

C-R-S: DEL CR 9-8.11

Scope Narrative

General Information:

County: Delaware County
PID#: 2118
Description: The Consultant's services include preparation of final construction and right of way plans for a new single-lane modern roundabout with minimal approach work.

Preliminary Plan Provided by DCEO:

DCEO will provide the selected consultant a preliminary plan with design designation, typical sections, centerline alignments and profiles, roundabout geometric details, storm sewer locations and lighting locations.

Traffic Analysis:

No traffic analysis will be required. Certified traffic will not be required.

Survey Parameters:

Survey and mapping should use the Ohio County Coordinate System (OCCS).

Plan Sheets:

The following plan sheets are anticipated.

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| Title Sheet (1) Schematic Plan (1) Roundabout Geometry (1) Typical Sections (2) General Notes (2) Maintenance of Traffic Notes (2) Detour Plan (1) General Summary (2) Estimated Quantities (2) Drainage Subsummary (1) Plan and Profile at 20 scale (4) | Roundabout Plan (1) Cross Sections at 50' Plus Driveway Profiles (8) Intersection Detail (4) Splitter Island Details (4) Reference Line Profiles (4) Driveway Subsummary (1) Right of Way Legend Sheet (1) Summary of Additional ROW (1) ROW Topo Sheets at 20 scale (5) ROW Boundary Sheets at 20 scale (5) |
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Note: Centerline plat not required.

Cross Section:

| | |
|------------------------|---------------------------------|
| Lane Width | 12' |
| Treated Shoulder Width | 2' paved (full depth) |
| Total Shoulder Width | 8' (2' paved, 6' graded turf) |
| Curb Type: | Type 2 at roundabout approaches |
| Guardrail Type | Do not use guardrail |
| Maximum Foreslope | 4:1 |
| Maximum Backslope | 4:1 |

Pavement:

Consultant should consider widening and overlay of approaches in lieu of full depth reconstruction where no profile adjustment is needed, in order to reduce cost and simplify access to work zone residences. Planing/milling of existing asphalt is not desired due to lack of thickness of existing asphalt.

Pavement buildup for full depth sections:

- 1 1/4" Item 441, Asphalt Concrete Surface Course, Type 1 (448), PG64-22
- Item 407 Tack Coat @ 0.04 gal/sy
- 1 3/4" Item 441, Asphalt Concrete Surface Course, Type 2 (448), PG64-22
- Item 407 Tack Coat @ 0.075 gal/sy
- 6" Item 302, Asphalt Concrete Base
- Item 408 Prime Coat @ 0.4 gal/sy
- 6" Item 304, Aggregate Base

Roadside:

Consultant shall give special consideration to right of way impacts of the roadside design – in particular, presence and depth of any ditches where none currently exist, and the slope and appropriateness of a ditch. Enclosed drainage using storm sewers and catch basins is expected in certain areas where roadside impacts may be costly. Do not exceed an open ditch depth of 3 feet measured vertically from the edge of pavement.

Existing leach fields are expected within the areas of proposed roadside work. Consultant shall research Delaware General Health District records and delineate leach fields.

Roundabout:

Proposed roundabout shall be a single lane. Geometric design of roundabout should generally conform to the preliminary plans provided by DCEO.

Truck apron shall be stamped and colored concrete. Central island landscaping shall generally follow the design of previous Delaware County roundabouts, with sample plans provided by DCEO.

Lighting:

Provide lighting design in general conformance with the preliminary plans provided by DCEO. Photometric analysis not required if the spacing of poles is less than 175 feet and poles are located in the typical configuration of the sample plans provided. Lighting shall be designed in accordance with DCEO's Design Resource Page.

Traffic Control:

Provide notes per the DCEO Design Resource Page and from sample plans provided by DCEO for sign sheet and sign support material types. Specify 5-inch pavement markings for centerlines and edge lines.

Maintenance of Traffic:

A full closure with detour plan is anticipated to be the preferred MOT method for roundabout construction. Ingress and egress from work zone properties shall be maintained with traffic compacted surface where required

Hydraulics:

Standards: Hydrologic and hydraulic analysis should be performed in accordance with ODOT L&D Volume 2.

Conduit Material Type: Culvert and storm sewer material preference should be as per the DCEO Supplement to the ODOT L&D Manual.

Geotechnical:

Soil Borings and Geotechnical Investigation: Not required

Pavement Design: The Consultant shall use the pavement design specified above.

Environmental:

No jurisdictional wetland or stream impacts are anticipated. DCEO may direct the consultant to provide an encumbrance of funds in the fee proposal for if-authorized environmental studies.

Utilities:

Consultant shall ensure that overhead utilities (electric and telecom) have feasible locations within new or existing public right of way to relocate poles and that overhead utilities do not conflict with proposed light poles. A preliminary layout of relocated utilities should be done during geometric layout of the roundabout. Detailed design of utilities is not required, but conceptual location of new and existing poles and above ground structures should be noted in the preliminary roundabout plan to ensure feasibility of the design.

Public Involvement:

Consultant shall prepare electronic versions of project maps showing proposed work limits and shaded right of way limits in PDF or image format. DCEO anticipates direct mailing to affected property owners and a project information web page hosted on the DCEO website.

Right of Way Design:

Consultant shall specify WD right of way for parcels to be acquired in the name of the Delaware County Board of Commissioners where appropriate. TMP parcels for a duration of 24 months shall be used to minimize the extent of permanent ROW where tie-in grading is required and no significant change to the grading of such areas results from the project.