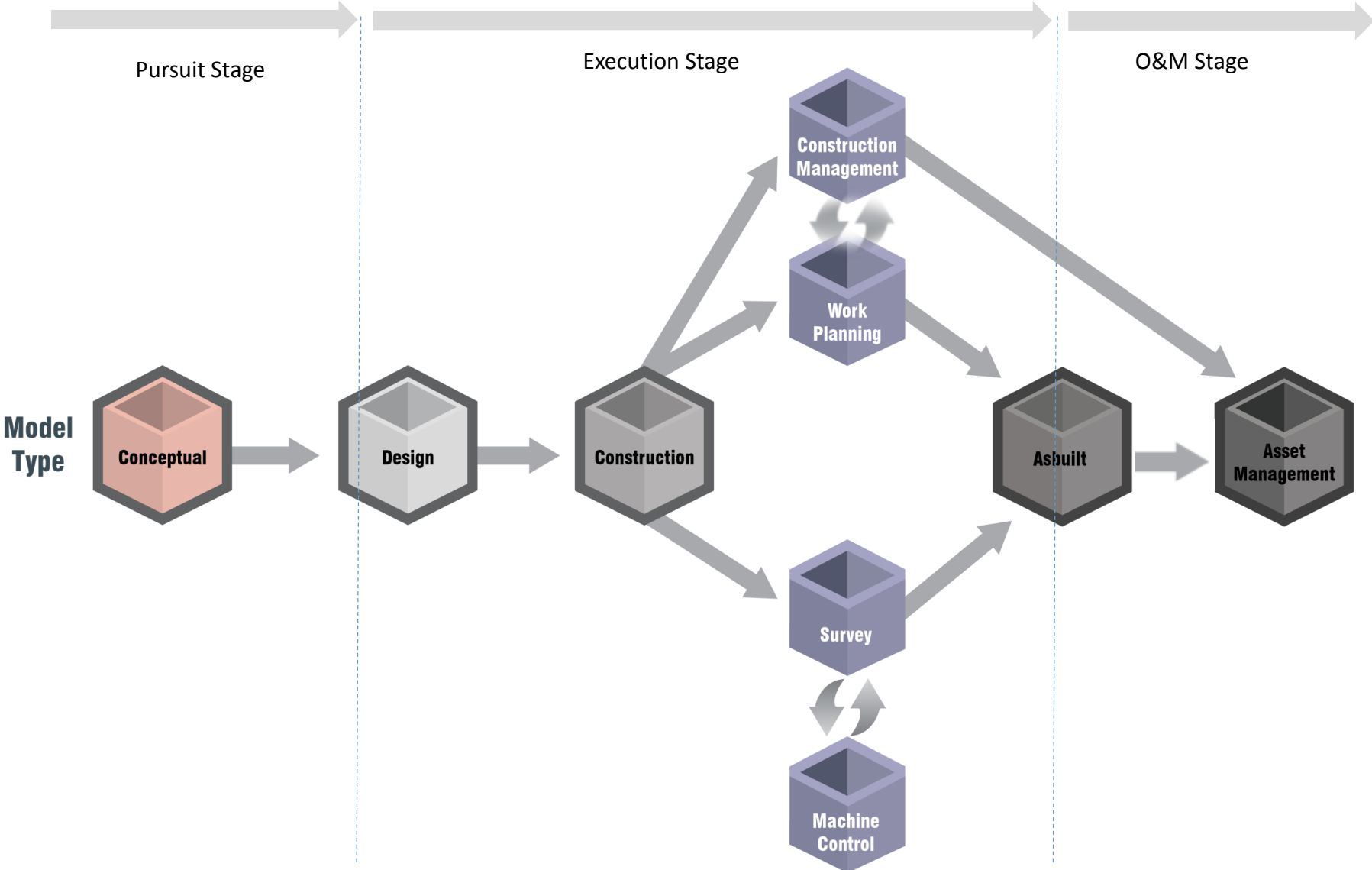




# VDC Overview

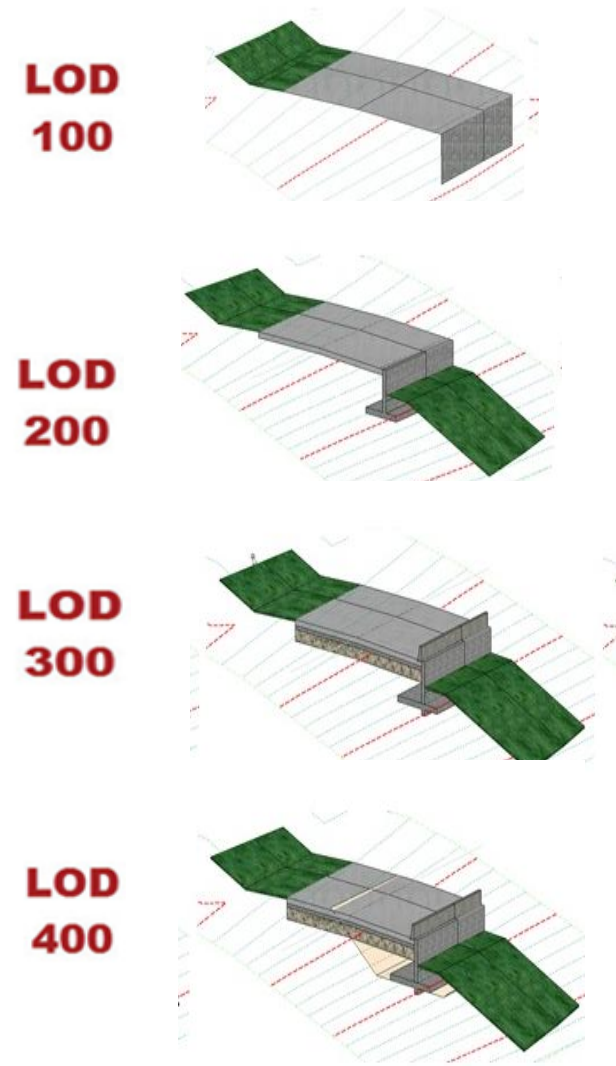


# VDC Lifecycle



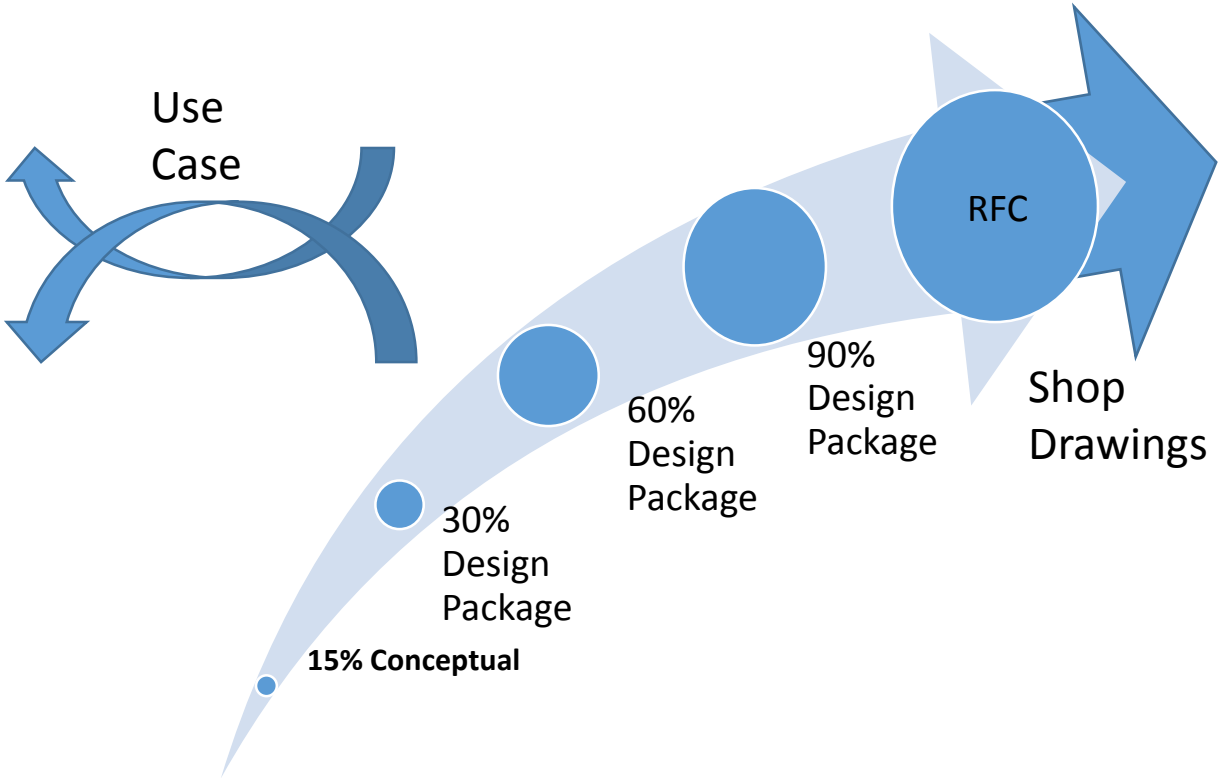
# Level of Detail

How visually detailed is the model?

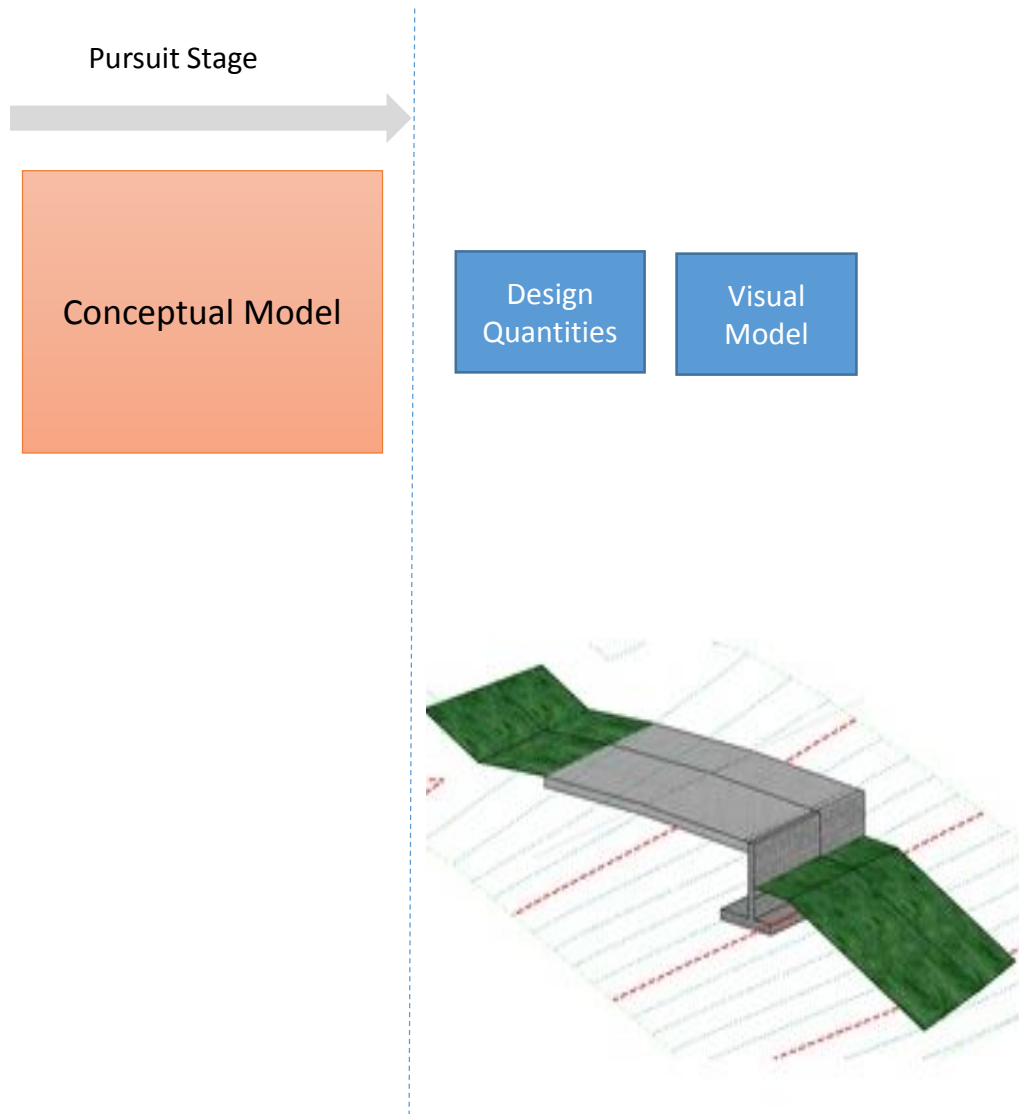


# Level of Development

How complete (reliable) is the development of design?  
(0-100%)



# Conceptual Model



## Who Owns the Model

- Engineer-of-Record / Designer

## Model Responsibilities

- Client – Answer ATC's and one-on-one review
- Designer – Provide model content and design info
- Construction – Review model content and design info
- Subs/Vendors – Provide content/info as requested

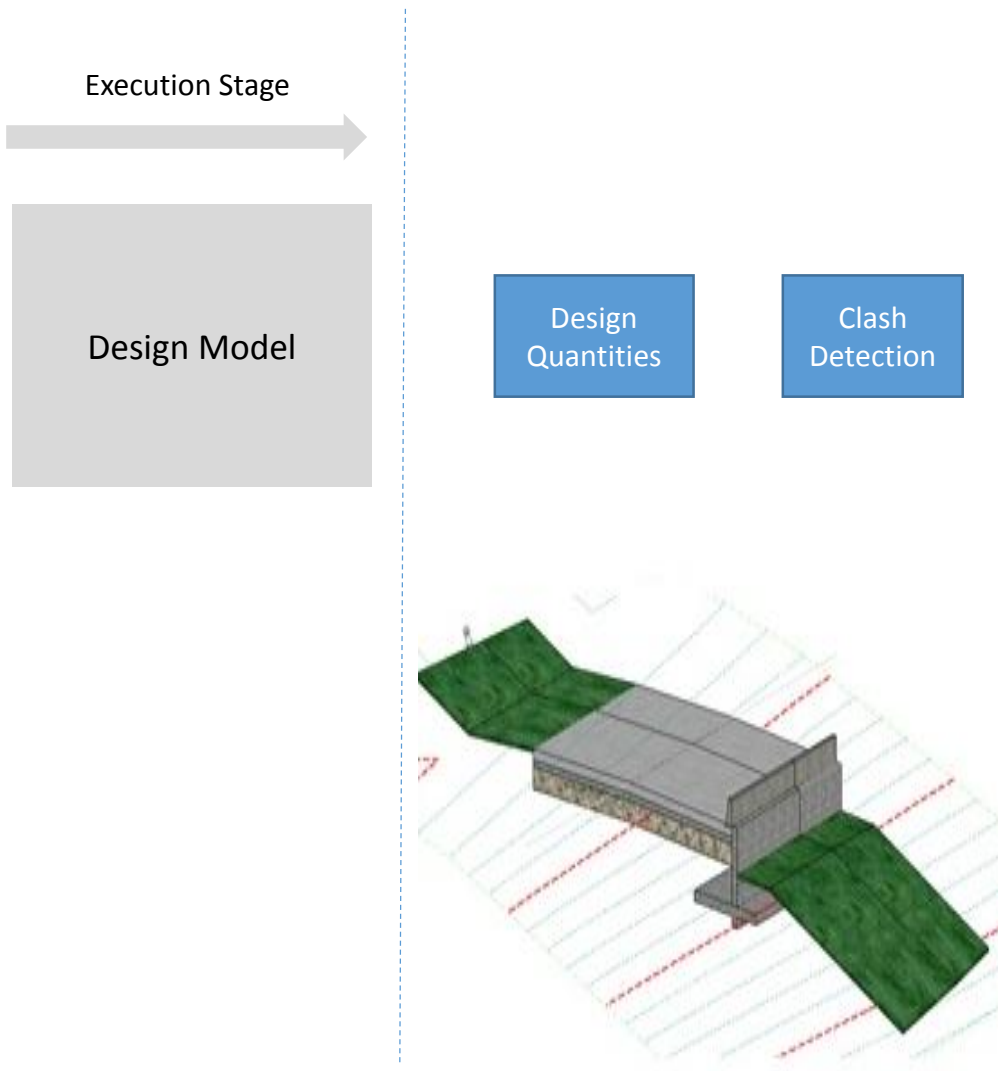
## LOD

- Visual Detail - 200-300
- Design Development - 0-15%
- Information - 0-15%

## Information Obtained from Model

- Basic quantities – (i.e. LF of pipe)
- Alignments and locations – 2D only
- Product types – (i.e. MSE wall)

# Design Model



## Who Owns the Model

- Engineer-of-Record / Designer

## Model Responsibilities

- Client – Accept design
- Designer – Design model, clash detection
- Construction – Track qtys, constructability
- Subs/Vendors – Provide quotes, constructability

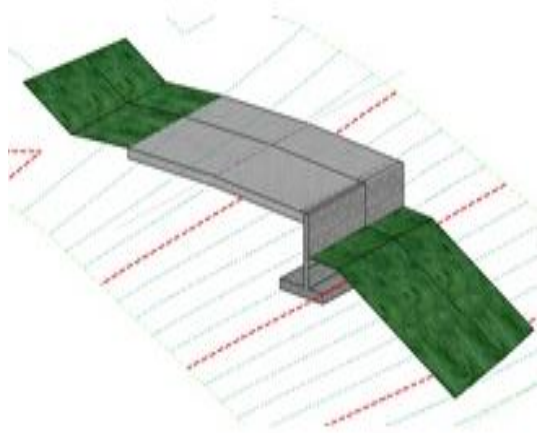
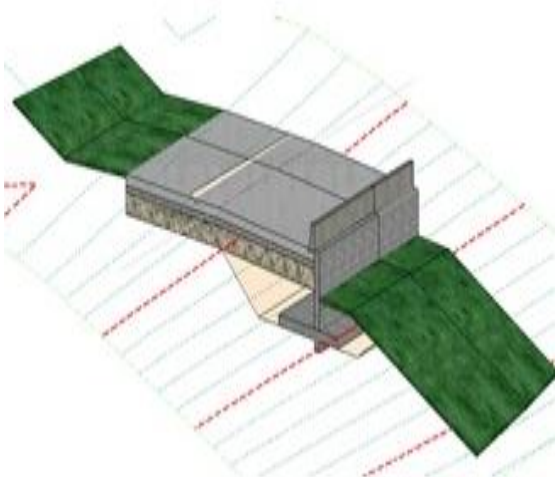
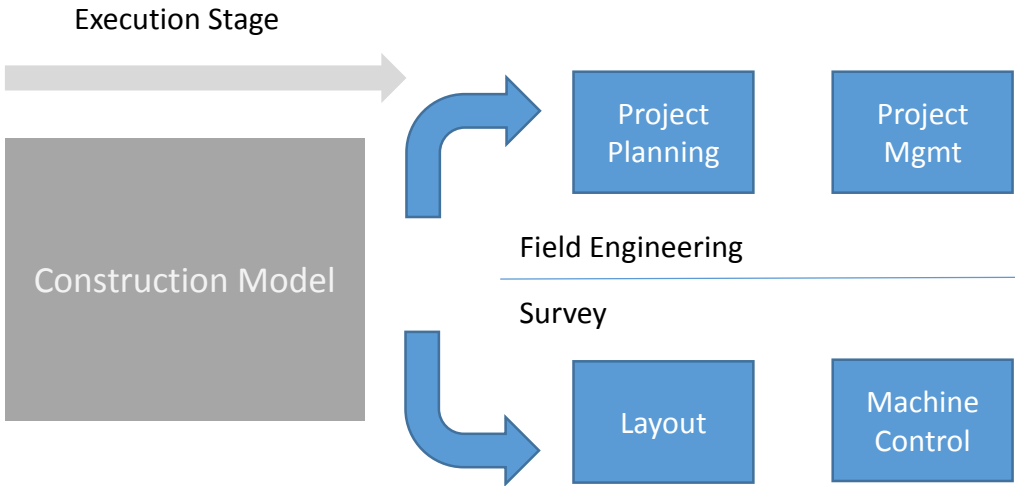
## LOD

- Visual Detail – 200
- Design Development – 15-90%
- Information – 15-90%

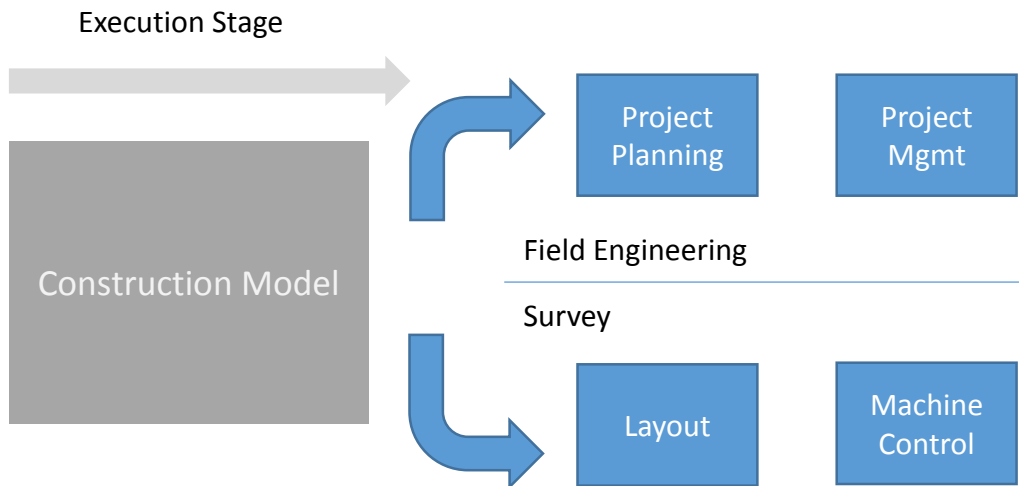
## Information Obtained from the Model

- Defined physical properties (L x W x H), thickness of pipe
- Survey data – 3D alignments and locations
- More developed quantities
- Specs or technical provisions

# Construction Model



# Construction Model



## Who Owns the Model

- Construction team

## Model Responsibilities

- Client – Review of construction and approval
- Designer – Maintain model for FDCs, NDCs
- Construction – Enhance design model with construction level information
- Subs – Model coordination, clash detection
- Vendors – Shop drawings and models

## LOD

- Visual Detail - 100-400
- Design Development - 100%
- Information - 100%

## Information Obtained from the Model

- Phased quantities
- Coordinated with schedule
- Temporary construction plans
- Construction sequenced
- Shop drawing detail