in coordination with the respective Region PLS. The data format for submitting design computer files shall be compatible with the CDOT InRoads program. Preliminary and final design shall be submitted to CDOT electronically. The Consultant shall immediately notify the CDOT/PM if the firm is unable to produce the desired format for any reason and cease work until the problem is resolved.

SECTION 6 WORK ACTIVITY ASSIGNMENTS

This list establishes individual task responsibilities that the consultant may be asked to do. The consultant may be asked to perform all work tasks which are indicated below by an 'X' mark in the consultant column, in accordance with the forms and the CDOT standards. Selected work tasks shall be assigned only after coordination and consultation with CDOT. The Consultant is also responsible for coordinating the required work schedule for those tasks accomplished by CDOT and other agencies.

Task Descriptions will be supplied in each task specific scope of work.

	<u>CDOT/OTHER</u>	<u>CONSULTANT</u>
A. <u>Project Initiation and Continuing Requirements</u>		
1. Initial Project Meeting	<u> X </u>	<u> X </u>
2. Review Environmental Mitigation Requirements	<u> X </u>	<u> X </u>
3. Independent Design Review	<u> </u>	<u> X </u>
4. Project Schedule	<u> </u>	<u> X </u>
5. Develop Design Criteria	<u> X </u>	<u> X </u>
6. Initiate Survey	<u> X </u>	<u> </u>
7. Right of Entry and Permits	<u> X </u>	<u> X </u>
8. Traffic Control	<u> </u>	<u> X </u>
9. Initial Submittals	<u> </u>	<u> X </u>
10. Progress Meetings	<u> </u>	<u> X </u>
11. Structure Review Meetings	<u> X </u>	<u> X </u>
12. Project Management	<u> X </u>	<u> X </u>
 B. <u>Project Development</u>		
1. Communication and Consensus Building		
a. Contact List	<u> X </u>	<u> X </u>
b. Public Notices/Advertisements	<u> </u>	<u> X </u>
c. General Meetings		
(1) Small Group	<u> X </u>	<u> X </u>
(2) General Public	<u> X </u>	<u> X </u>
(3) Project Review	<u> X </u>	<u> </u>
d. Communication Aids		
(1) Graphics Support	<u> </u>	<u> X </u>
(2) Newsletter	<u> </u>	<u> X </u>
(3) Wall Displays	<u> </u>	<u> X </u>
(4) Study Model	<u> </u>	<u> X </u>
(5) Local Office	<u> </u>	<u> </u>
2. Project Review Team	<u> X </u>	<u> X </u>
3. Route Location Surveys		
a. Field Surveys		
(1) Presurvey Conference	<u> X </u>	<u> X </u>
(2) Primary Control Net	<u> X </u>	<u> </u>
(3) Secondary Control Net	<u> X </u>	<u> </u>
(4) Supplemental Control Nets	<u> X </u>	<u> </u>
(5) Global Positioning Surveys	<u> X </u>	<u> </u>
(6) Monumentation	<u> X </u>	<u> </u>
(7) Accuracy Tests	<u> X </u>	<u> </u>
b. Photogrammetric Mapping		
(1) Aerial Photography	<u> </u>	<u> X </u>

	<u>CDOT/OTHER</u>	<u>CONSULTANT</u>
(2) Data Reduction		
(a) Topography (Contours)	_____	<u> X </u>
(b) Planimetric (Topo)	_____	<u> X </u>
(3) Map Compilation		
(a) Index Maps	_____	<u> X </u>
(b) Finished Maps	_____	<u> X </u>
4. Conceptual Design		
a. Urban Planning and Aesthetics	_____	<u> X </u>
b. System Feasibility for Interchanges	_____	<u> X </u>
c. Alternatives Analysis	_____	<u> X </u>
d. Final Alternatives Reports	_____	<u> X </u>
e. Interchange Approval Process (1601 Process)	<u> X </u>	<u> X </u>
5. Gather Data, Analysis, and Mitigation Development		
a. Traffic Related		
(1) Traffic Study	_____	<u> X </u>
(2) Accident Study	<u> X </u>	<u> X </u>
(3) Noise Study	_____	<u> X </u>
(4) Air Quality		
(a) Air Quality Monitoring	_____	<u> X </u>
(b) Air Quality Analysis	_____	<u> X </u>
(5) Alternate Transportation Sys.	_____	<u> X </u>
b. Archaeology		
(1) Gather Data & Analysis	_____	<u> X </u>
(2) Mitigation Implementation	_____	<u> X </u>
c. Paleontology		
(1) Gather Data & Analysis	_____	<u> X </u>
(2) Mitigation Implementation	_____	<u> X </u>
d. Initial Geology Investigation	_____	<u> X </u>
e. Water Quality		
(1) Quality Analysis	_____	<u> X </u>
(2) Quality Monitoring	_____	<u> X </u>
f. Ecological Assessment	_____	<u> X </u>
g. Historical		
(1) Historical Bridge Clearance	<u> X </u>	<u> X </u>
(2) Historical Study & Clearance	<u> X </u>	<u> X </u>
h. Floodplain and Drainage Assessment	_____	<u> X </u>
I. Right of Way (ROW)		
(1) Early ROW	<u> X </u>	<u> X </u>
(2) ROW Review	<u> X </u>	<u> X </u>
j. 4(f)/6(f) Activity		
(1) Evaluation	<u> X </u>	<u> X </u>
(2) Clearance/Concurrence	<u> X </u>	_____
k. Threatened and/or Endangered Species		
(1) Determination of Presence	<u> X </u>	<u> X </u>
(2) Implement Mitigation	<u> X </u>	<u> X </u>
l. Wetlands		
(1) Wetlands Determination	<u> X </u>	<u> X </u>
(2) Wetlands Findings Report	<u> X </u>	<u> X </u>
m. Hazardous Materials		
(1) Field Search	_____	<u> X </u>
(2) Research	_____	<u> X </u>

	<u>CDOT/OTHER</u>	<u>CONSULTANT</u>
(3) Conduct in-situ tests	_____	<u> X </u>
(4) Analyze and Assess Impacts	<u> X </u>	<u> X </u>
n. Existing Roadway/Structure	<u> X </u>	<u> X </u>
o. Construction Requirements	<u> X </u>	<u> X </u>
p. Aesthetic Considerations	<u> X </u>	<u> X </u>
q. Utilities	<u> X </u>	<u> X </u>
r. Economics	<u> X </u>	<u> X </u>
s. Farmlands	_____	_____
t. Energy Usage	_____	<u> X </u>
6. Environmental Assessment (EA) Process	<u> X </u>	<u> X </u>
7. Environmental Impact Study (EIS) Process	<u> X </u>	<u> X </u>
8. Design Report Process	<u> X </u>	<u> X </u>
9. Obtain Permits	<u> X </u>	<u> X </u>
C. <u>Preliminary Design</u>		
1. Design Field Survey		
a. Presurvey Conference	<u> X </u>	_____
b. Project Control	<u> X </u>	_____
c. Radial (Topographic) Survey	<u> X </u>	<u> X </u>
d. Vertical (Relief or Elevation) Survey	<u> X </u>	<u> X </u>
e. Utilities	<u> X </u>	<u> X </u>
f. Drainage	<u> X </u>	<u> X </u>
g. Material Sources	<u> X </u>	<u> X </u>
h. Supplemental Surveying	<u> X </u>	<u> X </u>
2. Traffic Engineering	_____	<u> X </u>
3. Materials Engineering		
a. Preliminary Soil Investigation	<u> X </u>	<u> X </u>
b. Pavement Rehabilitation	<u> X </u>	<u> X </u>
c. New Pavement Structure	<u> X </u>	<u> X </u>
d. Pavement Justification	<u> X </u>	<u> X </u>
e. Pavement Design Report	<u> X </u>	<u> X </u>
f. Existing Bridge Investigation	<u> X </u>	<u> X </u>
g. Foundation Investigation	<u> X </u>	<u> X </u>
4. Hydrology/Hydraulics Engineering		
a. Hydrology	_____	<u> X </u>
b. Hydraulics	_____	<u> X </u>
c. Preliminary Hydraulics Report	_____	<u> X </u>
5. Utility Coordination		
a. Location Maps	_____	<u> X </u>
b. Contact Local Services	_____	<u> X </u>
c. Reviews and investigations		
(1) "Pothing"-Excavation	_____	<u> X </u>
(2) "Pothing"-Surveying Utility Locations	_____	<u> X </u>
d. Relocation recommendations	<u> X </u>	<u> X </u>
e. Ditch Co. coordination	<u> X </u>	<u> X </u>
6. Roadway Design and Roadside Development		
a. Roadway Design	<u> X </u>	<u> X </u>
b. Roadside Development		
- Landscaping	<u> X </u>	<u> X </u>

	<u>CDOT/OTHER</u>	<u>CONSULTANT</u>
- Sprinkler Systems	<u>X</u>	<u>X</u>
- Sound Barriers	<u>X</u>	<u>X</u>
- Bikepaths	<u>X</u>	<u>X</u>
- Truck Escape Ramps	<u> </u>	<u> </u>
- Rest Areas	<u> </u>	<u> </u>
c. Lighting Plan	<u>X</u>	<u>X</u>
7. Right of Way		
a. Research	<u>X</u>	<u>X</u>
b. Ownership Map	<u>X</u>	<u>X</u>
8. Major Structure Design		
a. Structure Data Collection	<u>X</u>	<u>X</u>
b. Structure Selection and Layout	<u>X</u>	<u>X</u>
c. Structure Selection Report	<u>X</u>	<u>X</u>
d. Foundation Investigation Request	<u>X</u>	<u>X</u>
9. Construction Phasing Plan	<u>X</u>	<u>X</u>
10. Preparation for the FIR	<u>X</u>	<u>X</u>
11. Field Inspection Review	<u>X</u>	<u>X</u>
12. Post FIR Revisions	<u>X</u>	<u>X</u>
D. <u>Final Design</u>		
1. Project Review	<u>X</u>	<u>X</u>
2. Design Coordination	<u>X</u>	<u>X</u>
3. Utility Coordination	<u>X</u>	<u>X</u>
4. Hydraulic Design		
a. Data Review	<u>X</u>	<u>X</u>
b. Storm Water Pollution Prevention Plan	<u>X</u>	<u>X</u>
c. Major Structure Channel Design	<u>X</u>	<u>X</u>
d. Final Hydraulics Report	<u>X</u>	<u>X</u>
5. Interim Plans		
a. Initiate ROW Authorization Process	<u>X</u>	<u> </u>
b. Final Utility Plans	<u>X</u>	<u>X</u>
c. Final Railroad Plans	<u>X</u>	<u>X</u>
6. Right-of-Way		
a. Plans	<u>X</u>	<u> </u>
b. Authorization Plan	<u>X</u>	<u> </u>
c. Appraisal Staking	<u>X</u>	<u>X</u>
7. Materials Engineering		
a. Materials Data	<u>X</u>	<u>X</u>
b. Stabilization validity	<u>X</u>	<u>X</u>
c. Stabilization Plan	<u>X</u>	<u>X</u>
8. Traffic Engineering		
a. Permanent Signing/Pavement Marking	<u>X</u>	<u>X</u>
b. Signalized Intersections	<u>X</u>	<u>X</u>
c. Traffic Control Plan	<u>X</u>	<u>X</u>
9. Roadside Planning		
a. Landscaping	<u>X</u>	<u>X</u>
b. Other		
- Sprinkler systems	<u>X</u>	<u>X</u>
- Bikepaths	<u>X</u>	<u>X</u>
- Sound barriers	<u>X</u>	<u>X</u>

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	<u>CDOT/OTHER</u>	<u>CONSULTANT</u>
- Truck escape ramps	_____	_____
- Rest Areas	_____	_____
c. Lighting Plans	<u> X </u>	<u> X </u>
10. Roadway Design	<u> X </u>	<u> X </u>
11. Major Structure Design		
a. Structure Final Design	<u> X </u>	<u> X </u>
b. Preparation of Structure Plans and Specifications	<u> X </u>	<u> X </u>
c. Independent Design, Detail and Quantity Check	<u> X </u>	<u> X </u>
d. Bridge Rating and Field Packages	<u> X </u>	_____
e. Structure Final Review Plans and Specifications	<u> X </u>	<u> X </u>
12. Construction Phasing Plan	<u> X </u>	<u> X </u>
13. Plan Preparation for Final Office Review	<u> X </u>	<u> X </u>
14. Final Office Review	<u> X </u>	<u> X </u>
15. Construction Plan Package	<u> X </u>	<u> X </u>
E. <u>Corridor Management Support</u>		
1. Design Control	<u> X </u>	<u> X </u>
2. Information Services	<u> X </u>	<u> X </u>
3. Budget Planning Support	<u> X </u>	_____
F. <u>Value Engineering</u>	<u> X </u>	<u> X </u>

SECTION 7 SERVICES AFTER DESIGN

	<u>CDOT/OTHER</u>	<u>CONSULTANT</u>
A. <u>Review of Shop Drawings</u>	<u>X</u>	<u>X</u>
B. <u>Construction Services</u>		
1. Coordinate Schedule	<u>X</u>	_____
2. Provide field observation		
a. Pile driving/caisson drilling	<u>X</u>	_____
b. Major concrete pours	<u>X</u>	_____
c. Placement of girders	<u>X</u>	_____
d. Splicing of girders	<u>X</u>	_____
e. Post-tensioning duct and anchorage placement	<u>X</u>	_____
f. Post-tensioning operations	<u>X</u>	_____
3. Technical assistance	_____	<u>X</u>
4. Submittals		
a. Diary	<u>X</u>	_____
b. Documentation/justification	<u>X</u>	_____
c. Progress reports	<u>X</u>	_____
d. Calculations, drawings, and specifications	<u>X</u>	_____
e. Daily time sheets	<u>X</u>	_____
C. <u>Post Design Plan Modifications</u>	<u>X</u>	<u>X</u>
D. <u>Post Construction Services</u>		
1. Final earthwork determination	<u>X</u>	_____
2. As-built plans	<u>X</u>	_____
3. Revisions to Right of Way Plans	<u>X</u>	_____
4. Monument ROW	<u>X</u>	_____
5. Set Property Corners (Remainders)	<u>X</u>	_____
6. Deposit ROW Plans	<u>X</u>	_____
E. <u>Construction Engineering</u>	<u>X</u>	_____

SECTION 8 SUBMITTALS

Hard Copy	Electronic Copy		Project Initiation and Continuing Requirements	CDOT/OTHER	CONSULTANT
	PDF	Orig.			
X	X	X	Periodic Reports		
X	X	X	Billings		
X	X	X	Meeting Minutes		
X	X		Project Schedule		
X		X	Completed Specific Design Criteria		
X	X		Survey Plan		
X	X		Approved MHT's		
X	X		Traffic Control Supervisor Certification		
X	X		Permissions to Enter		
		X	Initial Submittal of TMOSS (?) and or MOSS Compatible Data		
X	X	X	Initial Submittal of an Original Plan Sheet		
			Project Development		
X	X	X	Public Communication Contact List		
			Route Location Survey		
X	X		Traffic Control Supervisor Certification		
X	X		Approved MHT's		
		X	Survey data in raw, unedited formats		
X		X	Pothole data including invert elevations		
X	X		Culverts report		
X	X		Access report		
X	X		Topographic survey notes		
X	X	X	Contour plan checked for errors		
X	X	X	Survey control diagram		
X			Field books		
		X	Electronic Survey Files		
		X	Survey TMOSS Data		
X		X	Monument Records		
X	X	X	Control & Monumentation Plan Sheets		
X	X		Aerial Photography Index Map Sheets		
X	X		Aerial Photography Contact Sheets		
			Permits		
X	X		401 Permit		
X	X		Dewatering / 402 Permit		
X	X		404 Permit		
X	X		SB 40 Permit		
X	X		Wildlife Certification		
X	X		CDPS Storm Water Permit		
X	X		CDPHE Discharge Permit		
			Preliminary Design		
		X	Electronic Survey Data		
X	X		Traffic Data & Recommendations		
X	X		Geology & Soils Investigation Report		
X	X		Pavement Design Report		
X	X		Existing Bridge Condition Report		
X	X		Foundation Investigation Report		

Table 1...SUBMITTALS (CONT.)

Hard Copy	Electronic Copy		Preliminary Design (Cont.)	CDOT/OTHER	CONSULTANT
	PDF	Orig.			
X	X		Engineering Geology Plan Sheet(s)		
X	X		Preliminary Hydraulics & Hydrology Report		
X	X	X	Preliminary Storm Water Management Plan		
X	X		Utility Relocation Recommendations		
X	X	X	Ditch Structure Plans		
			Right-of-way		
X	X		Memorandum of Ownership		
X	X	X	Preliminary Ownership Map (include in FIR Plan set)		
X	X		Structural Selection Report		
X	X		Foundation Investigation Request		
X	X		Final Materials Recommendations		
X	X		Final Pavement Selection Report		
X	X		Intersection Traffic Report		
X	X		Traffic Report		
X	X		Preliminary Cost Estimate		
X	X	X	FIR Plan Set		
X	X		List of deviations from Standard Design Criteria		
X	X	X	Corrected FIR Plan Set		
X	X		Final Hydraulics & Hydrology Report		
			Final Design		
X	X	X	ROW Authorization Plans		
X	X	X	Final Utility Plan Set		
X	X	X	Final Railroad Plan Set		
X	X		PUC Exhibit		
X			Bound Final Geotechnical Report _____ copies		
X	X		Correspondence with Agencies, Entities, and Public		
			Right-of-way		
X	X		Area Calculations		
X	X	X	Authorization Plans		
X	X		Legal Descriptions		
X	X	X	Final Right-of-way Ownership Map		
X	X	X	Stabilization Plans		
			Traffic Engineering		
X	X		Safety Assessment		
X	X	X	Signing/Pavement Marking Plans		
X	X		Signal Warrant Study		
X	X	X	Signalized Intersection Plans & Specifications		
X	X	X	Traffic Control Plan		
			Roadside Planning		
X	X	X	Landscape Plan & Specifications		
X	X		Certification of Plant Availability		
X	X	X	Irrigation Plans & Specifications		
X	X	X	Bike path Plans & Specifications		

<i>Table 1...SUBMITTALS (CONT.)</i>					
Hard Copy	Electronic Copy		Roadside Planning (Cont.)	CDOT/OTHER	CONSULTANT
	PDF	Orig.			
X	X	X	Sound Barrier Plans & Specifications		
X	X	X	Truck Escape Ramp Plans & Specifications		
X	X	X	Rest Area Plans & Specifications		
X	X	X	Lighting Plans & Specifications		
X	X	X	Structure Final Review Plans & Specifications		
X	X	X	Construction Phasing Plan		
X	X	X	Storm Water Management Plan		
X	X		FOR Plans & Specifications		
X	X		FOR Cost Estimate		
X	X	X	Final Review Revisions		
			Construction Plan Package		
X	X	X	Final Plans (11X17), Specifications (duplex) & Estimate Package for Ad.		
X	X	X	Final Cross Sections		
X	X		Schedule of Quantities		
X	X		Design Decisions		
X	X		Variances		
X	X		Findings In the Public Interest		
		X	Original Surface Digital Terrain		
		X	Final Surface Digital Terrain Model		
		X	Design Digital Terrain Model		
X		X	Staking Data		
X	X	X	Earthwork Quantities		
X	X	X	Mass/Haul diagram		
X	X		Project Calculations (2 copies)		
X	X		Worksheets (2 copies)		
X	X		Design Notes		
X	X		Independent Design Review Reports		
X	X		Roadway Design Data Submittal		
X	X		Major Structure Design Final Submittal		
X	X		Bridge Construction Pack		
X			Record Plan Sets		

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SECTION 9
CONTRACT CONCLUSION

1 SUPPLEMENTAL WORK

N/A