

## **VDC MANAGER**

Department: Capital Programs Supervisor's Title: Senior Digital Design

Unit: 5120 Manager

Level: 7, Exempt Supervises: N/A

The VDC Manager Senior Digital Design Manager allows for the opportunity to be a major contributor to the growth of one of the busiest airports in the world as part of the Capital Programs and Digital Technologies Integration Group (DTIG). Will incorporate VDC/BIM into Massport's business processes and address technical challenges related to model maintenance, integration with other systems, etc. Responsibilities include direct contact and coordination with the design teams and general/trade contractors to ensure MPA's needs with respect to VDC/BIM are met.

## **ESSENTIAL JOB TASKS:**

# **Virtual Design and Construction (VDC)**

- 1. Train and assist members of MPA PMs and APMs in the use of VDC tools and processes.
- 2. Support model-first approach, workflows, and technology deployment for MPA Design and Construction projects.
- 3. Contribute to KPI's and metrics to evaluate and assess value, impact, ROI of established VDC initiatives.
- 4. Contribute to DTIG's process improvements and VDC initiatives.
- 5. Support the implementation of Massport's Autodesk Construction Cloud (ACC) throughout the department and lead the deployment for each specific project.
- 6. Manage deploying laser scanning and other innovative technologies for Massport capital projects.

## **Building Information Modeling (BIM)**

- 1. Lead the development of project BIM execution plans and provide recommendations for program-level improvements to execution plans.
- 2. Oversee BIM utilization and on-time delivery of BIM submittals during design and construction phases of a project.
- 3. Research and standardize BIM workflows across design, construction and Asset Management practice as well as organizing and communicating BIM technical information to senior staff.
- 4. Assist in the utilization of BIM as a part of design reviews.

- 5. Attend design and construction meetings as needed to understand project scopes and to assist designers and contractors in understanding standards.
- 6. Oversee the development of Civil 3D base files from as-built records as they come in. Includes surface model, underground utilities, etc.
- 7. Support the Airside and Landside Engineering teams with Civil 3D design work for in-house design efforts.
- 8. Manage the maintenance of existing and newly developed BIM models (Revit and Civil 3D) to ensure all information is current, accurate and complete in accordance with VDC/BIM Guidelines.
- 9. Train APM's in use of Revit to increase the department's overall capabilities with these products.
- 10. Support the process of data collection and delivery for asset management and facility operations according to MPA's asset information requirements.

# CAD/Civil 3D

- 1. Assist with Civil 3D layout and design of airfield work completed as part of the Capital Program term contracts.
- 2. Assist with updating and maintaining floorplans for airport/seaport facilities.
- 3. Support the review of consultant design drawings for compliance with MPA standards
- 4. Coordinate with Project Managers to ensure timely delivery of as-builts.

#### **ADDITIONAL JOB TASKS:**

- Support multiple capital projects at a given time.
- Maintain project central files, as appropriate.
- Provide in-house technical input and technical reviews in the area of professional expertise.
- Possess a high level of enthusiasm and commitment for mentoring all levels of staff.
- Perform other duties, as assigned.

# **JOB REQUIREMENTS AND QUALIFICATIONS:**

## **Education**

Bachelor's degree desired in architecture, engineering, or construction management. Must have a minimum of three (3) years of experience in VDC/BIM and building design and construction or experience implementing design and construction technology.

# **Experience**

Must have extensive hands-on experience with Revit, Navisworks, ACC, Civil 3D, Recap, and other relevant BIM tools. Experience in writing BIM standards and guidelines a plus. Aviation specific VDC project/program experience preferred.

Must have proven ability in managing VDC related tasks in major multidisciplinary projects.

# **UNIQUE EXPERTISE/CERTIFICATION/REGISTRATIONS:**

- 1. Ability to collaborate with and motivate established professionals, and external partners.
- 2. Must have extensive knowledge of the nuances, features, functions, and limitations of VDC processes and tools, including experience with Autodesk products.
- 3. Knowledge of Design-Bid-Build, Construction Manager at Risk, Design/Build, and other modern contractual delivery methods.
- 4. Understands project workflows from design, estimation, construction administration and coordination, and fabrication.
- 5. Knowledge of other spatial data concepts including GIS is a plus.
- 6. Familiarity with Building Condition Assessment concepts and experience of assisting with condition inspections and assessments is preferred.
- 7. Extensive capabilities with MS Office, including Excel, Outlook, Word, and PowerPoint. Knowledge of Teams and Power BI is a plus.

#### **WORKING CONDITIONS**

**Environmental Parameters:** 

Ability to work in an office and to travel to all Massport facilities. Ability to pass a Massport background check and obtain a Massport Security Badge. Ability to work in or on all MPA land and water vehicles.

**WORK SCHEDULE:** Ability to work a 37.5 hour work week, and ability to meet fluctuating workload demands, as necessary.