

CitA
BIM GATHERING



Building Capabilities in Complex Environments

CitA BIM Gathering 2017, Croke Park, November 23rd & 24th, 2017



Information Technology for Site Workers



- Information technology (IT) on building sites can provide
 - A high level of communication exchange at all times
 - Easy recording of a wide range of information
 - Greater accuracy in a number of processes
- Facilitates
 - Greater efficiency
 - Better control of resource use
 - Quality control
 - Certification under BC(A)R
- *It is only when foremen, supervisors and site managers have developed knowledge and skills in the use of IT through wireless devices that the many benefits of BIM, Lean Construction and quality control processes will be fully realised to the benefit of construction companies and their clients*



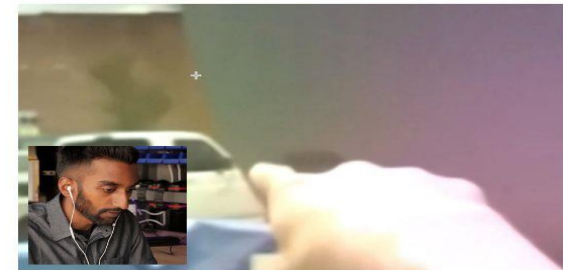
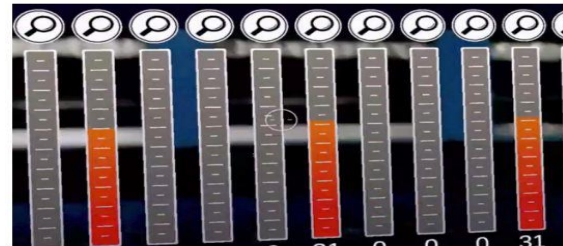
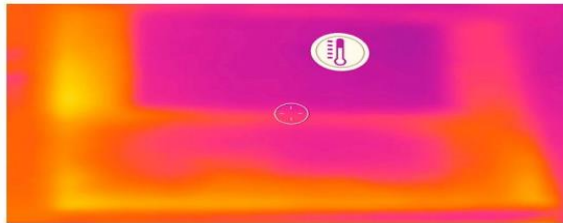
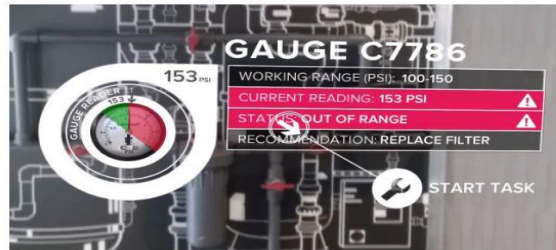
Disruption; Convergence; Collaboration



“A digital transformation knows no boundaries, it disrespects tradition & slays scared cows, change is inevitable”







4D Work Instructions

Your organization can provide intuitive augmented work instructions to your workforce. Workers will understand processes quicker, spend less time on each step, and make fewer errors. Augmented work instructions shown step-by-step in context of the job performed increase efficiency, save money, and provide valuable process improvement analytics.

[SEE RELATED CASE STUDY](#)

Thermal Vision

DAQRI Thermal Vision provides DAQRI SMART HELMET™ users with the ability to see or passively record temperature data in their real world environment. By identifying unsafe working conditions, Thermal Vision creates a safer environment for the operator. Seeing thermal characteristics may indicate the need for maintenance or additional monitoring.

[SEE RELATED CASE STUDY](#)

Data Visualization

Data visualization gives users distributed information and situational awareness outside of the control room, gaining efficiency by reducing the amount of movement and the need for a centralized location.

[SEE RELATED CASE STUDY](#)

Remote Expert

Increase productivity and safety with quick access in real time to domain experts. Remote Expert allows any DAQRI SMART HELMET™ user to connect to an expert at any time, regardless of the current activity, to get the help they need to complete tasks. It also offers the ability to share and annotate display screens. The expert can remotely see the environmental context of the DAQRI SMART HELMET™ user in real-time, enabling precise and informed assistance with the end result of increased reliability and operational excellence.

[SEE RELATED CASE STUDY](#)



- *CPD certificate in IT for Site Workers* is a one semester, part-time, upskilling programme for construction site workers.
- Suitable for site workers who wish to carry out their existing work in a more efficient & inter-connected way; or expand their role, progress their career, re-skill or seek employment.
- Content will be delivered via lectures, practical workshops and tutorials.
- Structured & resourced to provide a positive student experience & appropriate support services.
- A low teacher-to-student ratio to ensure good learning and student retention, given many students may be unfamiliar with many IT concepts and tools, and potentially 3rd Level education.

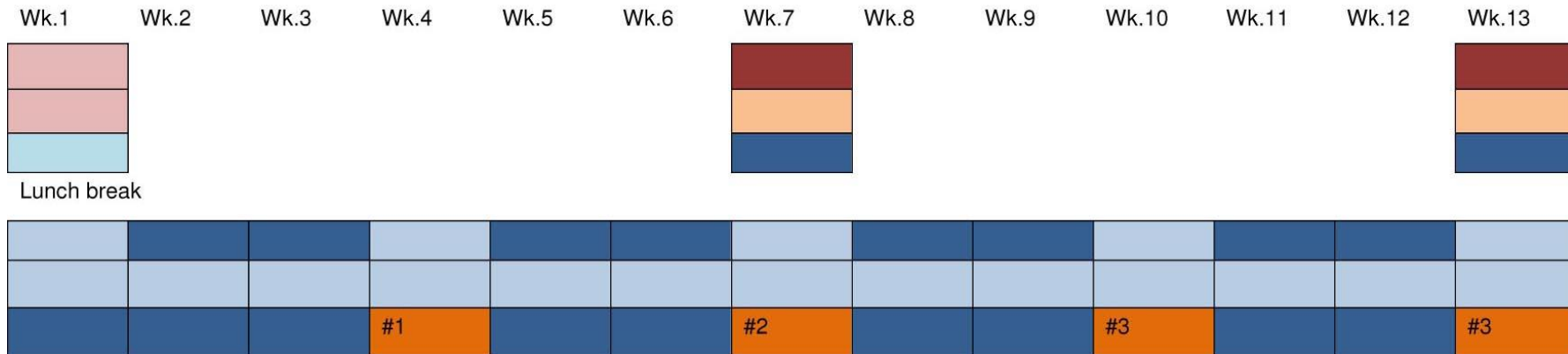


- Academic level
- Suitable for site workers with QQI Level 6 Advanced Craft Certification, or other relevant QQI Level 6 or 7 awards
- QQI Level 5 may be admitted where relevant prior learning
- Engagement and CPD requirements of CIRI
- 48 hours of structured learning & 52 hours of self-directed learning (much using current projects on site)
- Generally 3 hours Wednesday afternoons & 4 hours of study per week
- Attendance protocol
- Provides CPD under Pillar 3 (Technology & Innovation) for Supervisors and Craft Workers.




Legend

Introduction	Lecture	Presentation
Review	Tutorial	Assessment #1,2,3,4








DT 6023 IT4SW

Navigation

- Introduction
- 1/ Mobile Technologies
- 2/ Cloud Based CDE
 - Task 1 CDE
- 3/ Getting Connected !
- 4/ Building Information Management
- 5/ Building Information Models
- 6/ Collaborative Working
- 7/ Cloud Based Office Tools
- Student Resources
- Sitemap

Introduction

Information Technology for Site Workers



Increasingly, construction work is becoming digitised and associated contract documentation including working drawings are now regularly being stored and exchanged in electronic format. Such migration from the traditional paper based system brings with it a host of previously unknown difficulties for the people involved. It is becoming increasingly important for construction site personnel to be familiar with the principles of operation and associated interaction with IT systems employed. This is set to become even more crucial as building information modelling (BIM), currently in its infancy, becomes the norm. At the core of BIM is the integrated use of IT for management of all associated processes.

Learning Outcomes (LO):

On Completion of this module, the learner will be able to

- 1 Work within a cloud-based Common Data Environment (CDE) for the purposes of construction site and office activity.



G+

All communities Recommended for you

DIT IT for Site Workers
Information Technology for Site Workers CPD

Notifications on

3 members
dit.ie

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Events

Photos

Members (3) [See all](#)

What's new with you?

Text Photos Link Video Event Poll

Malachy Mathews OWNER
Discussion - Jan 22, 2016

<http://www.internationaltimber.com/news/building/the-rise-of-clt>

+1 Add a comment...

Malachy Mathews OWNER
Discussion - Jan 20, 2016

Topcon Invests in Virtual Reality for Construction

About this community

[Invite people](#) [Share this community](#)

This is a DIT learning community exploring the uses of information technology on construction sites aimed specifically at site working personnel

Malachy Mathews OWNER
Discussion - Jan 22, 2016

Is the Future of Construction On-site or Off-site?
 Architecture Construction

Prefabrication and off-site construction are all the rage among the building press, but is that truly the future of the industry?

+1 Add a comment...

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IT for Site Workers 1

Malachy Mathews

45060

Se
Up

STREAM STUDENTS ABOUT

No work due soon

VIEW ALL

STREAM

Show deleted items

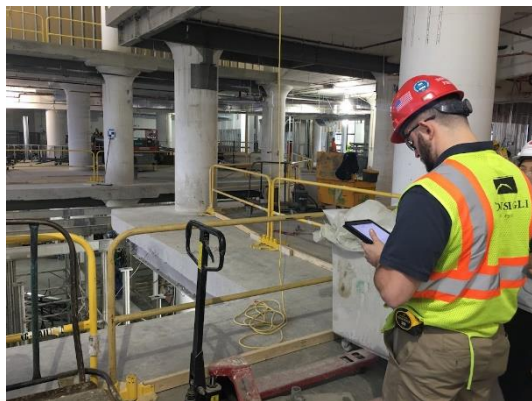
CLASS CODE

Students can join the class with this code:

Welcome to your class!

Do you want to take a tour to learn more?

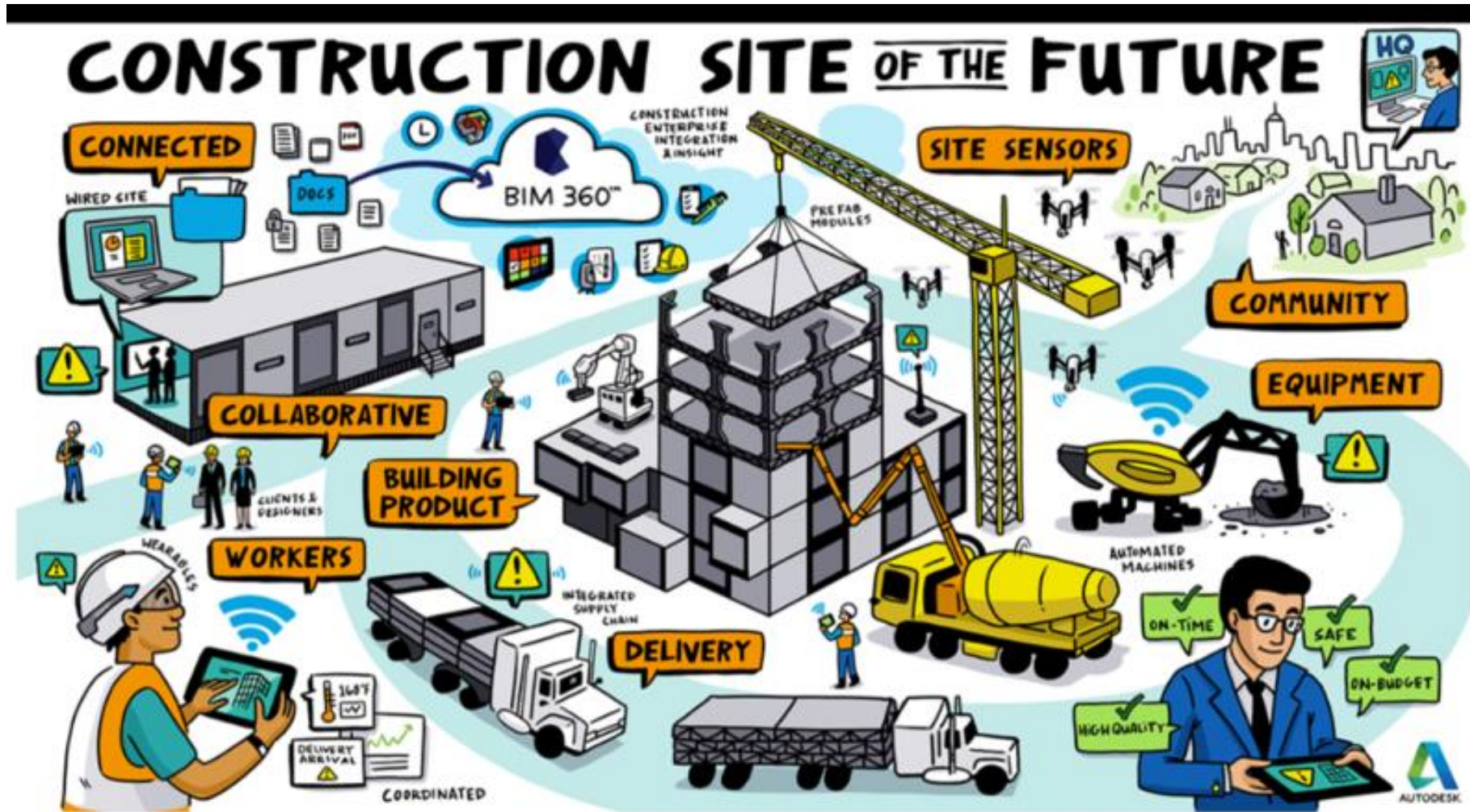
START TOUR

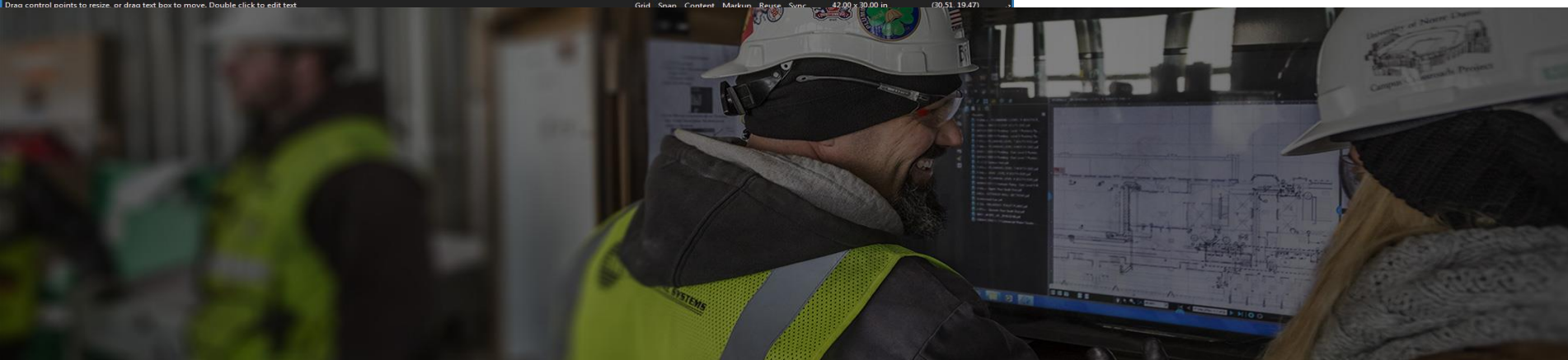
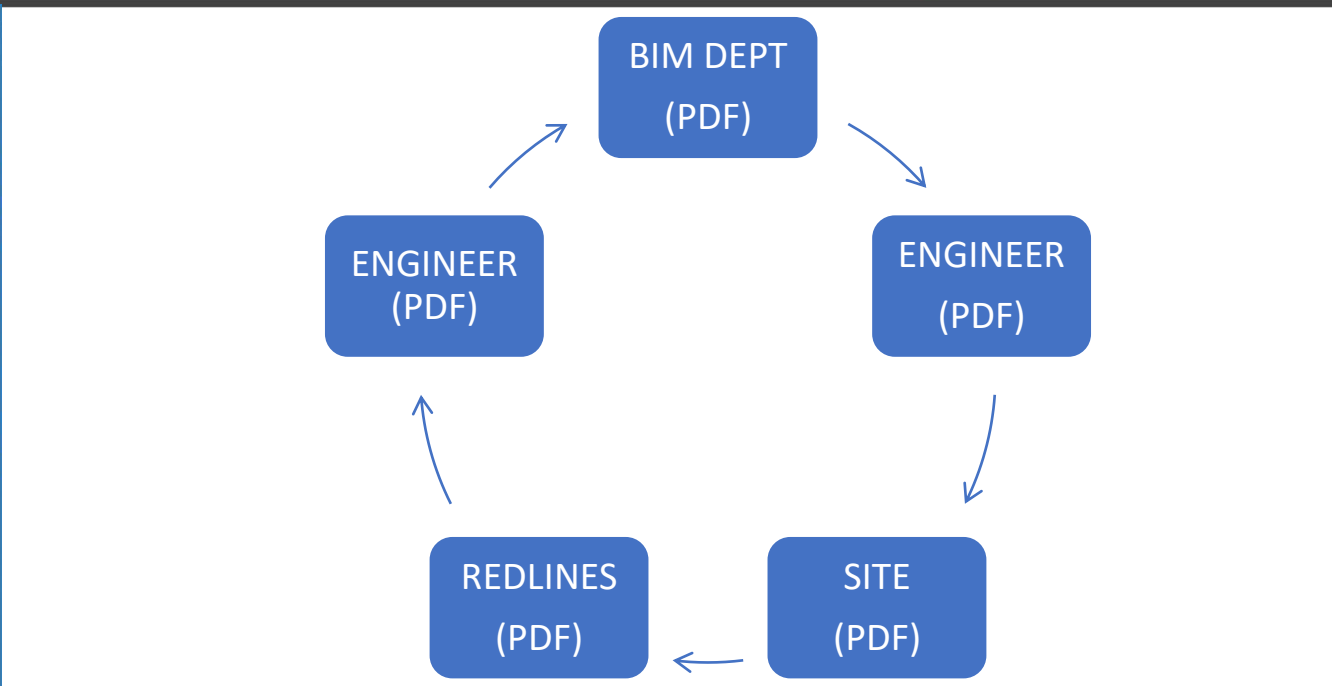
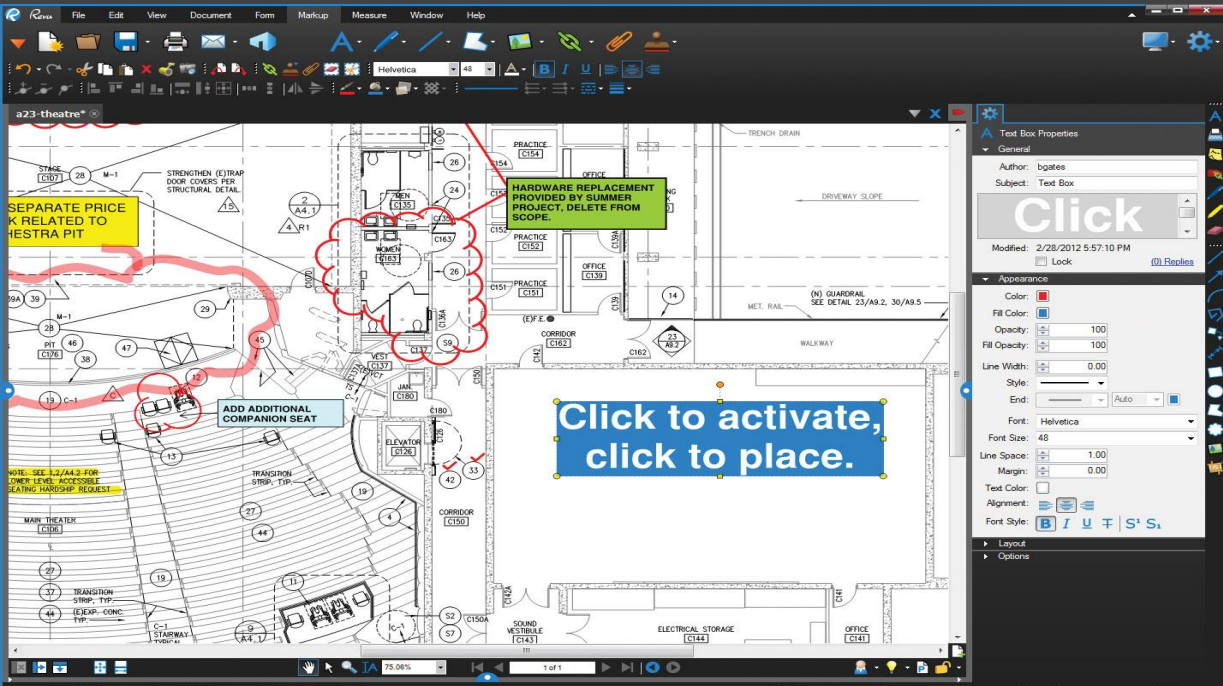




<p>3D VISUALISATION & COMMUNICATION</p> <p>Enscape Fuzor Autodesk Live</p>	<p>VR & AR SOFTWARE</p> <p>Iris VR Fuzor Autodesk Stingray</p>	<p>MOBILE 3D REVIEW</p> <p>BIM 360 Glue Revitzo Fuzor BIM anywhere Rendra Dalux</p>		
<p>DOCUMENT MANAGEMENT SYSTEM (COMMON DATA ENVIRONMENT)</p> <p>Aconex Field A360 Teams Newforma A360C4R</p>	<p>AUTOMATION</p> <p>Dynamo iConstruct Flux Kiwi Codes UNIFI Xrev Coins RTV Tools Autodesk Model Checker Colour Splasher</p>			
<p>AS-BUILT HANDOVER DOCUMENTATION</p> <p>Zutec Dome Connect WebFM</p>	<p>3D DESIGN (ARCHITECTURAL)</p> <p>Autodesk Revit ArchiCad</p>	<p>3D REVIEW & COORDINATION & CLASH DETECTION</p> <p>BIM 360 Glue A360 Teams Fuzor BIM collab Revitzo BIM Track Solibri Model Checker Navisworks Manage</p>		
<p>2D ACCESS / MARKUP TOOLS</p> <p>Field Wire Bluebeam Revu ShapeDo Procore PlanGrid Drawboard Bullclip</p>		<p>CONNECTED CONSTRUCTION FIELD DATA</p> <p>Field Wire OnTarget Fieldlens Procore BIM 360 Glue Aconex Field</p>		
<p>DATA VISUALISATION</p> <p>Tableau Kibana Elastic</p>	<p>4D PLANNING</p> <p>Asta Power Project Synchro Navisworks Simulate/ Manage Fuzor Construction C3D Interactive</p>		<p>5D COSTING</p> <p>CostX Rib iTWO C3D Interactive</p>	<p>6D FACILITIES MANAGEMENT</p> <p>Ineni & iViva Workds EcoDomus MxS VEO</p>

Delivery

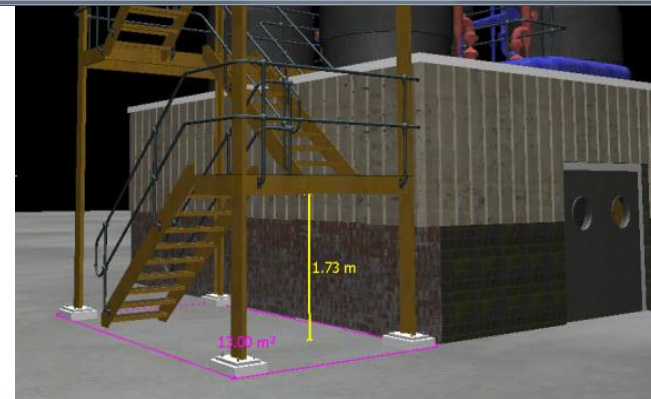
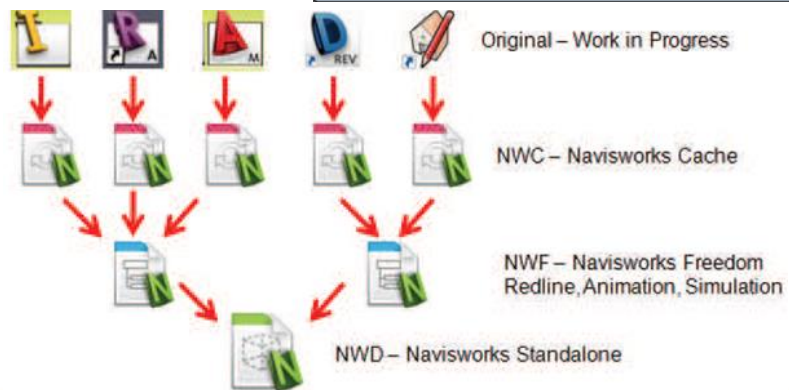
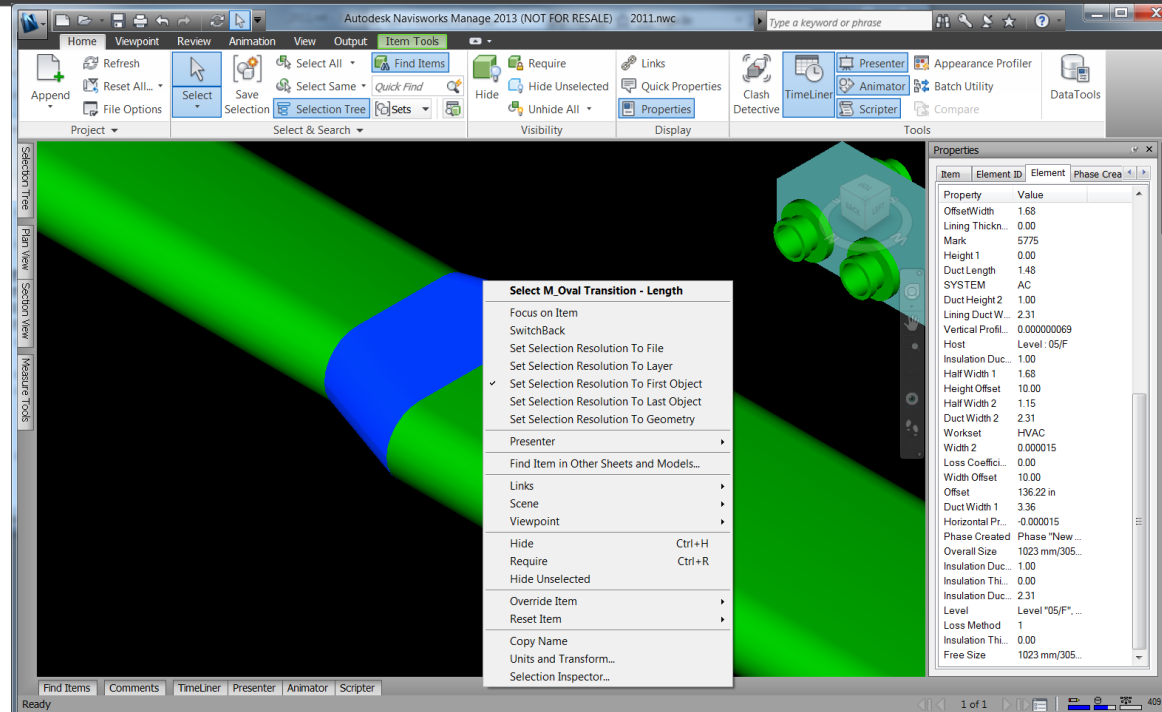






WORKFLOW

- FILE TYPES
- INTERFACE
- NAVIGATION
- PROPERTIES
- VIEW POINTS
- INTERAGATION





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Thank you

Joseph Mady