

Unlocking the Future of Digital Construction through BIM Solutions

Building Information Modelling (BIM) is a cutting-edge digital process that creates and manages information about built assets throughout their lifecycle. By integrating 3D models with precise datasets, BIM revolutionises industries such as utilities, land management, telecom, and highways. This tech-driven approach enhances design, construction, and operation, and plays a crucial role in reducing errors, cost-saving, and promoting sustainability through efficient project oversight.



Pioneering Innovation in the BIM Industry for Smart Infrastructure Solutions

Leveraging decades of expertise in geospatial and digital technologies, RMSI offers bespoke BIM services to meet the evolving challenges of various industrial sectors. Our solutions tackle the complexities of managing large volumes of data, ensuring smooth integration across multi-disciplinary teams, and maintaining compliance with dynamic industry regulations.

By streamlining workflows and enhancing collaboration among stakeholders, our tailored BIM services help mitigate risks such as design conflicts, data inconsistencies, and project delays.

“ RMSI’s custom BIM services help mitigate risks such as design conflicts, data inconsistencies, and project delays

What We Offer?

BIM Modelling and Digitalisation

Convert 2D drawings, GIS data, scans of buildings (e.g. Heritage buildings) and CAD models into highly detailed 3D BIM models, utilising advanced BIM tools like Revit.

Process and convert various 3D data sources into precise BIM models, including point clouds, photogrammetry, ground-penetrating radar (GPR), and terrestrial laser scanning (TLS).

Create accurate, detailed models for architecture, structure, and MEP (Mechanical, Electrical, and Plumbing) systems.

Convert energy modelling & analysis to reduce operational cost & sustainability in building design.

Ensure compliance with industry standards such as ISO 19650 and facilitate smoother project collaboration.

BIM Data Management and Integration

Handle complex data management tasks with ease, ensuring seamless integration of BIM with Geospatial Information Systems (GIS) and other systems.

Manage large BIM & Geospatial datasets from various file types (Shapefiles, CAD, PDF, IFC, etc.) while maintaining data integrity throughout the project lifecycle.

Implement advanced automation techniques to streamline data validation, file reception, and quality assurance processes.

Sustainability and Lifecycle Management

Support the development of sustainable construction projects by embedding lifecycle management processes into your BIM models.

Enable efficient energy modelling and resource management within BIM to promote sustainability at all project stages.

Monitor and manage the entire lifecycle of built assets, from design to demolition or repurposing.

Key Benefits and Value Proposition in Various Industries

RMSI combines geospatial expertise with advanced BIM technology to support the specific needs and challenges of various industries.



ENERGY & UTILITIES

- Attain a unified view of assets, reduce downtime, avoid errors, and improve resilience
- Optimise asset management and infrastructure planning
- Transform outdated data into advance utility models that enhance network performance, streamline maintenance and support data driven decisions
- Reduce costs, meet industry standards and achieve sustainability goals



LAND MANAGEMENT

- Update records on land management with accurate BIM Models that enhance collaboration between architects, engineers, and contractors
- Manage residential projects in a precise and efficient manner
- Streamline regulatory approvals by ensuring full compliance with building codes and environmental standards



TELECOM

- Combine geospatial data analysis with 3D modelling to ensure precision and improved coverage for enhanced network resilience
- Optimise infrastructure planning and deployment
- Real time insights for telecom providers to efficiently manage, upgrade, and scale their networks with minimal disruption



HIGHWAY

- Combine geospatial data processing expertise with BIM to optimise every stage of highway design, construction, and maintenance
- Visualise all project aspects from initial design to final construction for improved coordination and decision-making
- Precise spatial analysis for enhanced route planning, comprehensive environmental impact assessments, and improved road safety features
- Real-time updates and data integration capabilities ensure accurate project execution, reduce construction risks, and support efficient long-term asset management

RMSI's Capability in BIM

Tailored BIM Implementation

Custom client requirements

From model creation to clash detection and schedule simulation

Integrated GIS and 3D Models for complete spatial awareness

Quality Assurance and Compliance

Maintain accuracy with QA/AC protocols

Industry best practices in compliance with ISO and BIM standards

Stakeholder collaborations for project transparency

Automation and Optimisation

Integrated scripting and automation tools for speed and accuracy

Automated workflows

Advanced AI/ML approaches for seamless data processing

RMSI Success Stories



Geospatial Data Management for a Major Infrastructure Project

Delivered complex solution integrating GIS and BIM datasets, optimising project workflows and ensuring real-time data access across teams.



BIM and Geospatial Integration for Heritage Site Preservation

Enabled a seamless integration of BIM with geospatial data for the digital preservation of a historically significant site, providing accurate documentation and reducing future maintenance costs.



BIM Lifecycle Management for Smart Cities Project

Worked on BIM-based solution tailored for smart city development, seamlessly integrating advanced technologies into the BIM model to enhance lifecycle management. This solution allows for real-time data integration, enabling more efficient planning, construction, and ongoing management of urban infrastructure.