Project Description

# Contract Assignment: Convert MicroStation V8i files to ORD

# Contract Information:

This task order is cost-plus. NCDOT will be billed for the actual time spent and any reimbursable expenses incurred.

|  |  |
| --- | --- |
| [Consultant] |  |
| *Contract #*  | *Contract Type: Limited Services Contract* | *Payment Type: Cost Plus* | *WBS*  |
| **[Sub- consultant]** |  |
| *Contract #*  | *Contract Type: Limited Services Contract* | *Payment Type: Cost Plus* | *WBS*  |

# Project Contacts

|  |
| --- |
| NCDOT Contacts |
| *Name* | *Phone* | *Email* | *Role/Task* |
| **PRIME CONSULTANT CONTACTS**  |
| *Name* | *Phone* | *Email* | *Role/Task* |
| *Name* | *Phone* | *Email* | *Role/Task* |
| *Name* | *Phone* | *Email* | *Role/Task* |
| *Name* | *Phone* | *Email* | *Role/Task* |
| **SUBCONSULTANT CONTACTS**  |
| *Name* | *Phone* | *Email* | *Role/Task* |
| **SUBCONSULTANT CONTACTS**  |
| *Name* | *Phone* | *Email* | *Role/Task* |

**Project Information**

*Fill in Project Information.*

|  |
| --- |
| Basic Project Information |
| **SPOT ID:** *SPOT Number* | **WBS:** *WBS* | **Federal Aid Number:** *FA Number* |
| **Division:** *Division(s)* | **County:** *County(s)* |
| **Project Description:** *Project Description* |
| **Programmed R/W Date:** Click or tap to enter a date. | **Programmed Let Date:** Click or tap to enter a date. |
| **Project Length (miles):** *Insert # Miles* | **No. Interchanges:** *Insert # of Interchanges* |
| **# Typical Sections:** *Insert # of Typical Sections* | **# Aligns:** *Insert # Alignments* |
| **Length of Algns:** *Insert (miles) of all alignments* |  |
| **# Detail Sheets:** *Insert # detail sheets* | **# Plan Sheets:** *Insert # plan sheets* |
| **# Profile Sheets:** *Insert # profile sheets* | **# XSC Sheets:** *Insert # cross section sheets* |

# Services provided by the consultant may include but are not limited to the following tasks and deliverables.

# Project Management Tasks

## Objective:

During the project initiation stage, the Project Manager will organize the team, develop the scope of services, a baseline schedule and budget, and a work plan consisting of communications, risk management, quality and change management procedures and expectations for the project.

In subsequent stages, the Project Manager manages the team in accordance with those elements listed above, as well as ensuring the project is delivered on schedule and meets the highest quality standards. The Project Manager leads and is responsible for building and maintaining the team, assisting the team’s coordination, collaboration, and communication through various meetings. These meetings vary in frequency and purpose and are dependent upon project team needs. The Project Manager leads the team in coordination, tracks the status of the scope, schedule, and budget, facilitates dialogue between team members, and ensures that effective communication occurs on project decisions and identification of risks, opportunities, and actions to progress the project through MicroStation V8i to ORD conversion. In addition, the Project Manager performs administrative functions to report project status in accordance with various budget and schedule metrics and Department leadership requests for information, including development of project status reports, spending plans, etc.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| Meetings  |
|[ ]  Meetings with NCDOT PM: 0 |
|  | Anticipated format: Virtual meeting  | Anticipated # of staff: 0 | Anticipated duration: 1 hrs./meeting |
|[ ]  Internal Coordination Meetings: 0 |
|  | Anticipated format: Virtual meeting  | Anticipated # of staff: 0 | Anticipated duration: 1 hrs./meeting |

## Tasks/Deliverables:

|  |
| --- |
| TASK/Deliverable LIST |
|[ ]  1. **Project Management and Coordination**
* Coordination with NCDOT PM, including status calls and meetings.
* Coordination with other NCDOT disciplines/units.
* Coordination with subconsultants.
* Internal coordination with project team, including status meetings.
* Document all meetings and calls.
* Maintain administrative record and internal project files.
* Maintain Connect/SharePoint files
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

# Roadway Design| [Consultant]

## Objective:

Convert all existing roadway design MicroStation V8i files to ORD. Electronic file conversion level of effort is to achieve the same level of 2D plans as the last set of PDF plans submitted (DRPS, Field Inspection, Right of Way, Final).

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| MEETINGS |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

## Tasks/Deliverables:

|  |
| --- |
| TASK/DELIVERABLE LIST |
| Roadway ORD Conversion Tasks* Create ETM File for the existing terrain model.
* Create EOP File for the existing edges of pavement.
* Import/Recreate Alignments
	+ Import or Recreate Alignments with Other Linework
	+ Recreate/Import Vertical Alignments
	+ Recreate/Import Horizontal Alignments
* Recreate Plan Design and Construction Class Elements
* Modify NCDOT Roadway and Bridge Templates
* Create 3D Model.
* Model/Layout retaining/noise walls.
* Create Superelevation File
* Create Proposed Right-of-Way and Easements
* Create Title and Conventional Symbols Sheet
* Create Typical Section and Detail Sheets
* Create Plan Sheets
* Create Profile Sheets
* Recreate any detail sheets with new text styles/fonts.
* Create Cross Section Sheets
* Print and Perform QC of the Plan Set
* Submit Plan Set to NCDOT

Roadway Deliverables* Plan Set (PDF)
* Electronic roadway design files in ORD
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

**Hydraulics| [Consultant]**

Objective:

If drainage design is beyond Drainage Redlines and Permit Drawings, conversion tasks consist of converting existing V8i files (2D) to ORD. Tasks will not include rebuilding/redesigning storm drainage networks in 3D. Tasks will include everything needed to convert existing V8i files to ORD such that Field Inspection, Right of Way, Final Plans can be produced. It should be noted Permit Drawings will be updated; however, impact tables will not be redone.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| **MEETINGS** |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

Tasks/Deliverables:

|  |
| --- |
| **TASK/DELIVERABLE LIST** |
| **Hydraulics ORD Conversion Tasks*** Create DRN File
* Create ETM File with Additional Floodplain Lidar
* Modify NCDOT Drainage Templates
* Create Drainage System and Pipes Model
* Recreate drainage details.
* Incorporate Drainage Information on Plan and Profile Sheets
* Incorporate Drainage Information on Cross Sections (as necessary)
* Perform QC review of Hydraulic Design
* Submit Hydraulic/Permit Plans Set(s) to NCDOT

**Hydraulics Deliverables*** Electronic drainage files in ORD
* Permit Drawings (ORD format if applicable)
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

**Erosion Control| [Consultant]**

Objective:

Tasks will include everything needed to convert existing V8i files to ORD such that Erosion Control Plans can be produced.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| **MEETINGS** |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

Tasks/Deliverables:

|  |
| --- |
| **TASK/DELIVERABLE LIST** |
| **Erosion Control ORD Conversion Tasks*** Create EC File
* Create Title Sheet
* Import/Recreate design files
* Create Plan Sheets
* Create Detail Sheets
* Print and Perform QC of the Plan Set
* Submit Plan Set to NCDOT

**Erosion Control Deliverables*** Plan Set (PDF)
* Electronic erosion control files in ORD
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

**Structure Design| [Consultant]**

Objective:

Task will include everything needed to convert all existing structure design MicroStation V8i files to OBD. Electronic file conversion level of effort is to achieve the same level of 2D plans as the last set of PDF plans submitted.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| **MEETINGS** |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

Tasks/Deliverables:

|  |
| --- |
| **TASK/DELIVERABLE LIST** |
| **Structure OBD Conversion Tasks*** Open 2D V8i files in OBD/OBM (continue design)
* Print and Perform QC of the Plan Set
* Submit Plan Set to NCDOT

**Structure Deliverables*** Plan Set (PDF)
* Electronic structure OBM CAD Files
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

# Signing| [Consultant]

## Objective:

If the project is beyond the Signing and Delineation Concept submittal, conversion tasks consist of converting existing V8i files (2D) to ORD. Tasks will include everything needed to convert existing V8i files to ORD such that Signing Plans can be produced. Elements will not have the “intelligence” contained in ORD elements. Tasks will not include rebuilding/redesigning Signing Concept in 3D. Re-create the previous submittal using ORD files.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| MEETINGS |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

## Tasks/Deliverables:

|  |
| --- |
| TASK/DELIVERABLE LIST |
| Signing ORD Conversion Tasks* Create New ORD Files
* Attach V8i Files and Merge
* Attach or Re-establish ORD Reference Files
* Correct Scale Issues
* Create Clips for Border/Match Lines
* Print and Perform QC of the Plan Set
* Submit Plan Set to NCDOT

Signing Deliverables* Plan Set (PDF)
* Electronic Signing files in ORD
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

# Pavement Markings| [Consultant]

## Objective:

If the project is beyond the Signing and Delineation Concept submittal, conversion tasks consist of converting existing V8i files (2D) to ORD. Tasks will include everything needed to convert existing V8i files to ORD such that Pavement Marking Plans can be produced. Elements will not have the “intelligence” contained in ORD elements. Tasks will not include rebuilding/redesigning Pavement Marking Concept in 3D.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| MEETINGS |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

## Tasks/Deliverables:

|  |
| --- |
| TASK/DELIVERABLE LIST |
| Pavement Marking ORD Conversion Tasks* Create New ORD Files
* Attach V8i File and Merge
* Attach or Re-establish ORD Reference Files
* Correct Scale Issues
* Create Clips for Border/Match Lines
* Print and Perform QC of the Plan Set
* Submit Plan Set to NCDOT

Pavement Marking Deliverables* Plan Set (PDF)
* Electronic Pavement Marking files in ORD
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

Transportation Management Plan| [Consultant]

## Objective:

If the project is beyond the Traffic Management Concept submittal, conversion tasks consist of converting existing V8i files (2D) to ORD. Tasks will include everything needed to convert existing V8i files to ORD such that Traffic Management Plans can be produced. Elements will not have the “intelligence” contained in ORD elements. Tasks will not include rebuilding/redesigning Traffic Management Concept in 3D.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| MEETINGS |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

## Tasks/Deliverables:

|  |
| --- |
| TASK/DELIVERABLE LIST |
| Transportation Management ORD Conversion Tasks* Create New ORD Files
* Attach or Re-establish ORD Reference Files
* Correct Scale Issues
* Create Clips for Border/Match Lines
* Print and Perform QC of the Plan Set
* Submit Plan Set to NCDOT

Transportation Management Deliverables* Plan Set (PDF)
* Electronic Transportation Management files in ORD
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

# UBO Files (Utilities Coordination Working Plan, UBO Plans) | [Consultant]

## Objective:

If the project is beyond the initial Utilities Coordination Working Plans submittal, conversion tasks consist of converting existing V8i files (2D) to ORD. Tasks will include everything needed to convert existing V8i files to ORD such that Utilities Coordination Working Plans, UBO Plans, and Utilities Environmental Permit Plans can be produced. Elements will not have the “intelligence” contained in ORD elements. Tasks will not include rebuilding/redesigning UBO files in 3D.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| MEETINGS |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

## Tasks/Deliverables:

|  |
| --- |
| TASK/DELIVERABLE LIST |
| UBO ORD Conversion Tasks* Create New ORD Files
* Attach V8i Files and Merge
* Attach or Re-establish ORD Reference Files
* Correct Scale Issues
* Create Clips for Border/Match Lines
* Print and Perform QC of the Plan Set
* Submit Plan Set to NCDOT

UBO Deliverables* Plan Set (PDF)
* Electronic UBO files in ORD
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

# UC Plans| [Consultant]

## Objective:

If the project is beyond the initial UC submittal, conversion tasks consist of converting existing V8i files (2D) to ORD. Tasks will include everything needed to convert existing V8i files to ORD such that UC Plans with profiles can be produced. Elements will not have the “intelligence” contained in ORD elements. Tasks will not include rebuilding/redesigning UC plans in 3D.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| MEETINGS |
|[ ]  Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
|[ ]  Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

## Tasks/Deliverables:

|  |
| --- |
| TASK/DELIVERABLE LIST |
| UC ORD Conversion Tasks* Create New ORD Files
* Attach V8i Files and Merge
* Attach or Re-establish ORD Reference Files
* Correct Scale Issues
* Create Clips for Border/Match Lines
* Print and Perform QC of the Plan Set
* Submit Plan Set to NCDOT

UC Deliverables* Plan Set (PDF)
* Electronic UC files in ORD
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |

# Geotechnical| [Consultant]

## Objective:

If the project is beyond submittal of subsurface investigation product creation, and significant changes to the project are indicated, conversion tasks consist of converting existing V8i files (2D) to ORD. Tasks will include everything needed to convert existing V8i files to ORD such that Revised Geotechnical Subsurface Reports can be produced.

## Assumptions:

Fill out assumptions. Insert additional assumptions/exclusions as needed.

|  |
| --- |
| MEETINGS |
| ☐ | Meetings with NCDOT: 0 meetings 2 staff/meeting  | 1 hr per meeting |
| ☐ | Internal meetings: 0 meetings 2 staff/meeting  | 1 hr per meeting |

## Tasks/Deliverables:

|  |
| --- |
| TASK/DELIVERABLE LIST |
| Geotechnical ORD Conversion Tasks* Create new ORD geotechnical file (GTM)
* Connect and display existing subsurface boring data (gINT) to 3D ORD GTM file
* Attach or Re-establish ORD Reference Files
* Create Revised Plan, Profile and Cross Section Sheets for Inventory
* Create Revised Plan, Profile and Cross Section Sheets for Recommendations (if needed)
* Create 2D Inventory and Recommendation stratigraphy on profile and cross section
* QC all products to be issued to Stakeholders.

Geotechnical Deliverables* Subsurface Inventory (PDF)
* Recommendation Graphics (PDF) [if necessary]
* Electronic Geotechnical files in ORD
 |
| Insert other tasks as needed: to be included as part of workday estimate for this scope.1. |