

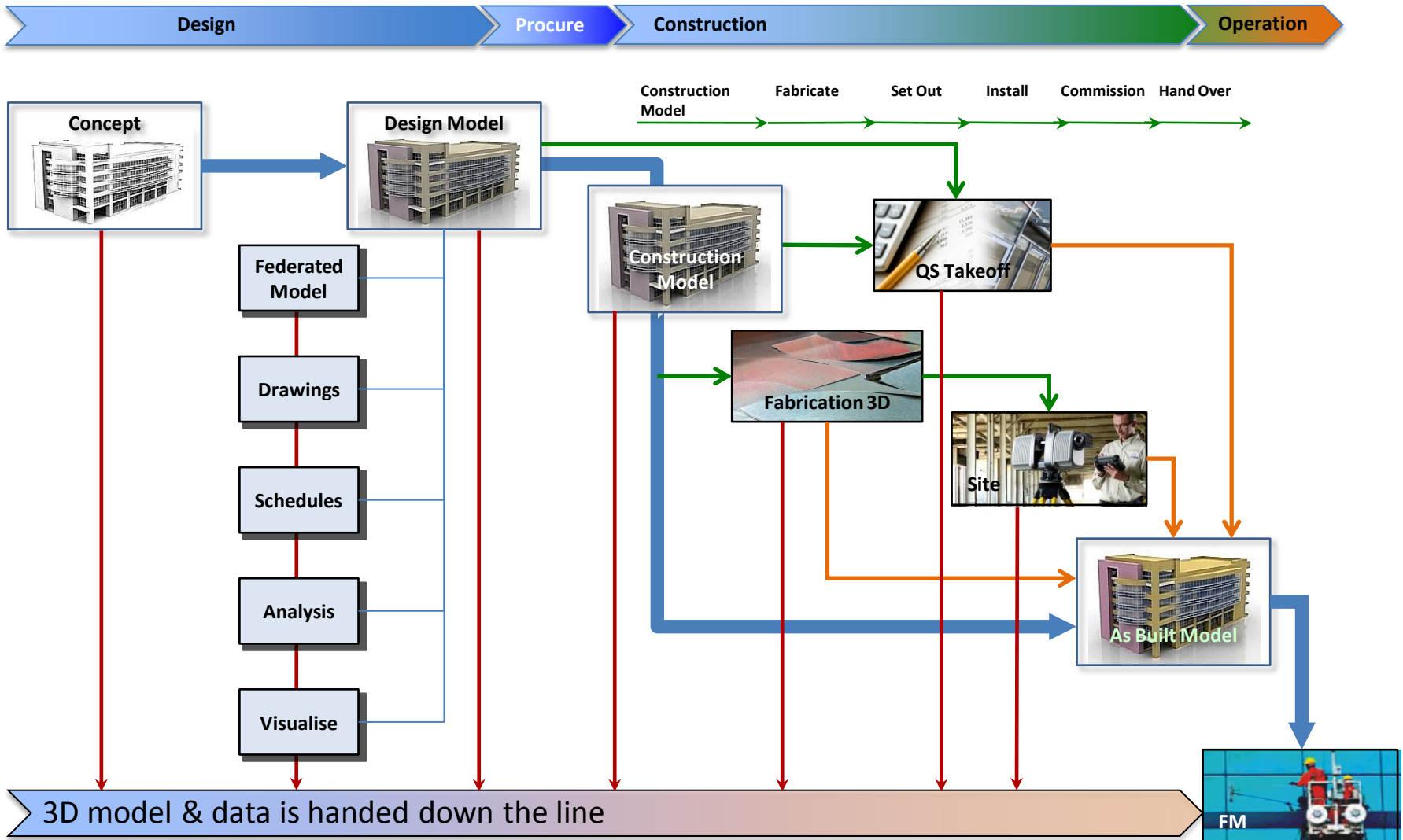


# BIM Plan : Level of Development

Carl Agar

# Level of Development?

# BIM – Process Overview

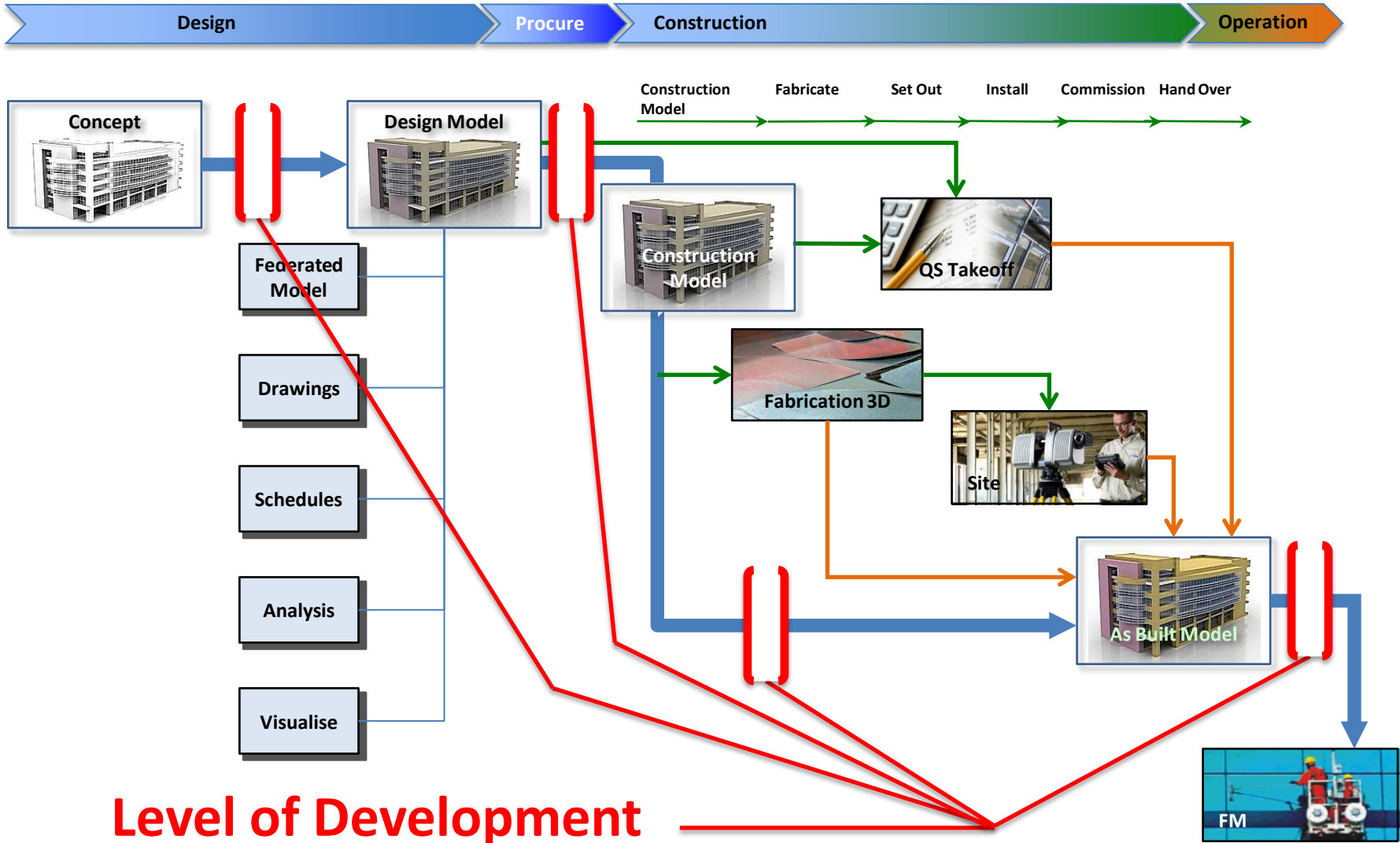


# We Need a Plan



- The BIM PLAN
- Defines the controlling protocols for:
  - model creation
  - model use
  - information provision
  - information use
  - team collaboration.
- Contract Document?

# BIM – Process Overview

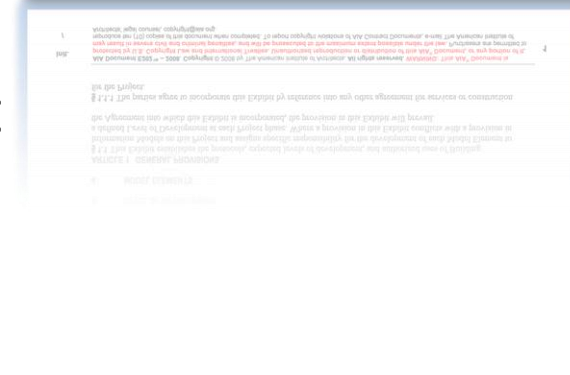
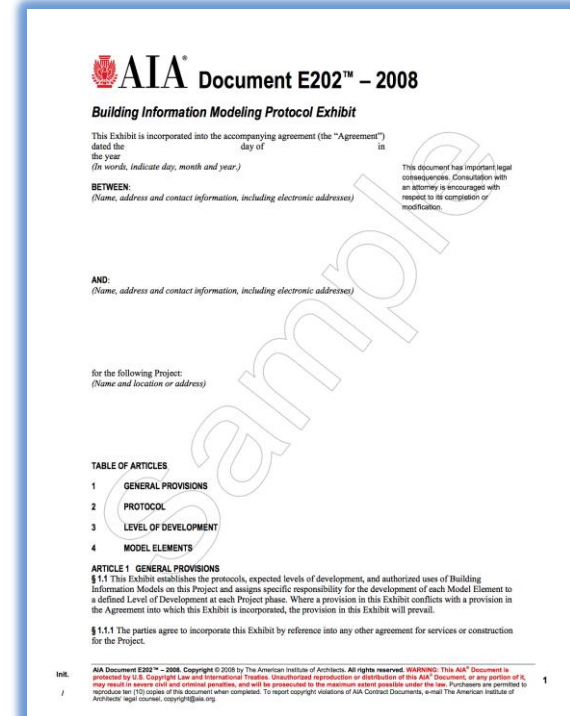


**Level of Development**



# Level of Development?

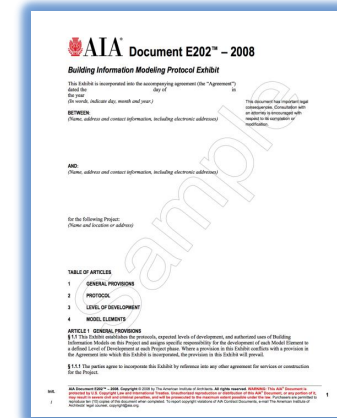
- Originates from USA
- American Institute of Architects
- Contract template
  - establishes the protocols, expected levels of development, and authorised uses of Building Information Models on a Project
  - assigns specific responsibility for the development of each Model Element to a defined Level of Development at each Project phase.



# BIM Plan

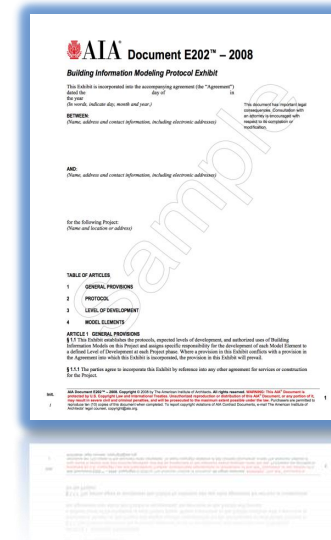


## What does it say about Level of Development?



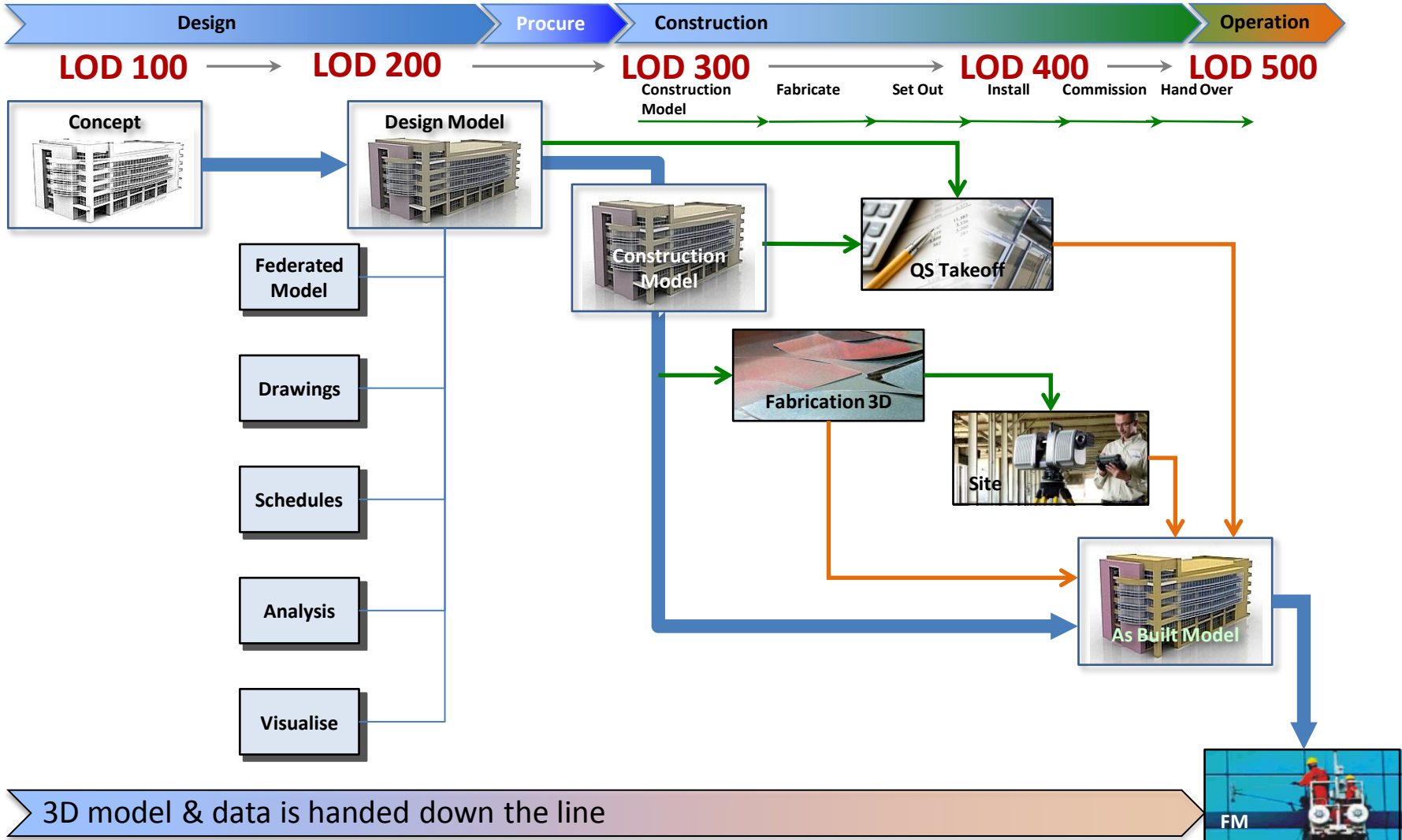
# Level of Development

- Of all of the things in a BIM Plan, this one will catch you out.
- There are 5 levels:
  - LOD 100 - Concept
  - LOD 200 – Design Model
  - LOD 300 – Construction Model
  - LOD 400 – Fabrication Model
  - LOD 500 – As-Built Model
- Note the numbering jump of 100



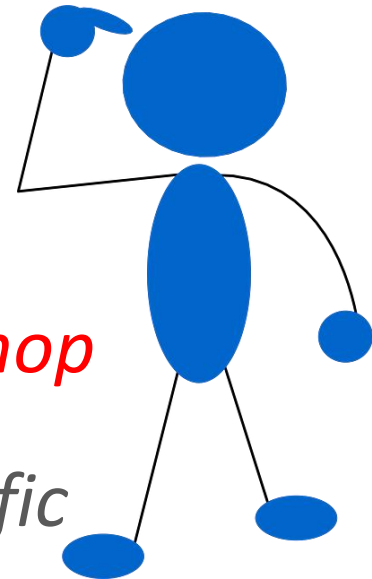


# BIM – Process Overview



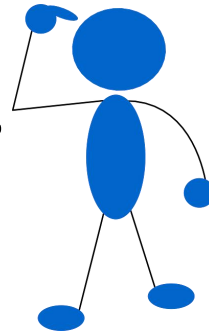
# “We are designing to LOD 200”

- LOD 200 “*generalised systems with approximate quantities, size, shape, location and orientation. The model may be analysed for performance of selected systems by application of generalised performance criteria*”
- vs
- LOD 300 “*suitable for the generation of traditional construction documents and shop drawings. The model may be analyzed for performance of selected systems for specific performance criteria*”



# “We are designing to LOD 200”

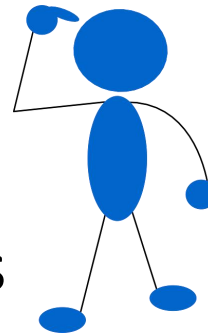
- Far too general
- It is intended that the levels of LOD 200 be further defined to suit the project.
- LOD 201, LOD 202, etc.



# “We are designing to LOD 200”

## ■ Consider

- 3D Model
- 2D Layout Drawings
- Schematic Drawings
- Specification



## ■ LOD can mean something different for each of these for the same object.

- The information can differ
- The representation can differ

# Which LOD?

- LOD 100 – Concept
- LOD 200 – Design Model
- LOD 300 – Construction Model
- LOD 400 – Fabrication Model
- LOD 500 – As-Built Model

# Which LOD? 200 or LOD 300

- It is a **fuzzy** line between LOD 200 and LOD300
- One size does not fit all
- Some designers will carry through into LOD 300
- Others clearly stop at LOD 200 or 299.99

# Watch out for



## ■ Level of Development

- It defines the detail of your deliverables
- |
- |

## ■ BIM

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## ■ Have

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Modeling

## ■ Do not forget during the... Modeling

# The BIM Train Has Left the Station

## Ask Yourself!

- Are you on the train?
- Do you have the right people on the train?
- Are they in the right seats?





