



COLORADO
Department of Transportation
Region 2

North Program
1480 Quail Lake Loop, Suite A
Colorado Springs, CO 80906

Project Management Support for ADA Ramp Compliance

SCOPE OF WORK

Scope Date: April 22, 2020

PROJECT NUMBER: STM R200-245
PROJECT CODE: 21988
CMS ID NUMBER: TBD
PROJECT LOCATION: Region 2
CONTRACT TYPE: Project Specific, Cost Plus Fixed Fee
CONTRACT SUBJECT: Project Management Support for ADA Ramp Compliance

The Contract Administrator for this Contract will be:

Daniel Hunt PE II
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Active Day to Day administration and monitoring of this contract will be delegated to the following CDOT employee:

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Background

In keeping with our goal of providing mobility and accessibility to all users of the transportation system, CDOT's Executive Management Team (EMT) has expressed a strong desire to aggressively increase ADA accessibility and move forward with a strategic and programmatic approach to achieving full compliance. The EMTs intent is to bring CDOT into full compliance with the ADA curb ramp requirements within five years.

A key element of this initiative is the adoption of the Public Right-of-Way Accessibility Guideline (PROWAG). PROWAG is the state of the art in accessibility for transportation facilities, unlike previous standards which were more oriented towards buildings. CDOT has updated CDOT standards and specifications utilizing PROWAG for best practices and guidance. The adoption of PROWAG will provide criteria that are better suited to the transportation environment while also providing better accessibility to the disabled community.



Administration

General administration of this contract will be delegated to the respective Resident Engineer involved with this consultant selection process. Active day to day administration and monitoring of contract task orders will be delegated to the Region 2 ADA Curb Ramp Representative, Region Program Engineers and their respective Design Team Managers and Resident Engineer will be responsible for the work described within each task order. Some of these services must be provided under the direct supervision of a Colorado-licensed Professional Engineer (PE) or Professional Land Surveyor (PLS).

Scope of Work

This contract will provide General Engineering support for projects as part of the R2 ADA Curb Ramp Transition Program with scope that include survey, right-of-way (ROW), utilities, environmental, preliminary and final design and during construction. This contract will provide general engineering services for the development of final plans, specifications, and cost estimates for ADA curb ramp projects throughout Region 2. These may include standalone curb ramp projects as well as individual ramp plans to be inserted into other project plan sets.

Type of work may include all or parts of the following activities:

- A. General Engineering Services** -The scope for general engineering services may include but shall not necessarily be limited to:
1. Provide conceptual drawings, graphs, data collection, or charts for the Region's planning, environmental, or other units as needed.
 2. Conduct or update studies for curb ramp compliance, transportation, environmental, NEPA etc.
 3. Provide support for region planning activities, including assistance with public meetings.
 4. Provide drafting support or CADD services. All CADD work for CDOT will be conducted using Bentley products including Microstation, Inroads Software, and ProjectWise latest versions used by CDOT.
 5. Provide support research or search county, state or other areas for records or documents relevant to the project or task. This includes right of way documentation.
 6. Provide scoping services.
 7. Provide scheduling in MS Project or other scheduling software as requested.
 8. Provide or acquire design services as required to complete tasks not specifically defined in the outline, but that may be required by specific task order.
 9. Provide Constructability Reviews.
 10. Provide meeting minutes for project development meetings (Scoping, FIR, ROWPR, FOR, etc.)
 11. Preconstruction site photos and preconstruction condition report/analysis.
 12. ADA Compliant Pedestrian detour routes, signage, striping and other items to accommodate construction.



- B. Roadway Design Activities** -The scope of work for roadway design activities may include but shall not necessarily be limited to:
1. Provide design services including quantity calculations for the various components of roadway construction, which could include curb ramps, pedestrian movements, and relocation of utilities, traffic signals, and pedestrian signals.
 2. Conduct plan, specification, and cost estimate checking and/or quality control.
 3. Furnish detailing and drafting services utilizing MicroStation and Inroads Software, latest CDOT adopted versions utilizing CDOT format. Other software products required for design services and communication of information are Microsoft Office products such as Word, Excel, Power Point. In addition, Project Wise, Sharepoint, or FTP sites may be required for file sharing. Other formats or software products may be required for specific tasks such as traffic modeling or truck turning movements.
 4. Attend and/or conduct meetings as needed such as scoping reviews, design office reviews, field inspection reviews, and final office reviews and provide minutes as appropriate.
 5. Prepare (PS&E Package) final plans, specifications and provide the CDOT project manager with detailed estimates that can be entered into CDOT Transport application system at any point in the project.
 6. Prepare revisions under-advertisement to plans or specifications when necessary.
- C. Hydrology Activities** -The scope of work for the hydrology activities may include but shall not necessarily be limited to:
1. Collect historical drainage data.
 2. Establish drainage basin data.
 3. Select run-off parameters and predict peak flow.
- D. Hydraulics Design Activities** -The scope of work for hydraulics design activities may include but shall not necessarily be limited to:
1. Ensure current drainage is adequate and that curb ramp location will not adversely impact ADA accessibility or any storm drain systems.
- E. Traffic Engineering Activities** -The scope of work for traffic engineering activities may include but shall not necessarily be limited to:
1. Perform in-field inventories of traffic control device locations and conditions (existing and what is needed to be fully in compliance with ADA requirements).
 2. Furnish design and quantity calculations necessary to prepare signal, signing or pavement marking plans.
 3. Furnish detailing and drafting services.
 4. Attend meetings such as field inspection and final office review or others as requested.
 5. Prepare construction signing plans and schedules.
 6. Prepare final plans and specifications.



- F. Landscape Architectural Activities** -The scope of work for landscape architectural activities may include but shall not necessarily be limited to:
1. Coordinate all special permits that may be required.
 2. Coordinate ROW requirements.
 3. Prepare Storm Water Management Plan (SWMP) Sheets with BMP locations and quantity calculations for each phase of construction.
- G. Materials and Geotechnical Services for Design** -The scope of work for design services may include but shall not necessarily be limited to:
1. Material Design for constructing curb ramps and associated intersection items including: Signal poles (traffic and pedestrian)
- H. Environmental Services** - The scope of environmental services consists of assisting Regional staff in completing environmental documentation and coordination necessary to approve and permit the project.
- The scope of work for these environmental services may include but shall not be necessarily be limited to:
1. Complete Section 106 review for all ramp locations in Region 2. A Historian shall establish the Area of Potential Effects (APE) for review by CDOT history staff, complete a file search of the Colorado Office of Archaeology and Historic Preservation (OAHP) COMPASS database, in addition to reviewing records of the appropriate County Assessor, aerial images, and topographic maps to identify known and potential historic resources.
 2. In accordance with recent CDOT streamlining procedures related to Section 106 reviews for ADA ramps, no site visit or site forms will be completed under this scope. Resources that meet the age threshold for consideration of eligibility to the National or State Register of Historic Places will be treated as eligible.
 3. A Historian will complete the CDOT ADA ramp clearance table, including an entry for each ramp in Region 2. It is assumed that worst-case-scenario right-of-way and easement acquisition information would be provided by this Contract for inclusion in this table (table will be provided). A Historian will also provide annotated project plans, including a notation for each property adjacent to or affected by the proposed work. Notations will include building date of construction, address, previous determination of National or State Register of Historic Places eligibility if applicable, and easement or right-of-way acquisition information.
 4. Project locations will be characterized as either existing or new facilities. A blanket effect determination will be developed for all resources treated as eligible, with field determinations, or previously identified as eligible that have similar effects. For potential, eligible, or listed historic districts, separate effect determinations will be developed. To avoid having to go back to SHPO if there are scope changes, all properties that meet the appropriate age threshold will be included in the analysis. Deliver draft compliance documents, including one review and revision cycle to finalize documents.
 5. Develop a draft Eligibility and Effects cover letter cover (template letter to be provided) for CDOT's use in initializing Section 106 consultation with the State Historic Preservation Office (SHPO). This letter will summarize the project, Section 106 review methodology, and Section 106 effect analysis.



6. In accordance with CDOT ADA ramp clearance processes, while no APE map will be provided, it is assumed a description of the APE will be included. The annotated plan set will provide information on work locations.
 7. Will complete Quality Assurance/Quality Control review of all deliverables.
- I. Utility Services** -The scope of work for Utility Services may include but shall not necessarily be limited to:
1. Subsurface Utility Engineering (SUE) compliance
 2. Survey/Research existing utilities.
 3. Map existing and relocated utilities.
 4. Assist or facilitate utility agreements.
 5. Coordinate and discuss utility impacts with utility companies.
 6. Prepare exhibits or other support as needed for utilities.
- J. Right of Way/Surveying** -The scope of work for surveying activities conforming to the latest version of CDOT's Survey manual that may include, but shall not necessarily be limited to:
1. All surveying services shall be completed utilizing MicroStation and Inroads Software, latest CDOT adopted versions utilizing CDOT format.
 2. Obtain Right of Entry forms if needed.
 3. Obtain a Highway Survey Permit from CDOT Utility Engineer/Inspector.
 4. Perform surveys related to the horizontal and vertical alignment of the project.
 5. Perform GPS control survey and Geo reference the project control.
 6. Perform topographical surveys.
 7. Perform cross section surveys.
 8. Perform utility surveys (includes potholing).
 9. Perform wetland survey.
 10. Prepare project control diagram.
 11. Perform LIDAR surveys.
 12. Perform unmanned aerial surveys.
 13. Perform supplemental survey.
 14. Attend pre-survey conferences.
 15. Perform Monumentation
 16. Photogrammetric Mapping.
 17. Perform staking of Right of Way and parcel points for property inspections.
- K. Right-of-Way Plan Preparation** -The scope for right of way plan preparation is conforming to CDOT's latest Right of Way manual may include, but shall not necessarily be limited to:
1. Retrieve recorded and un-recorded documents necessary to determine ownership and encumbrances, and property boundaries
 2. Upon request of Region, prepare scope of services and procure services for Title Commitments and updates as required for development of right-of-way plans.



3. Upon request of the Region, confer with parties and perform unconventional research when evidence of ownership is not well defined by a conveyance instrument to determine extent of prescriptive use and rights.
4. Determine parcel boundaries for properties affected by ROW acquisition, and create boundaries of parcels to be acquired.
5. Write parcel legal descriptions.
6. Determine parcel size of ROW acquisitions, and provide total area of "parent" parcels.
7. Prepare R.O.W. ownership tabulation sheet.
8. Prepare R.O.W. plan sheets.
9. Calculate and plot existing R.O.W. lines.
10. Geo-reference all Microstation drawings.
11. Prepare monument tabulation sheets.
12. Prepare land survey control diagram.
13. Prepare total ownership maps.
14. Attend and prepare meeting minutes for R.O.W. plan review meetings and other required project meetings as requested.
15. Upon request by Region, Finalize R.O.W. plans and deposit appropriate documents in County Records
16. Upon request of the Region, research records and obtain information from water users, including but not limited to ditch companies to determine users, flow, use and other information required when irrigation structures are altered or flow and use affected. Obtain and/or prepare ditch agreements, permits and licenses at the direction of Region.
17. Upon request of the Region, develop engineer cost estimates for property and improvements to be acquired and Right of way budgets.

- L. Other Services** -As requested by the Regions and specified in the task orders other services not specified above may be requested on an as needed basis. The scope of work for these services will include the details of the needs.

Timeframe and Deliverables

Timeframes and deliverables will be determined on a task by task basis at the time each task order is developed under this contract.

