

## SOLE SOURCE DETERMINATION

The Purchasing Division has been requested to approve a sole source purchase for the commodity or service described below. Pursuant to West Virginia Code 5A-3-10c, the Purchasing Division is attempting to determine whether the commodity or service is a sole source procurement. If you believe your company meets the required experience and qualification criteria stated below, please e-mail the Purchasing Division Buyer at [alan.w.cummings@wv.gov](mailto:alan.w.cummings@wv.gov) with a copy to [w.michael.sheets@wv.gov](mailto:w.michael.sheets@wv.gov) to express your interest in the project. Please forward any and all information that will support your company's compliance with required qualification and eligibility criteria along with any other pertinent information relative to this project to the Purchasing Division no later than 1:30 PM on 09/12/2012.

Requisition Number: 631200046

Department/Agency: WV Department of  
Transportation

Detailed Description of Project: The software products provided by Bentley Systems are used by WVDOT to design roads and bridges, survey property, and analyze the various components needed during the planning and construction of the structures. Microstation, the Computer Aided Design (CAD) product that forms the foundation, is the standard used by most transportation agencies in other states, federal government and the Army Corp of Engineers. The following is a list of the Bentley Systems software used by WVDOT at the Central Office in Charleston and 10 District Headquarters. A description of the software and list of the main products it interacts is included below.

SOFTWARE	#	INST. ON	DESCRIPTION	INTERFACES / DATA EXCHANGE	DOT USERS
Bentley Universal Client License	5	Server	Provides the ability to connect to the Interplot services for printing of plan sets.	Interplot	Engineers / Technicians
Powerscope	8	User	Controls access to design data and provides viewing and redlining capabilities for plan sets. This product is being phased out by DOT in favor of new features in Microstation and ProjectWise.	Microstation	Engineers / Technicians Minimal use in Districts
CADScript	7	User	Used for the generation of high presentation quality maps. Provides advanced map finishing tools such as text display, halo effects, linear gradated fill, advanced support for placement and manipulation of curved text. Provides publishing capabilities including color separations.	GIS software (ArcMap) and Bentley Map	Engineers / Technicians; Mapping
Bentley Geospatial Server	1	Server	This is server based software used for the management of geospatial (GIS) data. This software gives us the ability to connect and exchange data between ArcGIS, Oracle Spatial and Microstation.	Microstation, ArcMap, Bentley Map	Engineers / Technicians

I/RAS b	2	User	This tool is used to work with black and white scanned drawings. It provides for raster editing, clean-up and raster to vector conversion. These scanned images may then be imported into Microstation as background.	Microstation	Engineers / Technicians
iFill	1	User	This tool allows engineers to accurately see how the plot or presentation will look like before being plotted. It converts unfilled DGNS from pen table information to a format that is viewable on your screen. Since plotting can be expensive, this helps to decrease the number of check plots.	Microstation	Engineers / Technicians
Bentley InRoads	70	User	Provides mapping and drafting tools for modeling civil engineering projects. Used to design roads, reduce surveys and in hydrologic analysis. All DOT engineers use this to create a 3-d digital surface, create horizontal and vertical alignments, cut profiles, define template criteria and roadway conditions, generate cross-sections and 3-d models, calculate volumes, generate reports, evaluate the design, and create plan and profile sheets. InRoads gives Engineers the ability to input various forms of field data (GPS, LiDAR and Point Cloud) and automate the modeling of projects.	Works with Microstation and survey products.	Engineers / Technicians
Bentley InRoads Site	1	User	Is the tool that provides site design and digital terrain modeling, lot layout, and geometry for civil-works, environmental and site-development projects.	Works with MicroStation and survey products	Engineers / Technicians
Bentley InRoads Survey	23	User	Is the tool used to transfer electronic field book data into a graphics environment (Microstation). Provides the ability to transfer this information to Microstation (our Computer-aided design tool). This is a remote tool that can be used on laptops. It gives us the ability to verify survey data and make corrections on site.	Microstation	Surveyors; Roadway Engineers / Technicians
Bentley InterPlot Client	127	User	Utility for managing the plotting/printing of engineering plan sets. Allows engineers to save and reuse their plot parameters. (which allows us to set corporate standards on plotting jobs). Provides the ability to batch plot jobs. Provides the ability to highlight items for more readability without modifying the design file.	Microstation	Engineers / Technicians

CulvertMaster	1	User	Culvert Hydraulic Analysis and Design. Engineers can generate reports, calculate rating tables and plot curves. This product adheres to FEMA standards.	Microstation	Roadway and Hydraulic Engineers
FlowMaster For Windows Sub	2	User	Hydraulic Analysis. Used to compute flow for open channels, Pipes, Weirs and Orifices.	Microstation	Roadway and Hydraulic Engineers
gINT Logs	1	User	Used by Geotechnical engineers to determine soil layers and boring logs from field core samples.	Data is sent to LEAP, RC Pier and STAAD for foundation and structural design.	Materials Geologists and Engineers
gINT Professional	2	User	This provides additional reporting options beyond borings and well logs. Engineers produce fence diagrams, graphs, tables and other reports.	Data is sent to LEAP, RC Pier and STAAD for foundation and structural design.	Materials Geologists and Engineers
HEC-Pack	5	User	Engineering application used to design sediment ponds and used in various Hydraulic analysis.	Interfaces with Inroads and Microstation.	Primarily used by Hydraulic Engineers
InterPlot Raster Server	2	Server	Used to host the CADD printers and manage the InterPlot Client software.	Microstation	Engineers / Technicians
LEAP CONSPAN	15	User	Analysis and design of simple-span and multi-span precast and prestressed concrete bridge beams.		Bridge Engineers
LEAP RC-PIER	5	User	Used for design, analysis and rating of bridge piers. RC-Pier allows users to design multi-column and hammerhead piers, straight, tapered or variable caps and circular, rectangular or dilled-shaft colums. Footing types include isolated or combined, supported on either soil or piles. Unlimited number of loads, bearings and piles may be included in the design. Includes a report tool for multiple types of analysis.		Bridge and Geotechnical Engineers
Microstation	200	User	MicroStation is a used at DOT for 2- and 3-D design and drafting. This application is used agency wide and it is a standard for transportation based Computer Aided Drafting and Design (CADD) drawings.	PowerScope CADscript GeoSpatial Server I/RAS B iFill InRoads InterPlot ProjectWise	Used by all WVDOT Engineers / Technicians to produce contract plans. This is the main foundation product for our Transportation Infrastructure.

ProjectWise Caching Server	12	Server	This server software is installed in each of the DOT remote locations (10 Districts, Materials and Equipment Divisions). It manages the remote repositories allowing us to store data at the site nearest the user that is working on it. This is important since CADD and GIS data is extremely large and will quickly overwhelm our network.	Microstation ArcMap Adobe Acrobat MSWord MSExcel JPEG documents	ALL DOH users
ProjectWise InterPlot Driver Pack	2	Server	This is the drive pack that allows for connection to the IPLOT Plotters and Printers. Drivers are provided for many of the industry standard manufacturers.	Microstation	Engineers / Technicians
ProjectWise InterPlot Server	2	Server	Used for printing of CADD documents. IPLOT ensures that documents are printed at the correct scale. Automates the process to produce paper and intelligent PDF renditions from drawings and Office documents	Microstation Adobe Acrobat	Engineers / Technicians
ProjectWise IPlot Mid-Vol Dvr Pack	1	Server	Print Management software for CADD drawings. This is the module that controls printing through the ProjectWise Interface	Microstation	Engineers / Technicians
ProjectWise Web Server	1	Server	The webserver provides a portal for users that are not on the DOT domain such as consultants and contractors. They are able to access and submit updates for plan sheets and other project documents through the web portal.	Microstation Inroads MSWord MSExcel JPEG documents Adobe Acrobat	Outside Consultants and Contractors. DOH users that do not have Microstation, Engineers when accessing work from remote locations
STAAD.Foundation	1	User	Foundation design used by all DOH engineers	LEAP Conspan LEAP RC-Pier	Engineers / Technicians

SUPERLOAD Permit Administration	1	User	System used to analyze the permitting and routing of oversize/overweight vehicles and produce permits. The software routes the movement of overweight and oversize vehicles by computer analysis which may also require pilot vehicles, speed controls, or the underpinning of structures. It includes a webportal that allow trucking companies to request permits online. The workflow within the system reviews applications to make sure they are in conformance with agency rules and restrictions. Based on an approved application and a successful route selection, the system can automatically issue a permit. The following functions are performed: Application Entry; Completeness & Compliance Checking (Motor Carrier Rules and Statutes); Integration w/ Route, Bridge & Restrictions; Payment Processing; Permit Issuance; Reporting; Accounting / Finance	Transportation Superload WebPortal	Permitting Staff in the Maintenance Division and DOH Bridge Engineers
Transportation Superload	2	Server	Provides the WebPortal to allow trucking companies to apply for permits online.	SuperLoad	Outside trucking companies

**Exhibit A**

**Baseline Products:**

<b>Product</b>	<b>Quantity</b>
Bentley Universal Client	5
PowerScope	8
Bentley CADscript	7
Bentley Geospatial Server	1
Bentley I/RAS B	2
Bentley iFill	1
Bentley InRoads	70
Bentley InRoads Site	1
Bentley InRoads Survey	23
Bentley InterPlot Client	127
CulvertMaster	1
FlowMaster For Windows	2
gINT Logs	1
gINT Professional	2
HEC-Pack	5
InterPlot Raster Server	2
LEAP CONSPAN	15
LEAP RC-PIER	5
MicroStation	200
ProjectWise Caching Server	10
ProjectWise InterPlot Driver Pack	2
ProjectWise InterPlot Server	2
ProjectWise Interplot Mid-Volume Driver Pack	1
ProjectWise Web Server	1
STAAD.Foundation	1
SUPERLOAD Permit Administration	1
Transportation Superload	2

**Proposed Sole Source Vendor:**

Bentley Systems, Inc.  
 685 Stockton Dr.  
 Exton, PA 19341

**Specific Eligibility Criteria:** Each piece of software DOT uses works in conjunction with each other to perform specific functions within DOT to analyze, design and construct roads and bridges. Data is exchanged between the different products. The training of our engineers and systems support are also based on this software.

**Specific Qualification Criteria:** All software must integrate and be compatible with the above mentioned software being used by DOT. Systems must meet Federal Highway Administration and FEMA standards. DOT specifications (which are established through Commissioner's Orders and Legislation) are configured into the Bentley products.