

Quantifying the Opportunities – BIM in Preconstruction

Introduction:

Introducing BIM in the preconstruction phase of a project will increase the impact the information, expertise, and experience the team has on bettering the project. That includes internal and external partners. By including the internal preconstruction team into the BIM process you are helping every better understand scope, clarifications, pricing, scale, and impact. By exposing external partners to BIM during the Precon process you help them better understand design options, value analysis, phasing and schedule. This can all be done with standard information we are receiving from the design team.

Taking it one step further by going out and adding information into the process such as laser scanning for existing conditions, reaching out for as-built conditions, and as always training the team to use all the info can add in even more value to help set up the project on the right foot and give the GC the confidence to go build the building, the architect the assurance that the GC understands the design, and the owner the relief that they are receiving their building how they want it.

Introducing BIM into Precon Internally:

With the help of many of the innovative and forward thinking architects in the industry the general contractor is receiving more and more information during the design process. The low hanging fruit of this information is 3D models and CAD files. Receiving this information in the early phases of design can tremendously improve the GC's ability to utilize, evaluate, and provide feedback on the design throughout preconstruction. The GC can then leverage this information pull quantities of material, to help clarify scope and design to the trade contractors, and to help understand schedule and sequencing.

Key Topics:

- Quantity Takeoffs
- Scope Clarifications
- Navisworks Navigation and Visualization
- Reviewing Point Clouds to Assess As-built information
- Value Analysis Options
- Phasing and Schedule Communication

- Architect
- Trade Contractors

Difficulties:

- Availability of Information
- Information Constantly Changing
- Training Associates on Software

Software Examples:

- Revit Models
- Renderings
- Navisworks Model

Who is Involved:

- BIM Associate
- Precon Associate
- Superintendent
- Project Manager
- Project Executive