BIM Data Analyst Position Description

Duties and Responsibilities

As a BIM Data Analyst assigned to Agency, the Contractor will perform various tasks associated with Agency’s BIM initiative. In furtherance of these responsibilities, the Contractor performs tasks and assignments that typically include, but are not necessarily limited to, the following:

• Gather data for assessment from a variety of sources including current project submissions, Agency project archives, and collection in coordination with facilities. This information will be modeled, normalized, and documented to the appropriate industry standards;

• Provides analysis and synthetization of raw data included with each initiative and project submittal;

• Development of reproducible visualization graphics that clearly and adequately illustrate data analyses associated with each initiative or project, including the highlighting of any significant or noteworthy trends, or other knowledge that could be gleaned from the analyses. This output should be readily available when requested for use by senior Agency staff or Core Project Teams;

• Organize, classify, and structure the data by maintaining and updating strategy included in the Agency Master Records Database. Contractor will work with appropriate systems stewards within IT and the Agency business owners with an administrator role in order to support the development and implementation of successful cross-office processes;

• Support data integration efforts being led by allied Agency stakeholders in the deployment of Opentext and TRIRIGA. The Contractor will work with other stakeholders to define business processes and recommend procedures which allow for future content to be structured and organized to fit existing structure. Contractor will validate existing content to ensure data integrity in order to provide for accurate, scalable, performance optimized, and numerically stable analysis;

• Analyze current and historic data including, but not limited to, photos, videos, CAD drawings, Revit models, SketchUp models, KML & KMZ files, PDFs, 3D PDFs, Word documents, PowerPoint documents, Excel documents, emails, cables, memos, meeting notes, agendas, schedules, and Microsoft Project files; Geospatial analysis and management of relational databases, digital maps, data from global position systems, and remotely sensed imagery to organize, display, and analyze spatial data related to, but not limited to, the environment, business, planning, security, and infrastructure;

• Create workflows that support decision making. These may include, but are not limited to, anomaly detection, pattern recognition, predictive analytics, and other support services to assist senior Agency management and individual project Core Project Teams;
• Perform other related tasks as assigned by the Office or Division Director, Agency BIM Program leaders, contracting officers representative and Contractor’s team leadership.

Knowledge and Skills

• Experience in data modeling, object oriented paradigm, data modeling tools, ontologies, and data performance;

• Mastery of ESRI ArcGIS, ArcSDE, and related open source GIS solutions. Broad professional knowledge of Federal geospatial data standards and use of relational databases for managing and processing data;

• Experience and proficiency with BIM authoring and model viewing tools to include the integration of such tools with other data analysis and geospatial programs;

• Experience and proficiency with statistical analysis methods and related statistical analysis software (i.e.- R, SPSS, MatLab)

• Experience developing and utilizing enumerative and faceted classification systems within the domain of architecture and engineering. (i.e OmniClass, Uniformat, and Masterformat);

• Experience with process mapping and workflow visualization tools such as Visio.

Other Personnel Qualifications

• Must possess, at a minimum, a Bachelor’s degree from an accredited institution recognized as such by the U.S. Department of Education.

• Be granted or able to obtain at a minimum, an interim Secret security clearance prior to entry on duty, and then obtain and maintain a Secret security clearance throughout the period of employment.

• The Contractor must be a U.S. citizen and have a valid Passport

• Be capable of periodic travel.

• Be able to work at an office in the Washington, DC area during regular work hours of 0815-1700 Monday through Friday.