# BUILD BEFORE YOU BUILD
## levels of service

**Level One:**

**Generic Model**
- Schematic 3D image
- Determine "build-ability"
- Quick 3D QC check

**Level Two:**

**Building Development**
- More detailed "build-ability" check of specific detail items
- Begin phasing model study
- Higher quality QC check

**Level Three:**

**MEP Systems**
- Cross-discipline check
- Modeling and routing of MEP components

**Level Four:**

**Interference Check**
- Report of clashing conditions
- Cross-discipline coordination
- More detailed, discipline-specific phasing (4D)illustration
  options

**Level Five:**

**Schedule Data/Coordination**
- Quantity and material takeoffs
- Load balancing verification
- Setup for post-occupancy job tracking

**Level Six:**

**Phasing/Mobilization Studies**
- Campus plan layouts showing utility locations and
  scheduling interferences
- Building placement in relation to site
- More accurate phasing model

**Level Seven:**

**Visualizations/Animations**
- Enhanced project visualization
- Advanced design studies
- Production of marketing materials
- Phasing animations to show crane radius,
  Dumpster locations, etc.

**Level Eight:**

**Life Cycle Management**
- Room and tenant finish tracking
- Furniture layout schemes
- Facilities management such as equipment life cycle and
  usability tracking

**Alternative Service:**

**Coordination Review***
- Information derived from various sources to create
  one virtual design and construction model

*\* Service relies on the accuracy of the BIM databases supplied to us. It can
alert you to situations requiring further attention or information.*

# BUILD BEFORE YOU BUILD
## glossary of terms

**BBYB [Build Before You Build]:** the process by which a facility is constructed virtually as a building information model prior to its physical construction.

**BIM (n.) [Building Information *Model*]:** The virtual representation of a project, built on a computer in 3-D. This virtual model is typically comprised of multiple databases in which all of the information about the particular project is stored.

**BIM (n.) [Building Information *Management*]:** The process of managing the databases in which all of the information about the built model is stored. This process extends to managing the project team as well as the information in the model.

**BIM (v.) [Building Information Modeling]:** Also known as virtual design and construction, this is the act of creating the virtual model and performing the management process.

**Blueprint Language:** The method of communication where 3-D designs are transmitted in 2-D representations to be then physically constructed in three-dimensions.

**Building Information Modeling Protocol Exhibit (AIA E202-2008):** AIA's recently issued document establishing protocols, levels of development and authorized uses of building information models. AIA uses 5 levels of development; KAI has a more detailed 8 levels of services.

**CAD:** Although originally coined to mean Computer Aided Design, it is currently understood to signify Computer Aided Drafting, or Non-BIM. However, CAD actually includes any use of a computer for design, including BIM.

**FMI/CMAA Annual Survey of Owners:** Led by the Construction Management Association of America and implemented by FMI, this survey of various Owner-types provide a broad spectrum of Owner's needs, wants, concerns, and visions for the future of the construction industry.

**IPD [Integrated Project Delivery]:** A project delivery system in which the Owner, Designer, and Builder are contractually bound, via the same agreement, to design and build a project in a highly collaborative environment. Information, risks and rewards are shared according to a predetermined arrangement. IPD leverages early contributions of knowledge and expertise through the utilization of new technologies such as BIM, thus allowing all team members to better realize their highest potentials while expanding the value they provide throughout the project lifecycle.

**Non-BIM:** Software programs such as AutoCAD, Sketch-up, 3-D Studio Max, Photoshop, etc., that are graphic-oriented but do not provide tangible material information about the building attributes aside from graphical representation.

**Vaporware:** Computer hardware or software that promises more than it can deliver either in capabilities, ease of use, or speed and/or does not actually exist.

**VDC [Virtual Design & Construction]:** The process of creating a building information model either from scratch or from various separate or integrated information databases and sources.

## More Information

For more information on BIM please visit:
buildbeforeyoubuild.com or BIMformation.com