

BIM From An Engineering Perspective

CITA BIM 2 WIN SERIES

GARLAND
Concepts Realised

Agenda

- Introduction
- GARLAND + BIM
- BIM Workflow and Process
- BIM Workflow in Practice
 - Analysis and Authoring Tool Interaction
 - Structural Detailing
- Questions

BIM FROM AN ENGINEERING PERSPECTIVE

Introduction

Who We Are

- Consulting Civil and Structural Engineering Firm
- Established in 1937 over 75 years ago
- Main services
 - Civil & Structural Engineering | Safety Management
 - Project Management | Economic Development
- Locations:
 - Dublin | Limerick | Waterford | Riyadh & Jeddah, Saudi Arabia | Ghana, Africa

CELEBRATING 75 YEARS

OF CHANGE AND INNOVATION



Our Experience

- Our Experience – over 75 years
 - Educational
 - Commercial
 - Healthcare
 - Residential
 - Infrastructure
 - Industrial
 - International
 - Conservation & Restoration

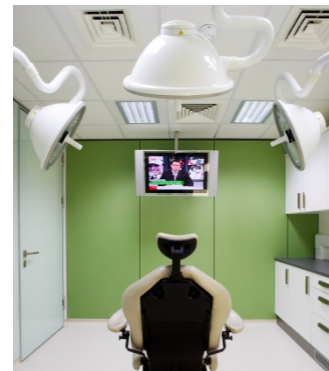
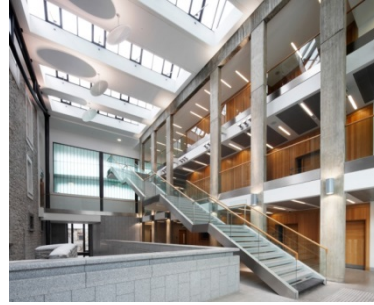


BEST PUBLIC SECTOR AWARD
CYCLOTRON PT CT CENTRE
Hamed Medical Centre Qatar

International Experience



Our Projects



GARLAND
Concepts Realised

BIM FROM AN ENGINEERING PERSPECTIVE

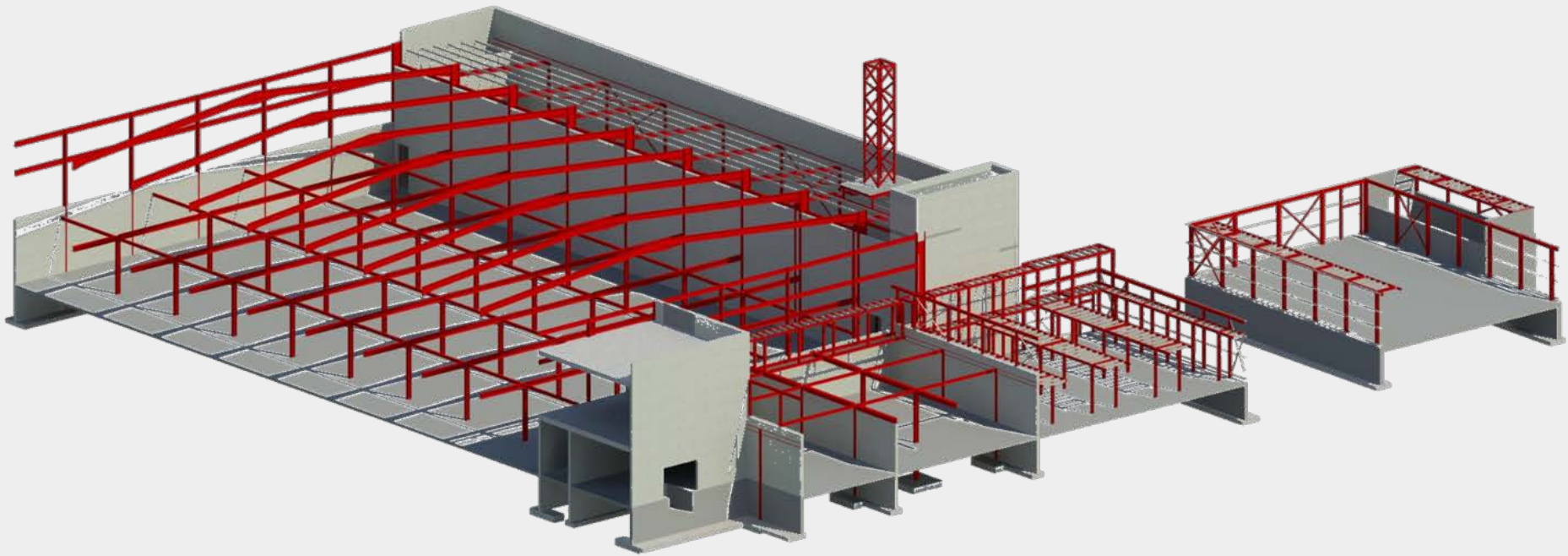
GARLAND + BIM



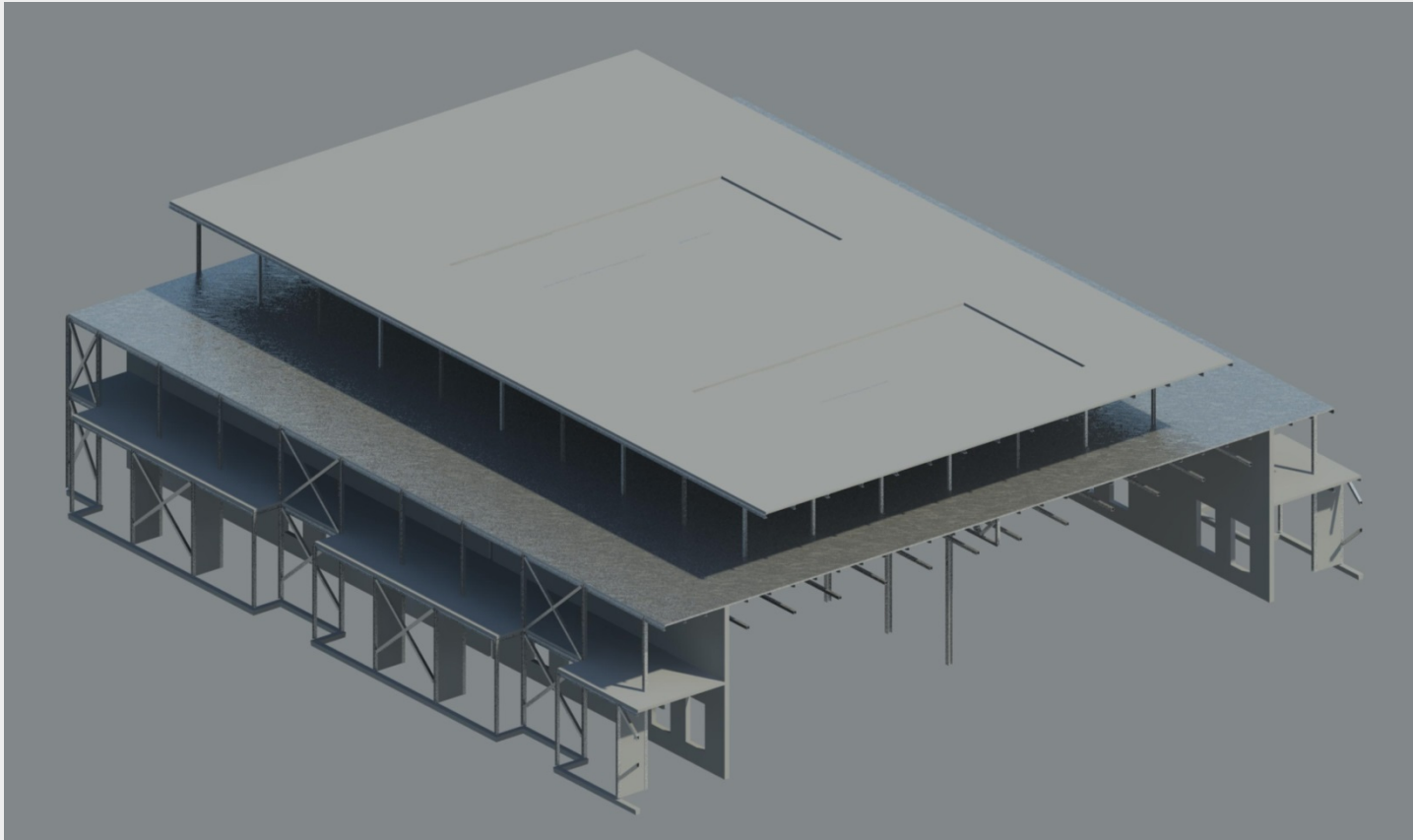
BIM = OPPORTUNITY



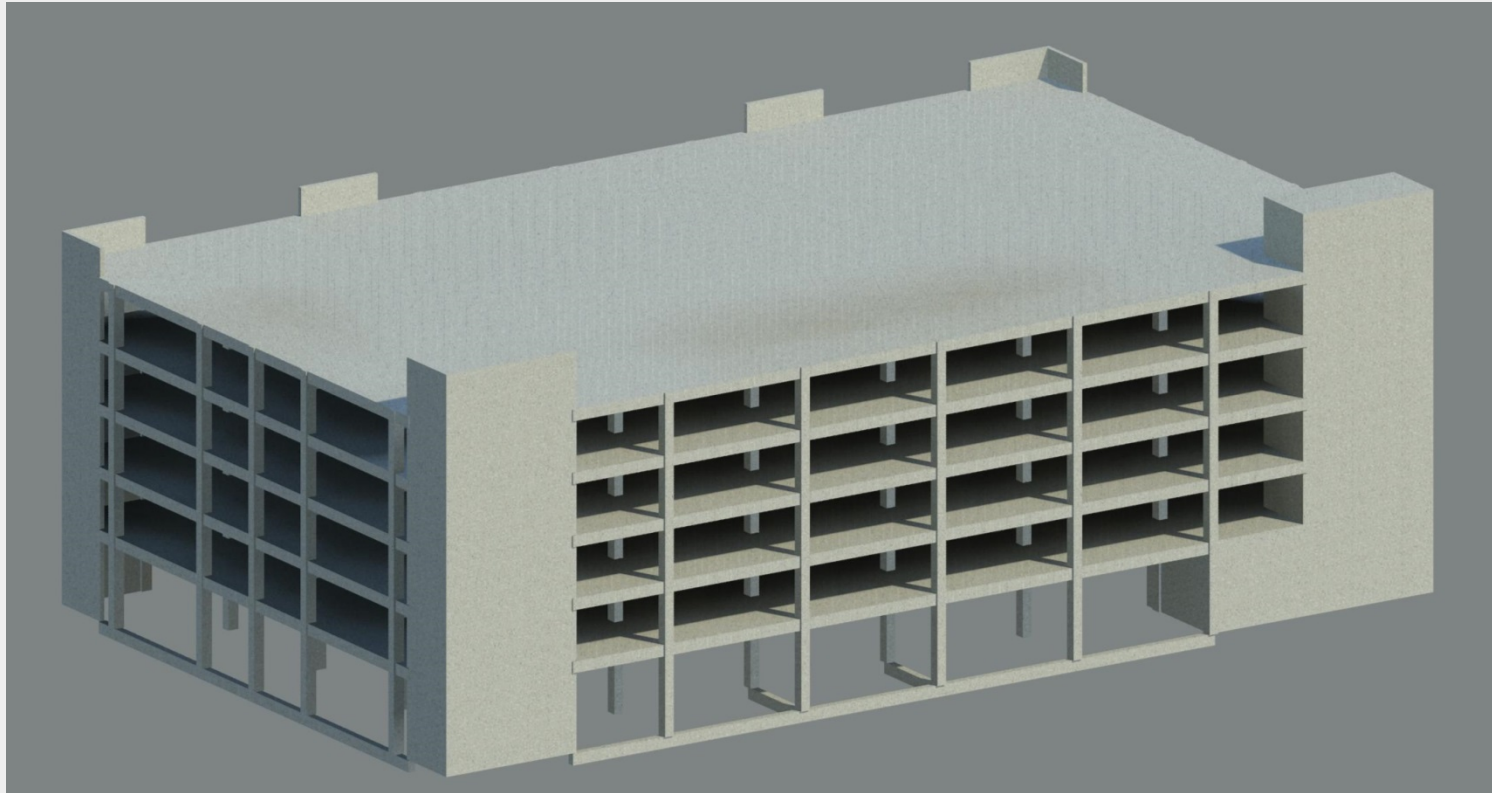
Selection of our BIM Projects



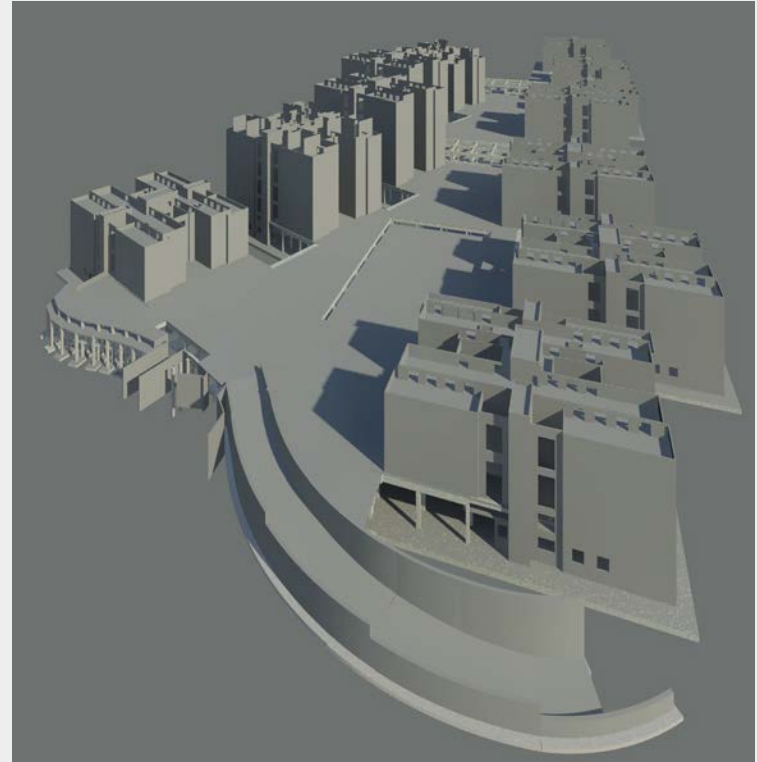
Selection of our BIM Projects



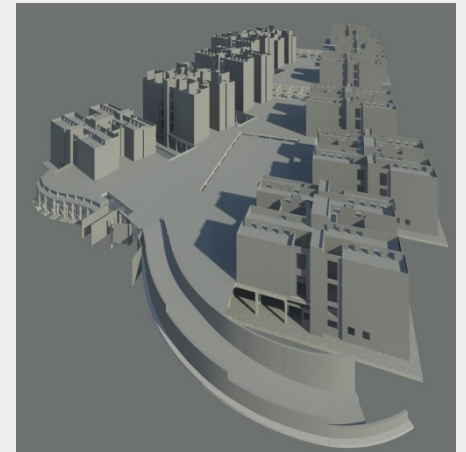
Selection of our BIM Projects



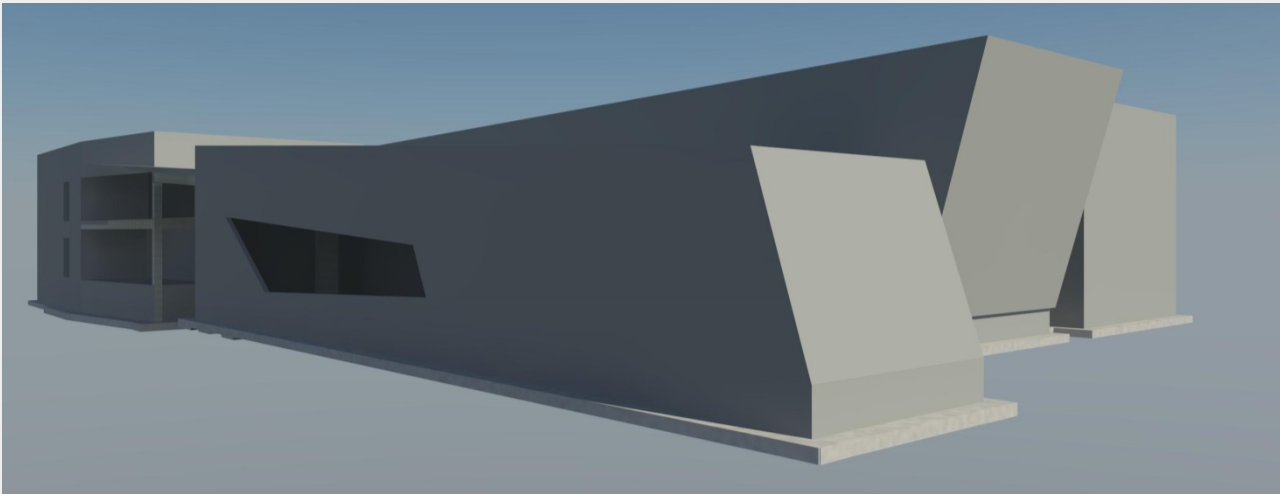
Selection of our BIM Projects



Selection of our BIM Projects



Selection of our BIM Projects

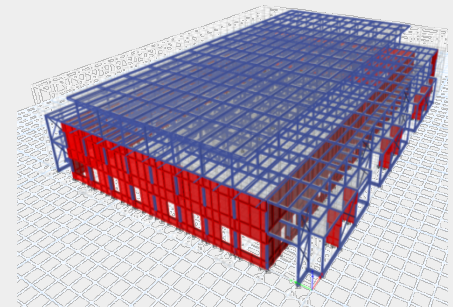
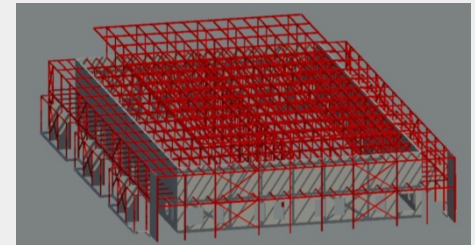


Mercer's Institute for Successful Ageing St James's Hospital



Our BIM Progress

- Using BIM on live projects
- Still on Learning Curve – Trying to figure it all out + learning every day
- Tweaking and optimising processes and workflows
- Implementation and Roll Out - Templates
- Right Projects and Right Teams

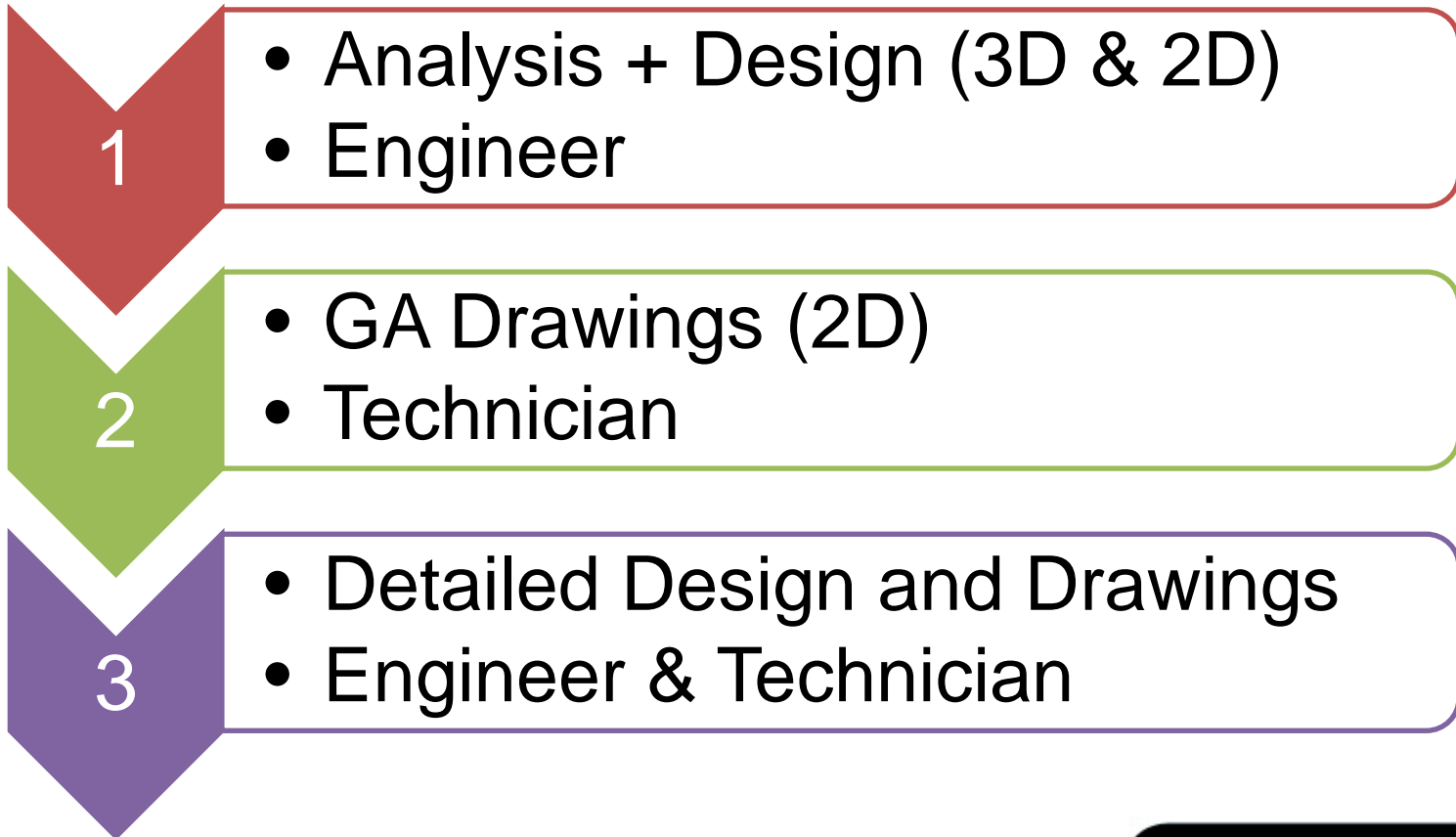


RIC Convention Centre,
Jeddah

BIM FROM AN ENGINEERING PERSPECTIVE

Workflows

Traditional – Pre BIM Method

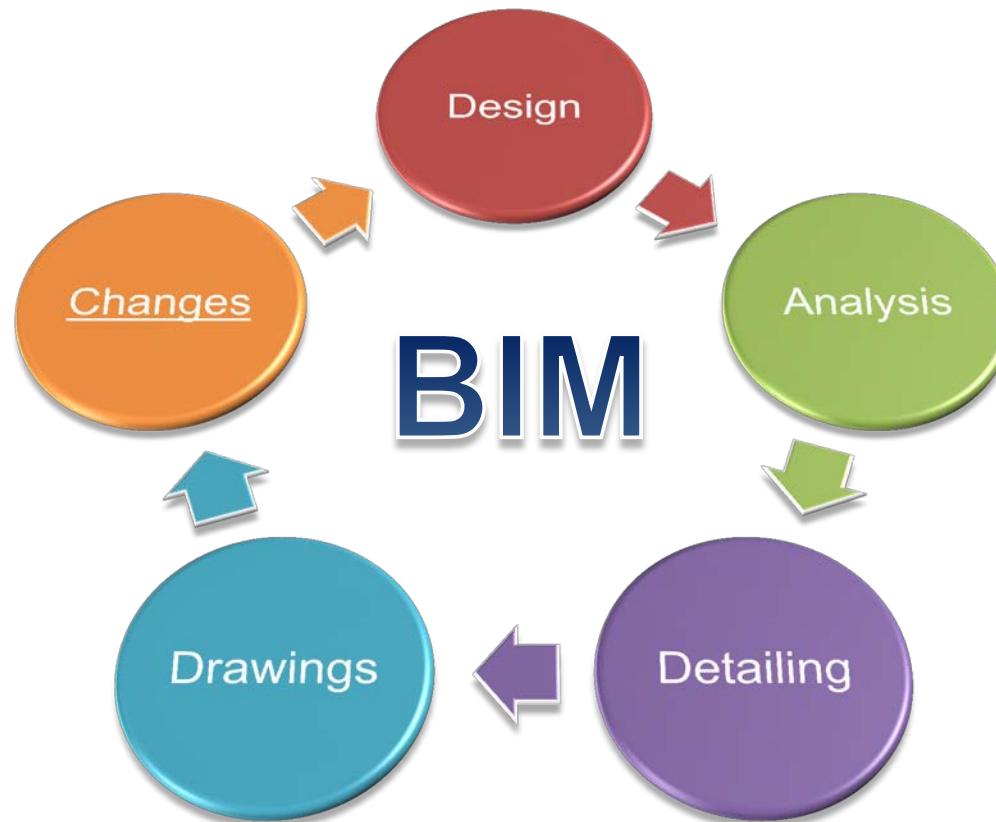


Traditional – Change Management



“You want to change what??????”

New BIM Process

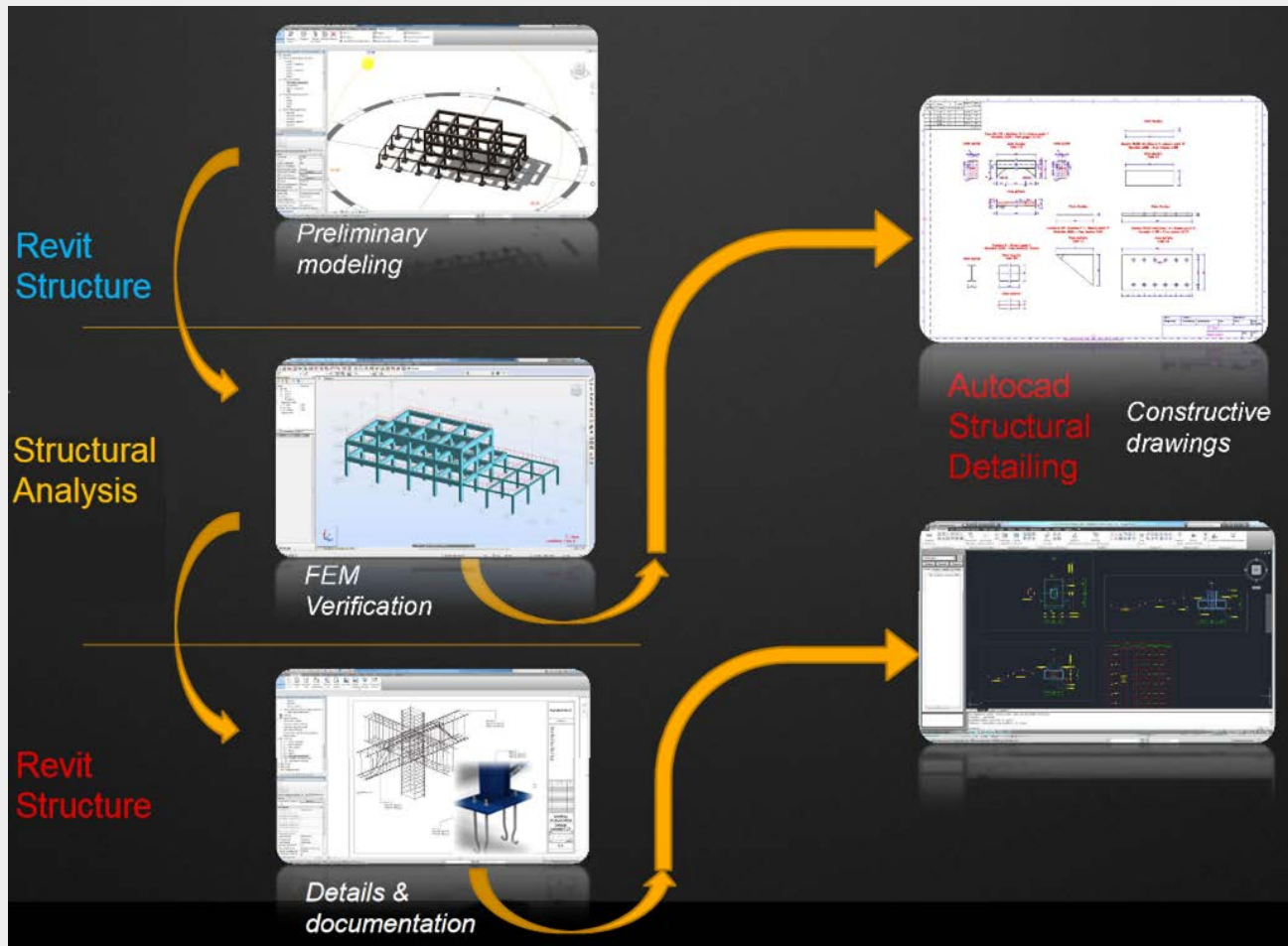


“No bother I can change that”

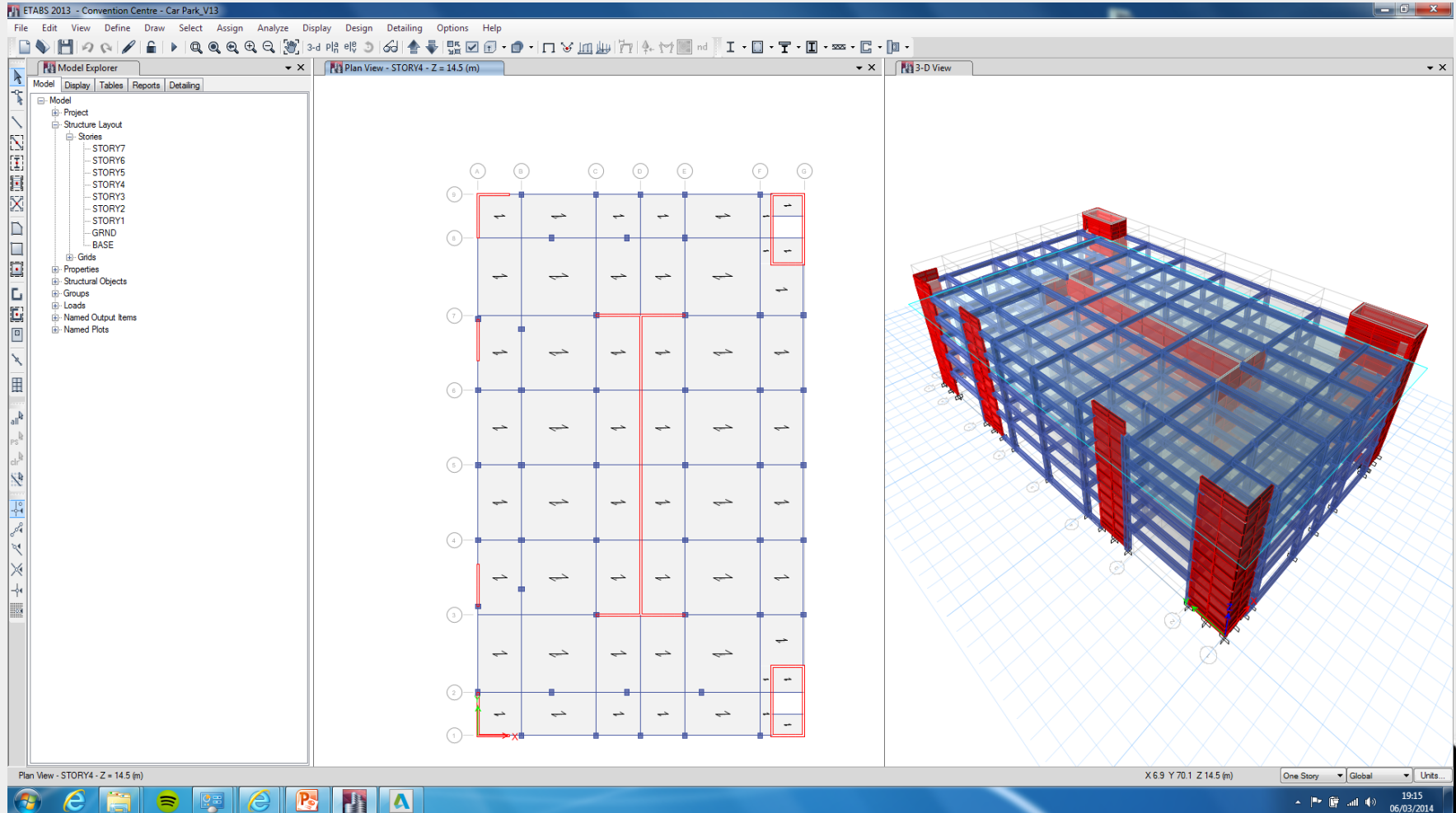
BIM FROM AN ENGINEERING PERSPECTIVE

BIM Workflow in Practice

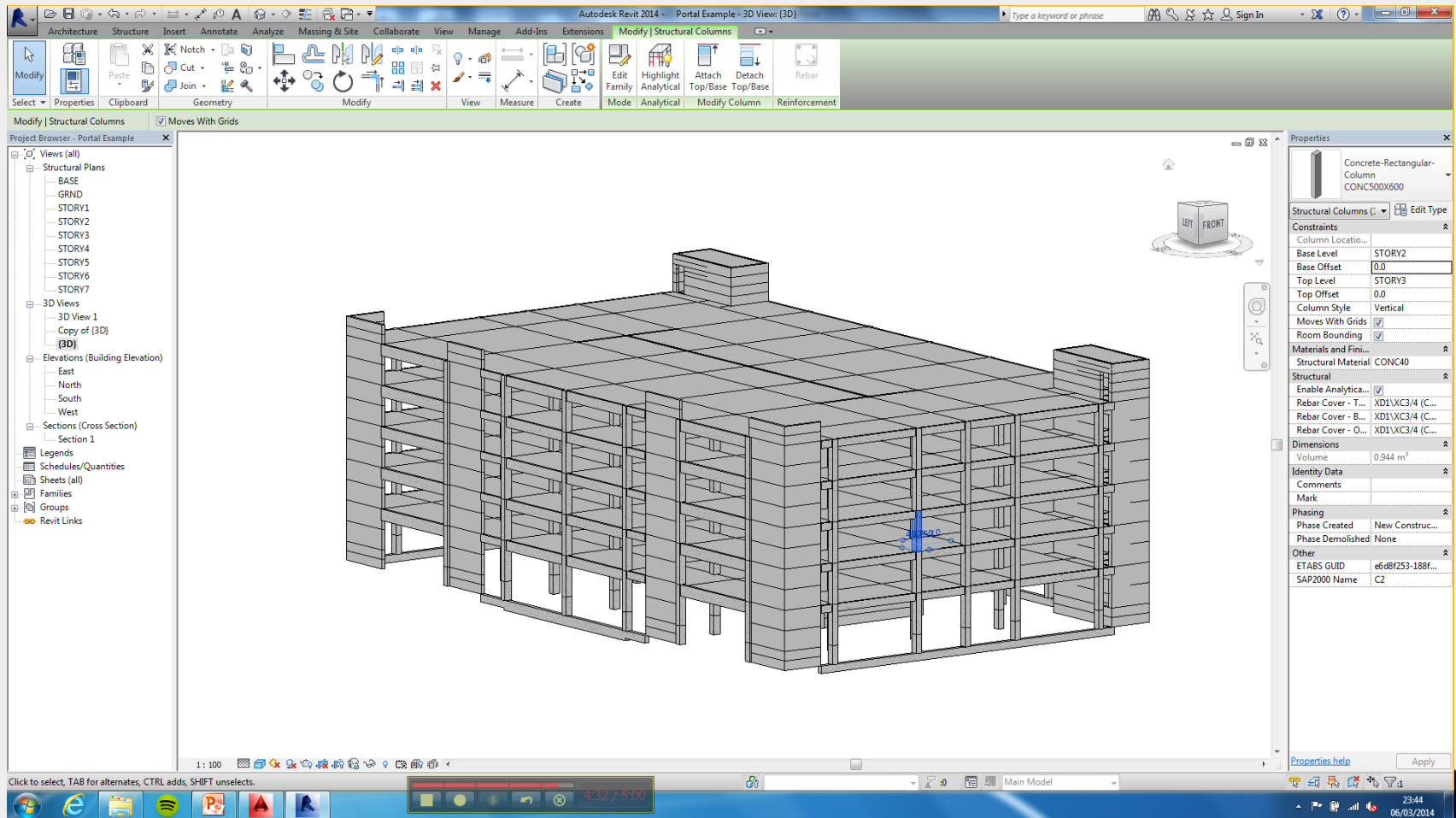
Practical Workflow (Autodesk)



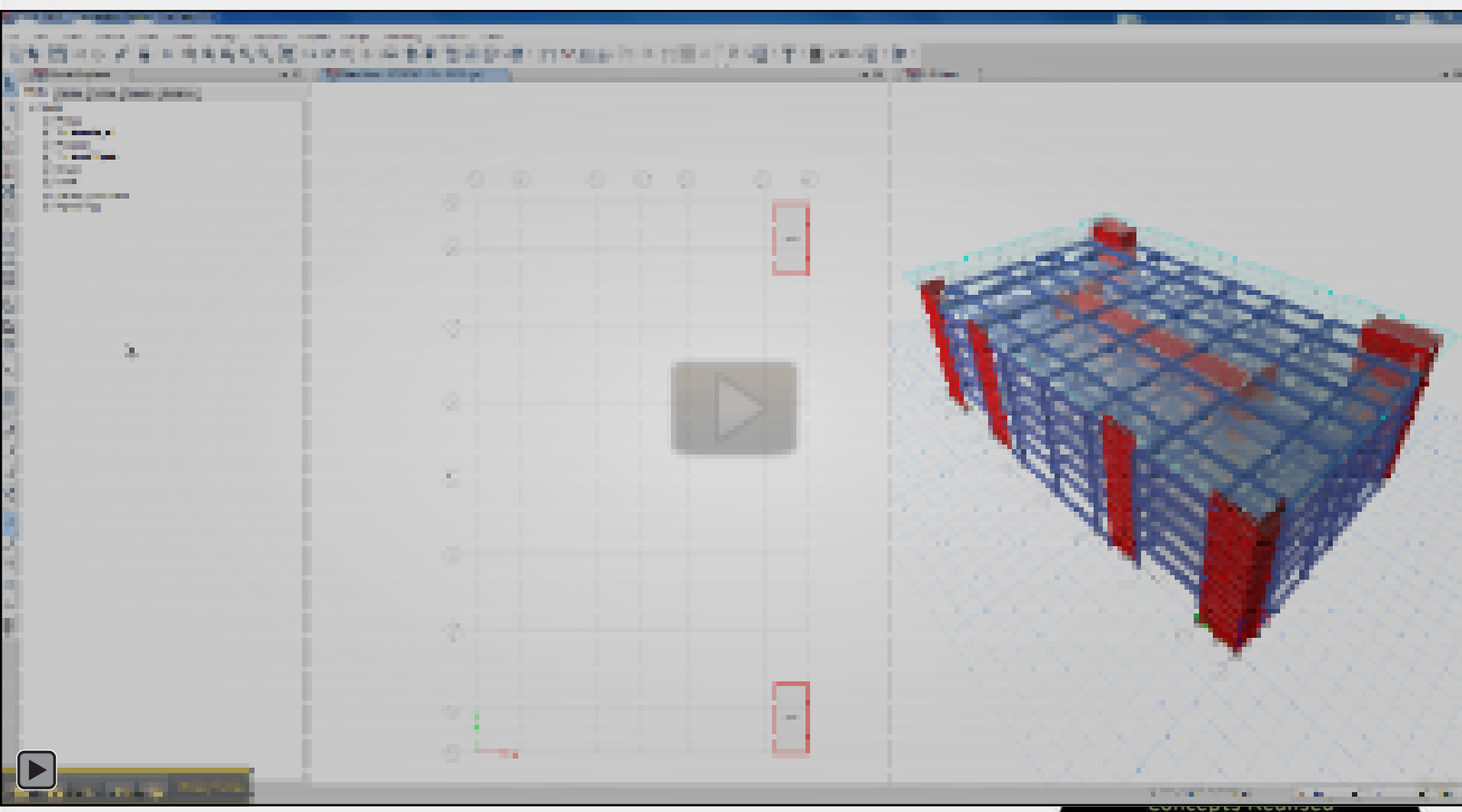
Analysis Software - Authoring Tool



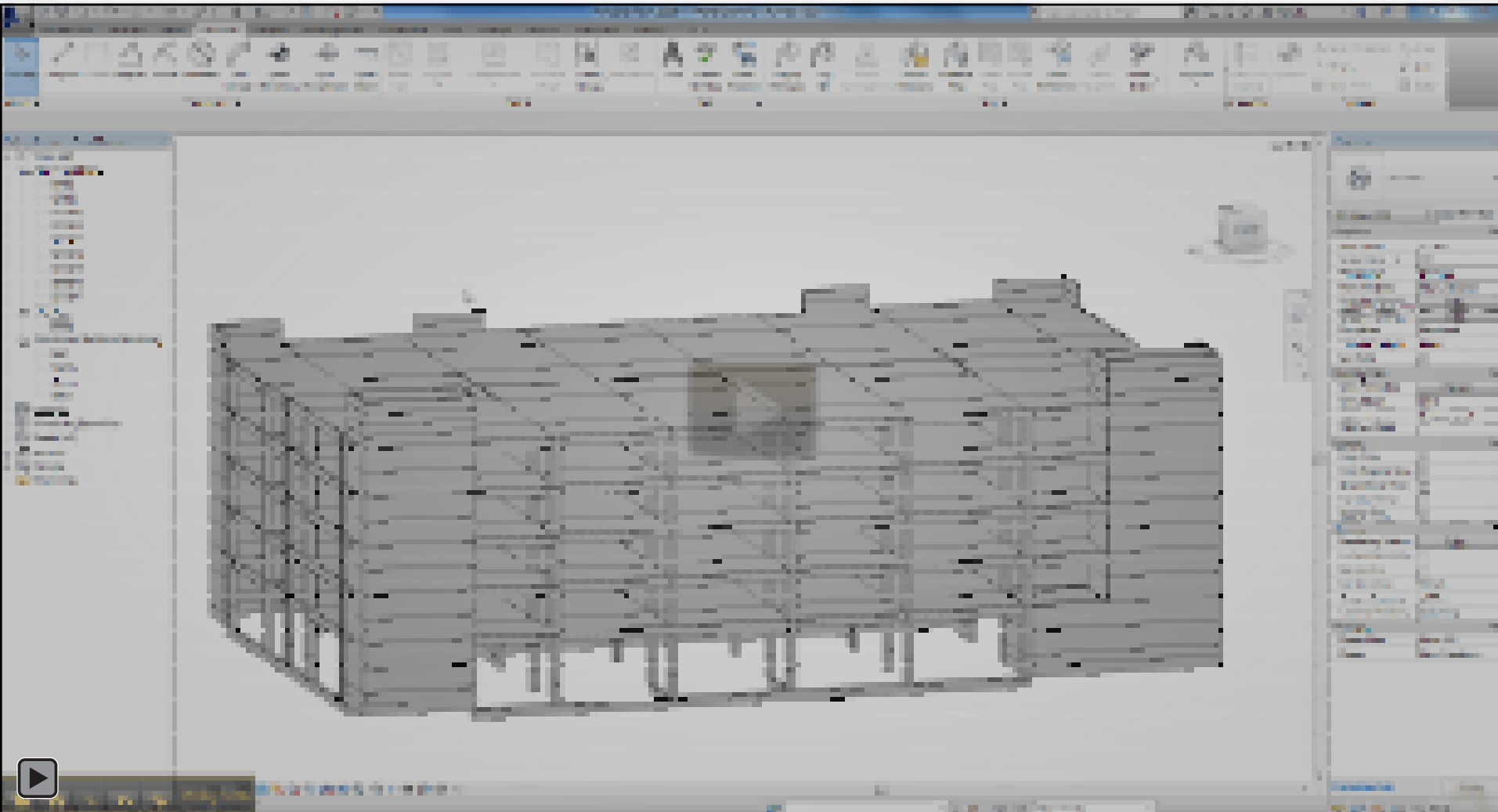
Analysis Software - Authoring Tool



Analysis Software - Authoring Tool (Video)

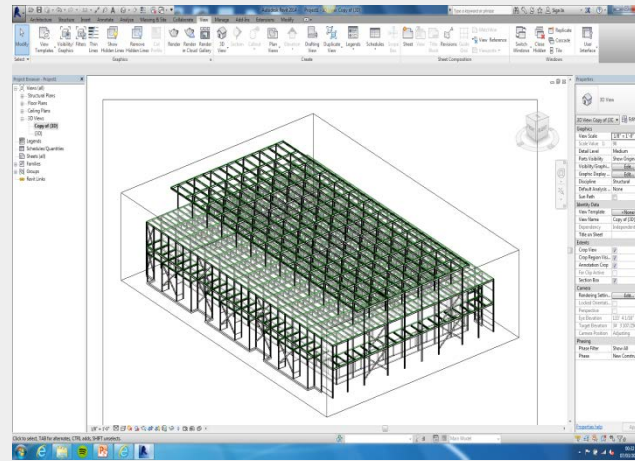
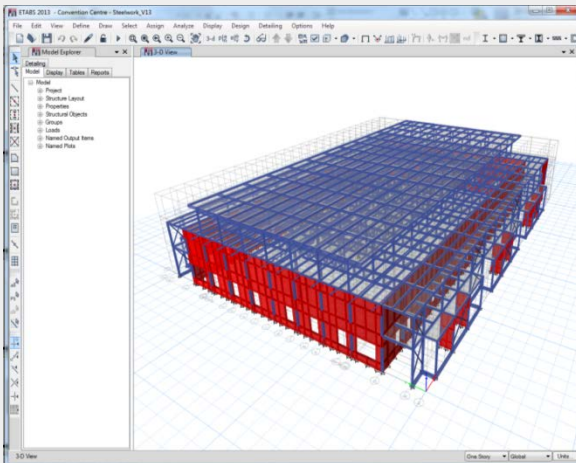
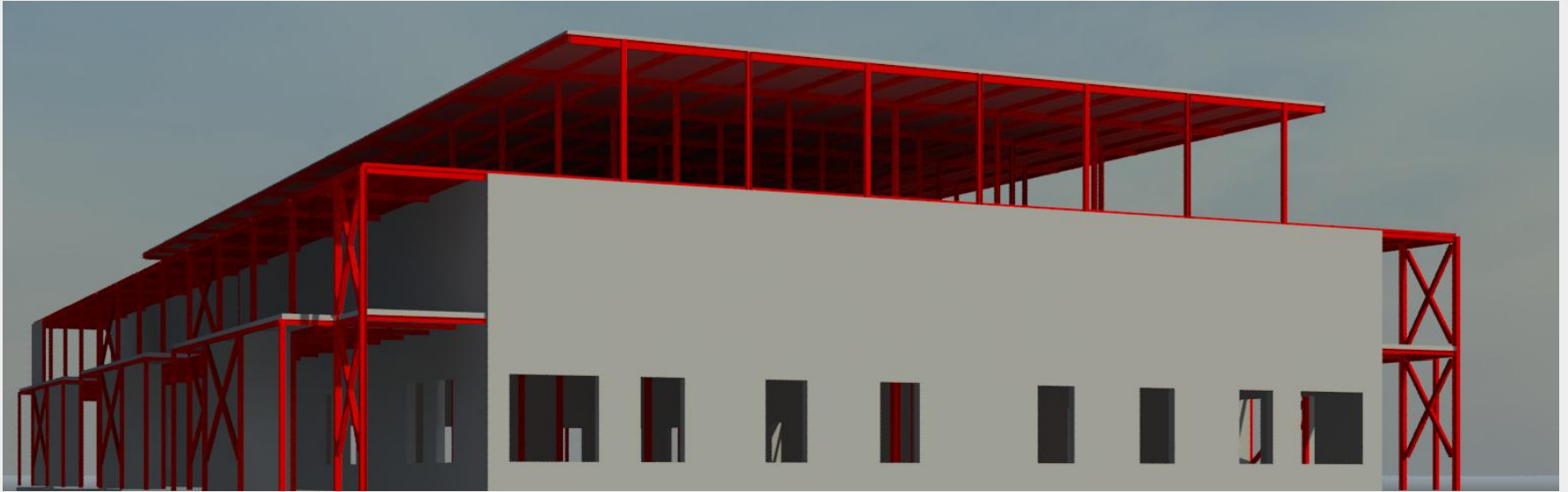


Analysis Software - Authoring Tool (Video)



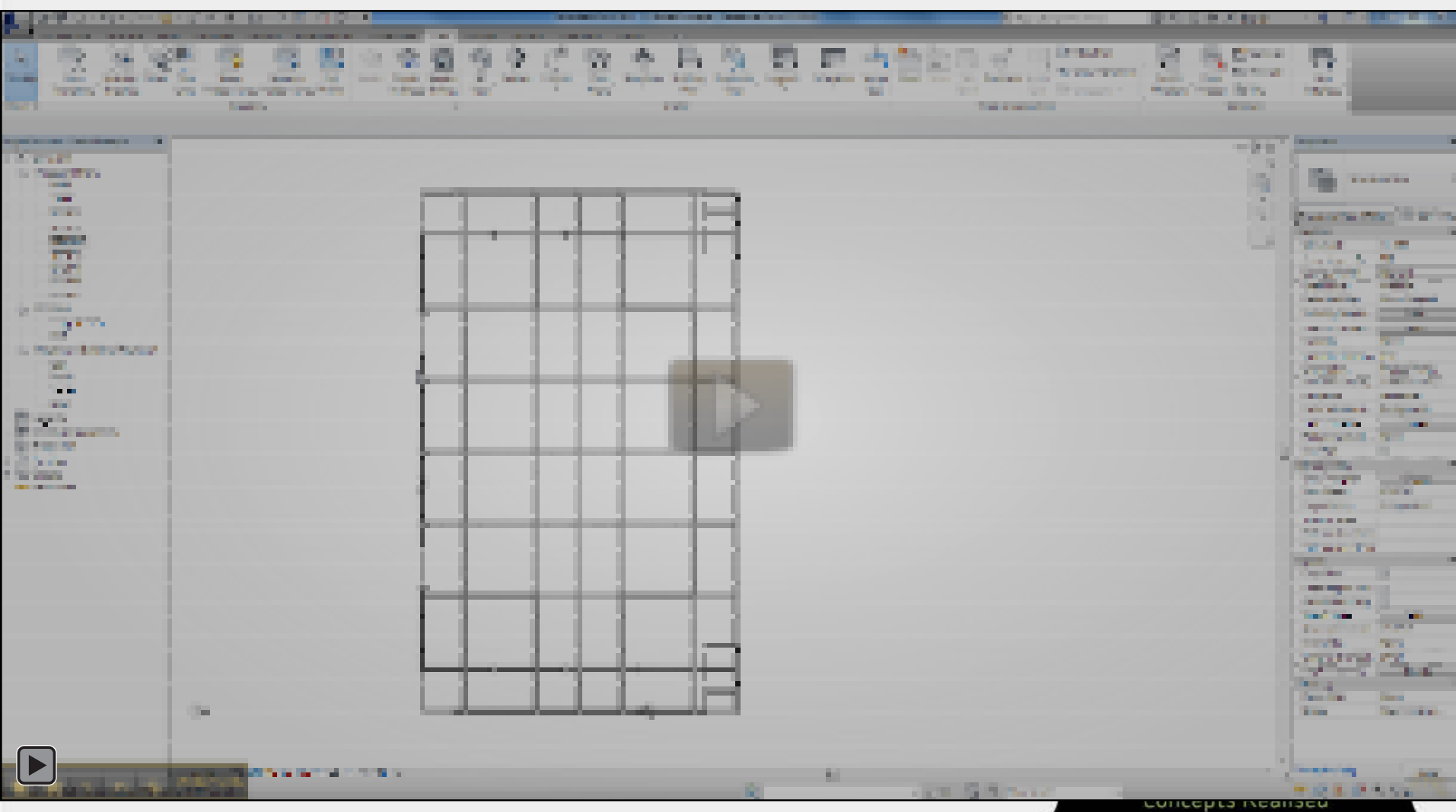
Concepts Realised

Analysis Software - Authoring Tool



GARLAND
Concepts Realised

Authoring Tool – Structural Detailing (Video)



Questions?

FOLLOW US ON



www.garlandconsultancy.com

GARLAND
Concepts Realised