



Sometimes, even engineers need help to find solutions

“How can we complete this process more efficiently?”

“How can I make the client understand how that will work?”

“How can I be sure all those services are going to fit that space?”

Thankfully, our **Digital Engineering** team has the answer... to these questions and more.

Digital Engineering creates innovative tools that help us work better, faster and smarter.

Tools that help us analyse and record existing buildings.

Tools that help to plan and integrate services in hidden spaces.

Tools that simulate elements of a building before it's built.

Tools that improve buildability and performance.

The services provided by Digital Engineering assist us in detecting issues, streamline and drive our processes, but most importantly, help us communicate more effectively with clients and stakeholders.

Digital Engineering is constantly adding new tools to our engineering toolbox because, when we work better, faster and smarter, the time and cost benefits pass directly to our projects and clients.

TECHNOLOGY SOLUTIONS

- Reality Capture
- Immersive Digital Buildings
- Acoustic Reality
- Going underground with Infraworks

BENEFITS

- Reduced survey time where multiple disciplines are involved
- Greater accuracy in services provision
- Achieve a deeper understanding of design functionality
- Ability to make informed choices around costly elements, such as lighting and finishes
- Enhanced stakeholder engagement
- Helps streamline the funding approval process

REALITY CAPTURE



Using sophisticated camera technology, we capture your site or existing building in 4K HD resolution, to create a permanent and detailed 3D visual record. Survey results can be shared by disciplines to complete condition inspections, or to provide 'certainty of fit' between new and existing services

ACOUSTIC REALITY



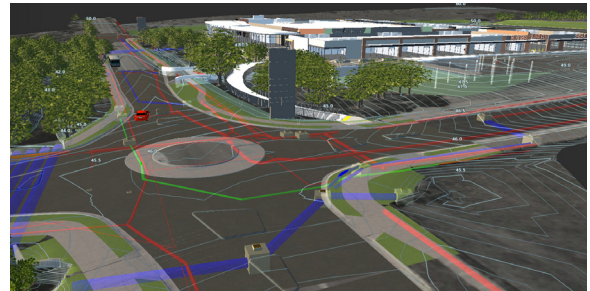
Communicating with clients about acoustic issues used to be difficult. Via immersive technology, by combining sound files with our design data, we can now accurately simulate how rooms will perform acoustically. 'Standing' in your virtual building you can 'hear' the difference that wall or glazing selections will have on occupant comfort – and all before a brick has been laid. On a larger scale, we can even model the acoustic properties of a whole building to demonstrate its impact on the neighbourhood – perfect for visits to the Planning office.

IMMERSIVE DIGITAL BUILDINGS



This process brings our designs to life so you can walk every room and corridor, consider layout and flow, or review lighting schemes and finishes. You can even look at how the services infrastructure integrates behind the scenes.

GOING UNDERGROUND WITH INFRAWORKS



Aligning the gas, water and electrical services in a building with the hidden array of pipes and cables below ground is now easier through the use of this web-based tool. Infraworks converts our civil designs into a 3D model that is simple to manipulate and view from any angle. And by including existing local authority data, we can easily integrate our site into the neighbourhood infrastructure.

REAP THE BENEFITS OF DEPLOYING OUR DIGITAL ENGINEERING TOOLKIT ON YOUR NEXT PROJECT. ASK ABOUT A CONTACT IN YOUR AREA:

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