

CLANCY Built on Partnership









Clancy's "Going Digital"

Brian Cass

CITA Waterford Regional Event 21-02-18

2017: 70th Years in Business





Clancy

- Turnover €40m
- Shift from Public to Private
- Projects between €5-15m
- One of the Top 20 domestic contractors
- Our success is built on partnership, we work with clients.
- Big enough to compete, small enough to care
- Innovation
- Strengthen our management team through leadership
- <u>www.clancy.ie</u> follow us on Twitter <u>https://twitter.com/Clancy_Drangan</u>
- Also on LinkedIn











Agenda

- Digital Tools and Processes used within Clancy's
 - o BIM 360 Field
 - o Bluebeam
 - BIM Trimble Robotic Total Stations
 - Site Logistics/Site Setup
 - Virtual Reality
 - 4D BIM
 - Drones
- Summary

BIM 360 Field - What is it??

- QA/QC Management
- Issues
- Checklists
- Safety
- **Plant Inspections**
- Commissioning
- **Daily Reports**
- **Document Library**
- A Governance Tool
- Data
- A Robust record keeper in one central source

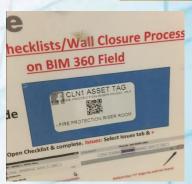




BIM 360 Field - What is it??

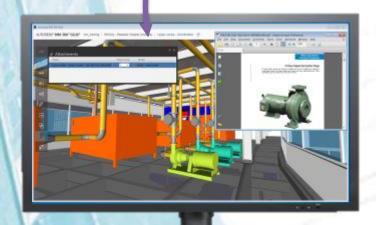
- Designed for the <u>entire</u> construction project team
- Manage Quality, Safety, Documents to the Field, Progress Photos, Commissioning & Handover
- Enable model-based workflows on the job site, and link field data to models
- Get real-time project insight through analytical reporting and dashboards
- Use of QR codes to get to the right information quickly







BIM 360 Field - How it Works



Centralized project data source Access to data offline



Office/Browser Access

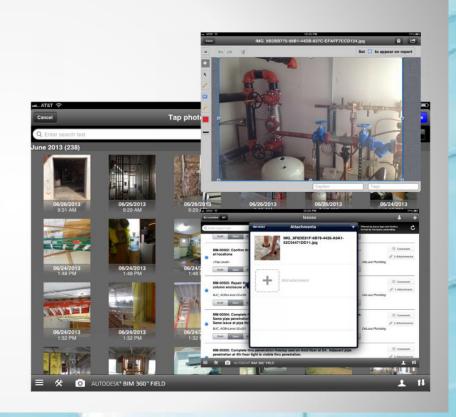
Field/iPad (iOS App) Access

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BIM 360 Field – Issues/Observations

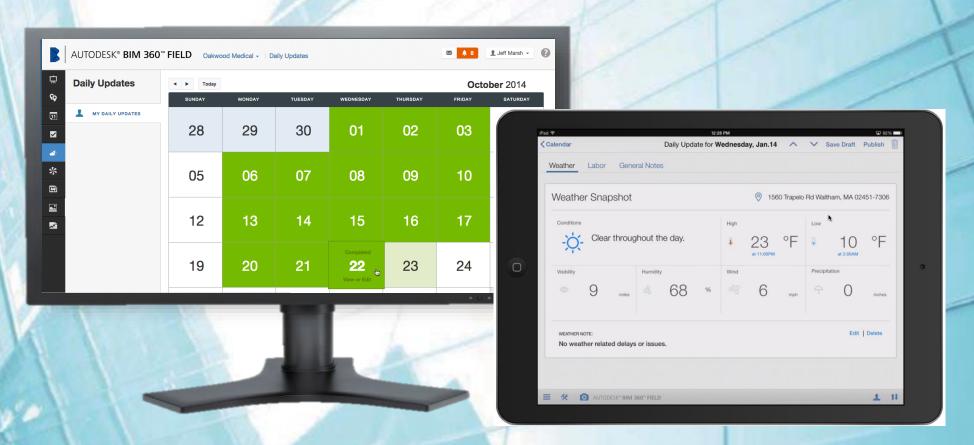
Walking the job site

- Capture and share
- Identify problems, create issues, assign tasks
- Ability assign the location and categorize
- Tagging and marking up



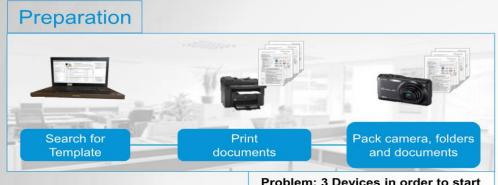


BIM 360 Field – Site Diary



BIM 360 Field – Digital Checklists

Safety inspection process: Conventional



Problem: 3 Devices in order to start Problem: Limited carry possibilites

Construction Site



Problem: Check picture on 2.5" screen Problem: A lot of references not at hand

Postprocessing



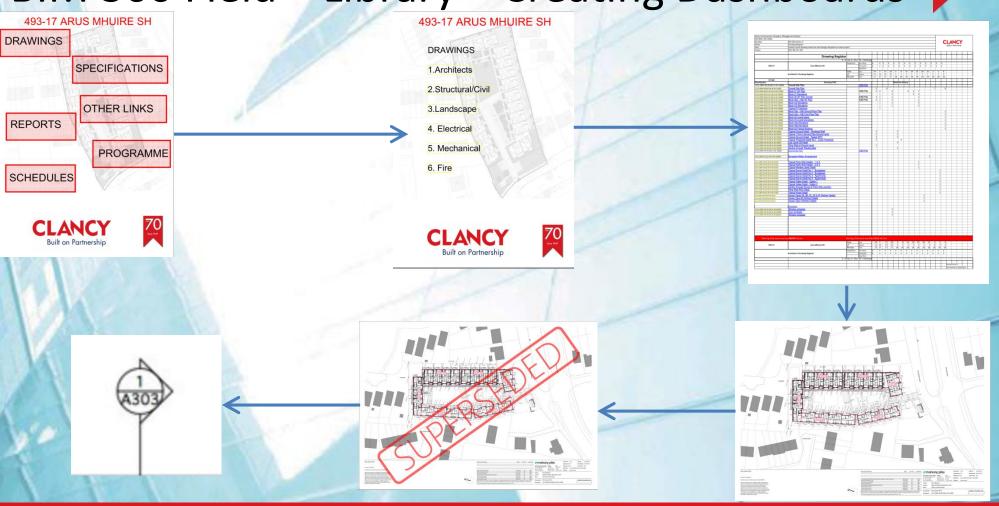
Problem: WHERE was that?
Problem: WHO was that? Problem: WHAT was that?

Distribution





BIM 360 Field – Library – Creating Dashboards



BIM 360 Field

Every device, every print

loss of money





Walking around and searching

loss of time



Missing information

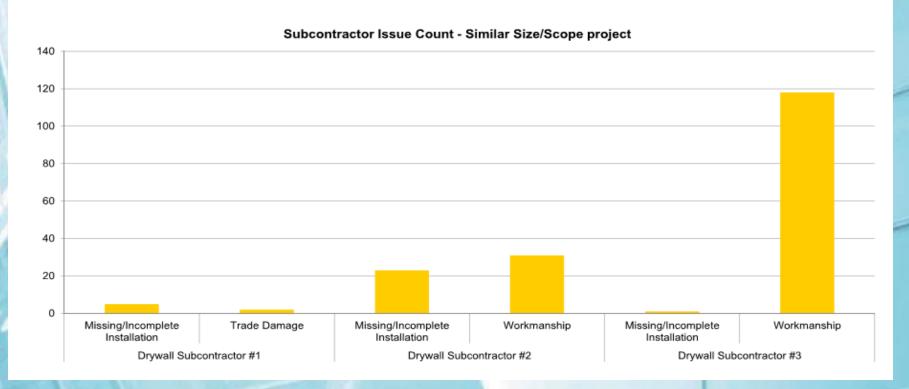
loss of quality



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BIM 360 Field reporting provides project performance transparency to executives and project managers

Cross Project Comparison – Drywall Subcont.



BIM 360 Field

- One box of A4 paper costs €17
- 20 Boxes of Paper (1 week) = €340
- 1 year of A4 paper = €17,640
- Aim to reduce paper by half within First Year of Implementation





Bluebeam



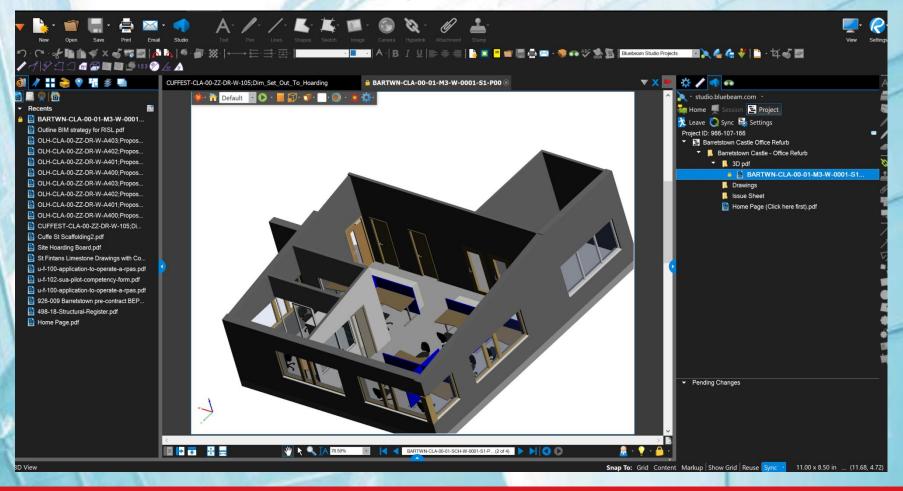
Drawing Register and Storage





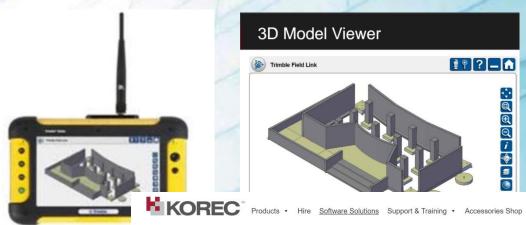
Technical Submittals Shop Drawings

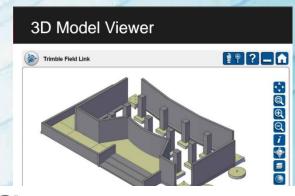
Bluebeam – also a great 3D pdf tool



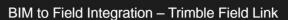
Trimble Field Link – BIM model Integrated Robotic Total Stations















Case Study

- Customer: Clancy Construction
- Project: Taking BIM to the construction site
- > Solution: Trimble RTS 773, Yuma tablet and Field Link software

Taking BIM to the construction site

Irish contractor Clancy Construction

Clancy wants its clients to understand

Clancy uses BIM throughout the life of a

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Site Logistics/Site Set Up



CLANCY BIM STATION ON ADMIN FLOOR





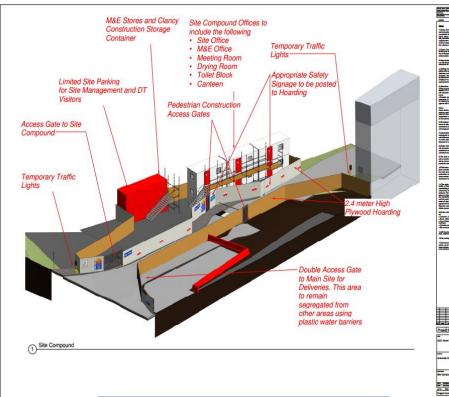




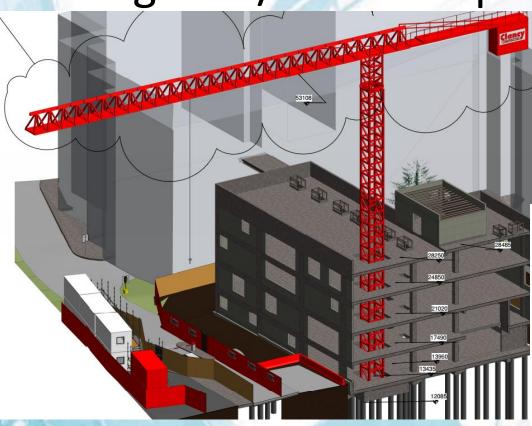


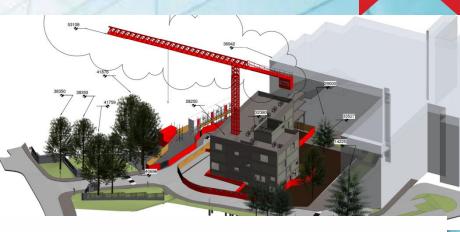
Site Logistics/Site Set Up

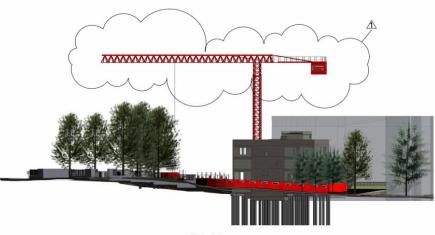




Site Logistics/Site Set Up





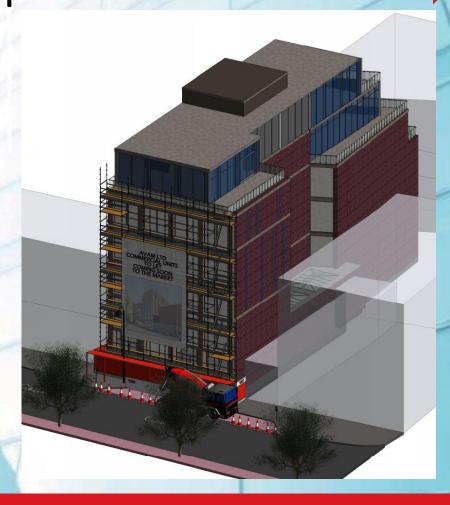


Side View

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Site Logistics/Site Set Up





Virtual Reality



4D BIM

- Try to use it more intelligently
- Keep it live throughout project
- Not just "fancy" video for tender but something that adds value



Drones

The use of drone surveys added to our bi-weekly site progress reports issued to design/client team





Progress Video - Bec

Summary CHANGE IS HARD



"I DON'T HAVE TIME TO SEE ANY CRAZY SALESMAN; I HAVE A BATTLE TO FIGHT!"

Summary

THERE'S NO WIFI CONNECTION

IT'S NOT INTUITIVE

IT'S HARD TO TYPE ON THE IPAD

I'M NOT TECH SAVVY

IT TAKES

TOO MUCH

TIME

IT SLOWS ME DOWN

THERE'S **TOO MANY** BUTTONS TO CLICK

IT'S OVERWHELMING/ TOO MUCH TO LEARN AT ONCE

Summary

THERE'S NO WIFI CONNECTION

I'M NOT TECH SAVVY

THERE'S TOO MANY BUTTONS TO CLICK

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TOO MUCH

TIME

IT'S HARD TO

NTHE

BUT WE'VE **ALWAYS** DONE IT THIS WAY

> IT SLOWS ME DOWN

Summary



The People



The Process



The Technology

