Mount Vernon

Esri, Mount Vernon, and Quinn Evans Architects collaborated to build a blended BIM-GIS 3D world with the assistance of the FME-based ArcGIS Data Interoperability Extension.

They used FME technology to blend numerous rich datasets for the mansion and the estate's outbuildings into one seamless world. The workflow added coordinates to Revit (IFC format) data and then entered the rotation from project north and true north. With BIM content geo-referenced, the workflow then exported the data to a spreadsheet, imported it into ArcGIS and connected it back to the attribution.

The results provide stakeholders an incredibly detailed view of site and structure data and history for planning and web maintenance, via a web browser. Contextual analyses can now be performed, such as viewshed analyses which ensures that the vista across the Potomac River remains pristine.

Mount Vernon was the residence of George Washington, the first president of the United States. The estate is preserved as true-to-form as possible.

"Using FME to bring Architectural grade models into the ArcGIS platform has worked so well on the Mount Vernon project and others in my professional life at Esri, that I've actually hired a residential architect that uses BIM to design my new house. Costs a little extra, but great demo material, and my variance presentation is going to blow the zoning board away!" -- Patrick Gahagan, Esri