

**NON-PROJECT / NON-TASK SPECIFIC CURB RAMP GENERAL ENGINEERING
SCOPE OF WORK –
Colorado Department of Transportation Region 3 CONTRACT**

ADMINISTRATION:

Contract Administration:

Steve Olson, Region 3 Program Central Program Engineer
202 Centennial Drive
Glenwood Springs, CO 81601-2810

Day to Day Project Administration: Administration:

To Be Determined- Based on Scope of Work and the Program Area Being Served:
Row and Survey Task Orders- Dorlynn Erickson
Program Areas- To be assigned to Resident Engineers based on Geographic area or
specific county limits.

General administration of this contract will be delegated to the respective Region Program Engineer involved with this consultant selection process. Active day to day administration and monitoring of contract task orders will be delegated to the Region 3 ADA Curb Ramp Transition ROW Project Manager Dorlynn Erickson, Region Program Engineers and their respective Design Team Managers and Resident Engineer 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).

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 is working to update CDOT standards and specifications utilizing PROWAG for best practices and guidance. Once we have revised our standard plans and specifications, the adoption of PROWAG will provide criteria that are better suited to the transportation environment while also providing better accessibility to the disabled community.

Scope

This contract will provide Program Level Support for the development of a R3 ADA Curb Ramp Transition Program that will assist the region in developing processes, process improvements, and a program of projects with scope that include survey, preliminary and final design and construction. Program Support may require working with specialty units in the development of programmatic approaches for utility, environmental, row and other clearances that apply at the regional or statewide level. Construction packages should include Emerging Small Business

(ESB) projects appropriate to the available ESB resources that serve Region 3. This contract will provide general engineering services for the development of plans, specifications, and cost estimates for ADA curb ramp projects throughout the state. 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 prioritizing/scheduling which curb ramps get upgrade when, including assistance with public meetings and/or public information including handouts, website support or development, and public meeting presentations.
 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 funding guidance and or support including grant applications.
 9. Prepare, provide support, coordinate Innovative Contracting documents or supporting information.
 10. Provide Program Management support and/or financial planning as requested.
 11. Provide support, preparation, or guidance for Grant Applications including economic analysis.
 12. Write, review, and/or provide guidance or expertise related to manual preparation or guidance documents.
 13. Provide/prepare training, advice, or guidance as requested.
 14. 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.
 15. Provide Independent Cost Estimates
 16. Provide Constructability Reviews
 17. Provide meeting minutes for project development meetings (Scoping, FIR, ROWPR, FOR, etc.)
 18. Preconstruction site photos and preconstruction condition report/analysis.
 19. 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. Furnish the size and location of drainage structures.
 2. Furnish storm sewer design.
 3. Furnish erosion protection design and NPDES requirements.
 4. Furnish design and quantity calculations for drainage structures including irrigation and permanent BMP's for surface drainage.
 5. Design of water and waste water systems.
 6. Irrigation system designs including, but not limited to, typical ditches, traveling gun irrigation systems and other center pivot systems.
 7. Design, advise, or plan for MS4 compliant facilities and calculations and/or plan preparation as needed.
 8. FEMA Flood Mapping Revisions and Amendments
- 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 consist of conducting scoping, recommend applicable environmental compliance requirements, process, and permitting to Region environmental staff. Assist Regional staff in completing environmental documentation and coordination necessary to approve and permit the project. This will include steps necessary to obtain a NEPA approval as well as construction permitting under Section 404 and for Construction Discharge Permit System. Additional environmental services include, address` monitoring wells and other hazardous waste concerns identified on projects to eliminate environmental impedance on CDOT projects to allow construction activities to proceed while complying with environmental regulations.

The scope of work for these environmental services may include but shall not be necessarily be limited to;

1. Review and document environmental conditions, and apply the expected scope of work to determine applicable compliance requirements.
2. Prepare and/or review environmental surveys, impact assessment and compliance documentation
3. Coordinate with Region environmental staff in the scope of H.a-b to ensure acceptance of scope of environmental surveys, impact assessment and documentation.
4. Assist Regional staff with any required external agency coordination.
5. Deliver draft compliance documents, including one review and revision cycle to finalize documents
6. Assist Region Environmental Staff in the development of any necessary permit applications.
7. Ensure familiarity with specific site logistics that may pose challenges to completion of highway improvements and when requested by the Region, determine what outside recourses are required to provide services, estimates and complete activities to allow CDOT construction work to proceed, and comply with regulations
8. When requested by Region manage the logistics, schedule and administrative duties for; site investigations, drilling and collection analysis, review of analytical data in reports files and consult other regulatory agencies, preparing material management reports and estimates.

- I. **Utility Services** -The scope of work for Utility Services may include but shall not necessarily be limited to:
1. Survey/Research existing utilities.
 2. Map existing and relocated utilities
 3. Assist or facilitate utility agreements
 4. Coordinate and discuss utility impacts with utility companies
 5. 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. Obtain Right of Entry forms if needed
 2. Obtain a Highway Survey Permit from CDOT Utility Engineer/Inspector
 3. Perform surveys related to the horizontal and vertical alignment of the project.
 4. Perform GPS control survey.
 5. Perform topographical surveys.
 6. Perform cross section surveys.
 7. Perform utility surveys (includes potholing).
 8. Perform wetland survey.
 9. Prepare project control diagram.
 10. Perform LIDAR surveys.
 11. Perform supplemental survey
 12. Attend pre-survey conferences
 13. Perform Monumentation
 14. Photogrammetric Mapping
 15. 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 parcels.
 5. Write parcel legal descriptions.
 6. Determine parcel size.
 7. Prepare R.O.W. plan 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 Right of Way plan reviews meetings and other required project meetings as requested.
 15. Upon request by Region, Finalize Right of Way plans and deposit Milars 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.