



Vidha Tek

**"Create. Construct. Manage.
Digitally Mastered."**



Create
Construct
Manage

**Digitally
Mastered**





Vidha Tek

Vidha-Tek is a global innovator in delivering advanced Building Information Modeling (BIM) solutions, tailored to meet the complex needs of Architecture, Engineering, and Construction (AEC) firms worldwide. We specialize in end-to-end project support, offering a full spectrum of services that include strategic design and consultancy, pre-construction services such as constructability reviews, clash detection, and design coordination, as well as value engineering to optimize project cost and performance. Our expertise extends to comprehensive logistics planning, construction management, and seamless integration of Facilities Management (FM) solutions. With the integration of Digital Twin technology, we provide real-time, data-driven insights for enhanced operational efficiency and lifecycle management. With over 1,500 successful projects delivered across 9+ countries over the past 10+ years, Vidha-Tek has solidified its position as a pioneer in leveraging digital solutions to streamline workflows, reduce risks, and drive sustainable outcomes across the AEC industry.



Vision

Recognized worldwide as a trusted and innovative partner in virtual design and construction, we specialize in delivering cutting-edge solutions that enhance collaboration, streamline processes, and drive project success. With a focus on precision, efficiency, and advanced technology, we support clients across the globe, consistently exceeding expectations and adding value at every stage of the project lifecycle.

Mission

We integrate advanced technology, streamlined processes, and expert teams to optimize design, construction, and operations, enhancing efficiency and precision through the power of Building Information Modeling (BIM).



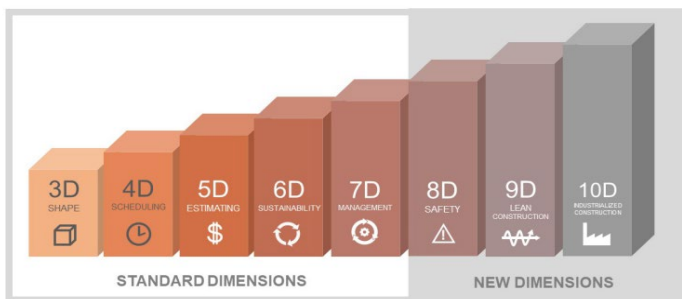
We bring cutting-edge technology and processes to design, construction, and owners worldwide.

Welcome!

Redefining Every Dimensions- From 2D to 5D and Beyond

Building Information Modelling (BIM) transcends the common misconception of being merely a 3D model, embodying a sophisticated, data-driven methodology that revolutionizes project execution and delivery across the Architecture, Engineering, Construction, and Operations (AECO) industry. BIM creates a dynamic, virtual representation of the construction environment, enabling the early detection of defects, coordination challenges, and design flaws that could otherwise compromise project efficiency. By seamlessly integrating these insights into the planning and construction process, BIM ensures flawless on-site execution. Furthermore, the integration of cutting-edge technologies such as virtual and augmented reality empowers teams to make swift, data-backed decisions with confidence, driving enhanced collaboration and delivering superior project outcomes. This comprehensive approach to project delivery not only optimizes workflow but also elevates the entire construction lifecycle, fostering greater innovation and sustainability.

DIMENSIONS OF BIM



Solutions

BIM Consulting & Manpower

3D, 4D, 5D & 6D BIM Services

BIM Drawing Production

Construction Industrialization

Immersive VR Experiences

Scan To BIM

Visualization

Digital Twins

BIM Modeling

Training

BIM Content Production

2D to 3D conversion

Sectors

BIM Consulting

Architecture & Interiors

Facade

Structural & Civil

Build Services & MEP

Infrastructure

Surveying

Laser Scan to BIM

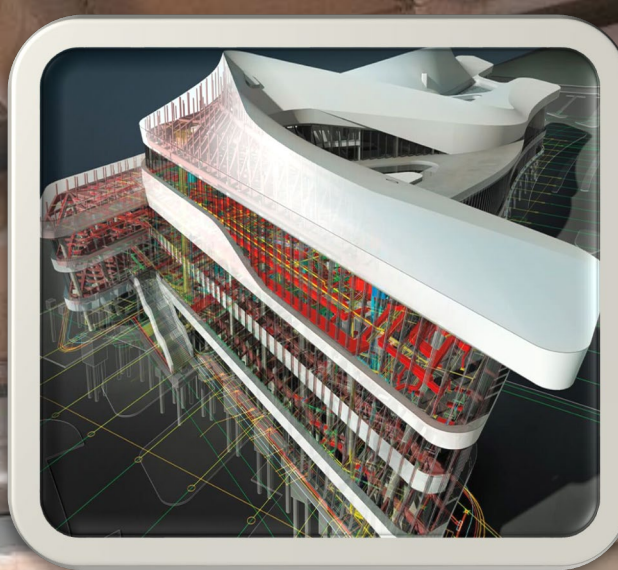
Content Creation

corporate Training

Outsource Modeling

BIM Content Production

2D to 3D conversion



Vidha Tek is a multidisciplinary team of expert engineers and designers committed to delivering comprehensive solutions across the entire project lifecycle. By leveraging our deep understanding of both owner and builder perspectives, we effectively implement, coordinate, and create both virtual and built assets. We specialize in developing Building Information Modeling (BIM) strategies and digital project delivery to enhance the efficiency, accuracy, and sustainability of major construction projects. Our approach involves constructing a detailed digital twin of each project, providing real-time insights and enabling early identification of potential issues. This proactive strategy allows us to optimize design, minimize risks, and drive significant savings in both time and cost, ultimately ensuring seamless collaboration and superior outcomes for all stakeholders involved.

The Works We Do

BIM Management

Our expert Management and Engineering teams leverage diverse technologies and platforms to efficiently implement, manage, and coordinate projects at every phase.

BIM Coordination

A dedicated BIM expert leads each project, coordinating a team of modellers to align multi-disciplinary design and construction elements with managers, engineers, and designers.

BIM Modeling

BIM relies on creating precise geometry and data to streamline coordination, manage project deliverables, reduce complexity, and enhance certainty.

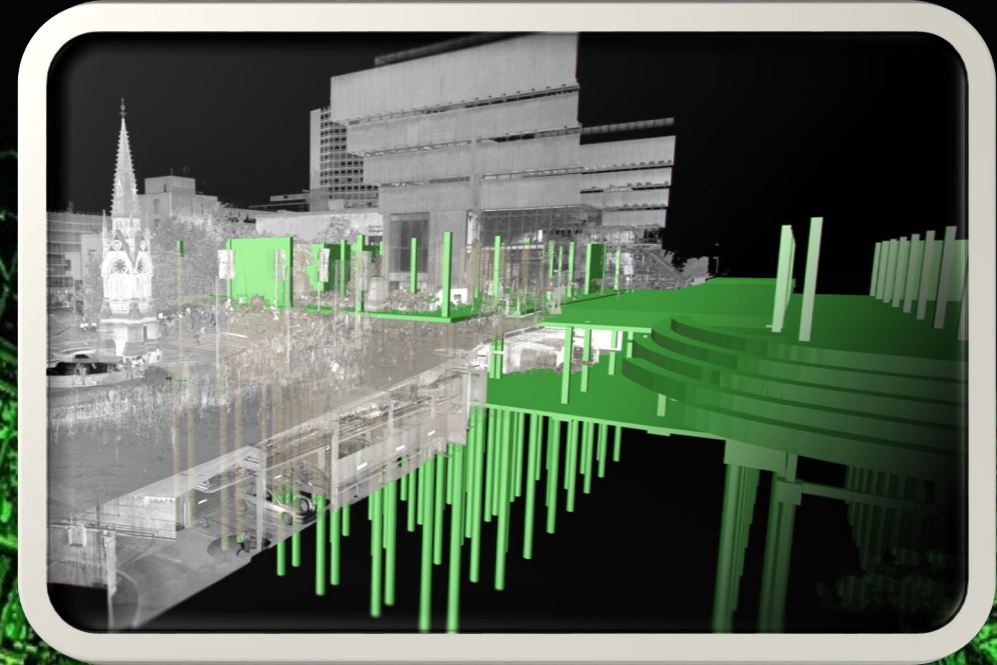
BIM Documents

The BIM document outlines how data will be structured and managed, providing owners and operators with a clear understanding of its flow throughout the project lifecycle.

Our core strengths embody our dedication, experience, and approach to ensuring successful project delivery. We relentlessly strive for excellence, continuously seeking innovative solutions to optimize project execution.

We develop detailed as-built information models that faithfully capture site conditions, ensuring accuracy in design and construction.

Reality Capture- Scan It | Model It | Use It



Visualization

Digital project delivery leverages realistic visualization to enhance decision-making throughout the project lifecycle. BIM provides comprehensive renderings, 4D simulations, and immersive Virtual and Augmented Reality experiences.

Coordination

At the heart of our business is construction project coordination. We collaborate BIM Coordinators with Project Engineers to integrate BIM on-site, ensuring effective coordination, clash detection, and the creation of detailed reports and drawings.

Documentation

Our teams leverage BIM for seamless project coordination, generating drawings directly from the model to reduce variations and cost overruns, ensuring efficient project delivery.

Digital services

Our core services cover all aspects of complex design and construction projects, including modeling, coordination, management, visualization, and documentation. We focus on accuracy and seamless collaboration, ensuring each phase of the project is executed with precision. Through the use of advanced technologies and industry expertise, we optimize workflows, support informed decision-making, and deliver outstanding results for our clients.



BIM Modelers

- 3D and 4D Modelling
- 5D Quantities
- 6D Asset Data
- Rendering Animations
- Virtual Reality
- RFI's Issue Tracking
- Scan to BIM
- Clash Detection

BIM Coordinators

- Coordination
- BIM Engineering
- Design Review & Coordination
- Workshops
- Construction Simulations
- CSD/ISD/CBWD/ ABWF Drawings
- Training and Mentoring

BIM Managers

- BIM Management
- BIM Standards
- BIM Specifications
- BIM Audit and Reporting
- BIM Execution Plans
- Independent Checker BIM Implementation
- Common Data Environment
- Scripting and Programming

75%
Contractors

10%
Design
Consultants

15%
Owners



Vidha-Tek

As a global digital delivery consultant, we empower owners, investors, designers, engineers, and contractors to create world-class digital and physical assets. Our expertise lies in the implementation, development, and management of BIM and Digital Delivery Services. Working closely with your team, we help build, coordinate, and oversee complex models, processes, and workflows in the built environment, ensuring streamlined execution and delivering exceptional results throughout the project lifecycle.

100%
Satisfied

58+

Architects &
Engineers

1200+

Models &
Growing

95+

Projects &
Counting

9+

Countries

Our Process

Buildability is at the core of our approach. Our teams bring valuable on-site experience, working hand-in-hand with contractors, designers, and engineers to ensure projects are both practical and achievable. We rigorously construct, review, and audit models, ensuring every detail is optimized for a smooth and successful project delivery.

We comply with local and international standards, processes, and procedures to effectively share and publish information across all projects and teams in a collaborative environment. This ensures smooth communication both internally and externally. Our team includes ISO-19650 Certified Professional BIM Managers, ensuring the highest levels of excellence in project execution and information management.

1. Review

We meticulously document, store, and evaluate all incoming information before starting the modeling process, ensuring clarity and accuracy at every stage.



2. Plan

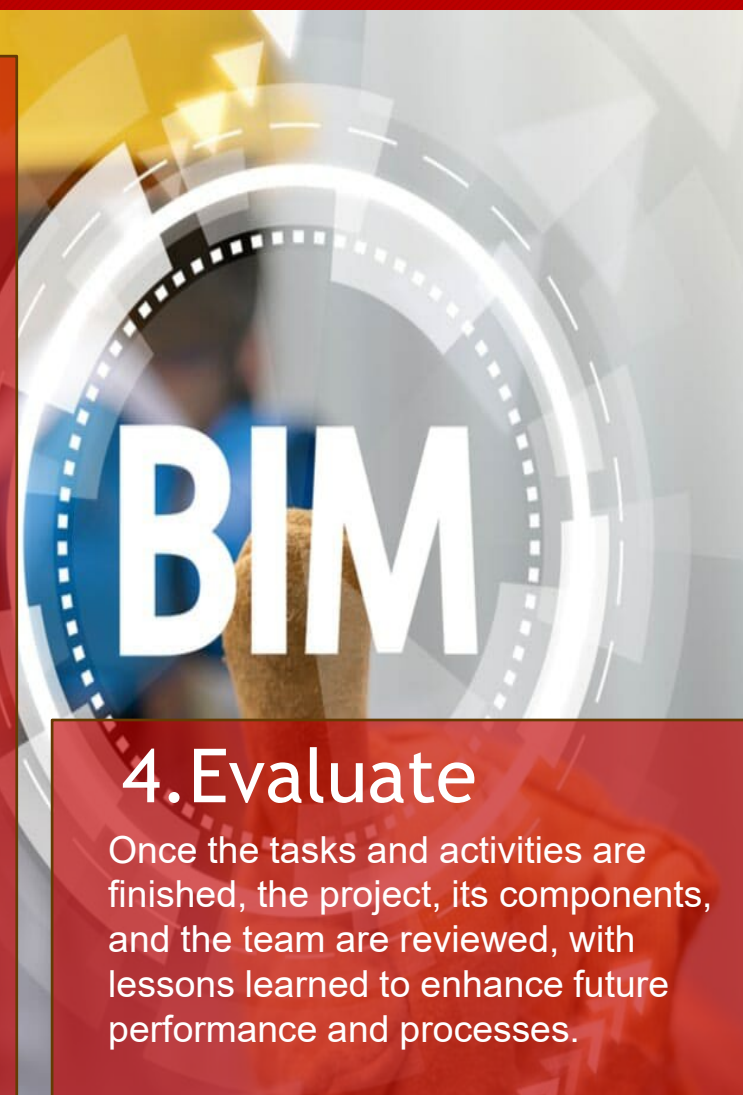
A comprehensive breakdown of activities and tasks is aligned with the model delivery schedule to ensure timely and efficient project execution.

3. Execute

Modeling begins and is periodically paused, checked, and reviewed to ensure alignment with the project plan and maintain accuracy throughout the process.

4. Evaluate

Once the tasks and activities are finished, the project, its components, and the team are reviewed, with lessons learned to enhance future performance and processes.



Banner Health Center

Headquartered in Arizona, Banner Health is one of the largest nonprofit healthcare systems in the country. The system owns and operates 28 acute-care hospitals, Banner Health Network, Banner - University Medicine, academic and employed physician groups, long-term care centers, outpatient surgery centers and an array of other services; including Banner Urgent Care, family clinics, home care and hospice services, pharmacies and a nursing registry. Banner Health is in six states: Arizona, California, Colorado, Nebraska, Nevada, and Wyoming. It is one of the most prestigious hospitals in the US and has left a credible mark in the healthcare operations in the region.

Scope of Work

scope of work for the Banner Health Center, Arizona project primarily included MEP design services in the Electrical trade to build the underground and above-ground electrical conduit, lighting and fire alarm modeling. The job also included creating shop drawings and detail drawings, and clash coordination with other trades.

Project Information

- Area - 69380 sq ft (Approx.)
- Duration - 2 years
- LOD - 400
- Contractor - Specified Electrical Contractors, Inc



Amaala

Project Amaala, located along Saudi Arabia's Red Sea coast, is a high-profile, transformative luxury tourism development designed to become a global hub for wellness, culture, and leisure. The project is set within an ecologically rich and pristine environment, with the aim of offering unparalleled experiences for ultra-luxury travelers. Spanning multiple phases, Amaala will feature a variety of upscale resorts, private villas, branded residences, a world-class marina, and an array of high-end amenities, including art galleries, cultural centers, and wellness facilities. The master plan incorporates sustainable architecture and advanced construction technologies, ensuring minimal environmental impact while maintaining exceptional luxury standards.

The development will be designed to integrate seamlessly with the surrounding natural landscape, using cutting-edge techniques to preserve the region's biodiversity and promote eco-friendly practices. The project is being executed in alignment with Saudi Arabia's Vision 2030, focusing on diversifying the nation's economy by positioning Amaala as a leading destination for international tourism, wellness, and cultural enrichment. As one of the most significant projects in the Red Sea Global initiative, Amaala is set to elevate Saudi Arabia's status as a premier luxury destination and a key player in the global hospitality and tourism industries.

Scope

Vidhatek Engineering was entrusted with the on-site deployment of a skilled team, including BIM Engineers, BIM Coordinators, and 4D & 5D experts, for the successful execution of Project Amaala. Our professionals played a pivotal role in integrating advanced Building Information Modeling (BIM) processes, ensuring seamless coordination and real-time collaboration across various disciplines. By utilizing 4D and 5D BIM techniques, our team contributed to enhanced project visualization, scheduling, and cost management, significantly improving the overall efficiency and accuracy of the construction process. Vidhatek's expertise in BIM deployment supported the project's commitment to innovation, quality, and timely delivery, reinforcing our role as a key partner in the development of this landmark luxury destination.



Project: Six Senses, Saudi Arabia
Location: Red Sea Coast, Saudi Arabia
Client: Red Sea Global

Scope: Luxury Resort Development
Type: Hospitality and Wellness Destination

Project Overview: Six Senses, located along Saudi Arabia's stunning Red Sea coastline, is a prestigious luxury resort that exemplifies the convergence of natural beauty, sustainability, and exceptional service. As part of the larger Red Sea Global development, this eco-conscious resort is designed to provide an exclusive, immersive experience for high-end travelers seeking tranquility, wellness, and adventure in an unspoiled environment.

Key Features:
Sustainability and Eco-Design: The resort is built with an emphasis on environmental sustainability, leveraging cutting-edge green technologies, low-impact construction practices, and renewable energy solutions. The design incorporates local materials and aligns with the principles of preserving the natural ecosystem.

Luxury Accommodations: The resort features a range of bespoke villas, private over-water suites, and premium guest rooms, each offering stunning views of the Red Sea, private pools, and unparalleled privacy.

Wellness and Leisure Facilities: A world-class spa, wellness centers, fitness facilities, and a variety of outdoor activities, including water sports and nature trails, are available to guests. The resort will also offer specialized wellness treatments and holistic health programs.

Cultural and Culinary Experiences: The development includes multiple high-end dining options, showcasing local and international cuisines, along with opportunities for guests to engage with the rich cultural heritage of Saudi Arabia.

Vidhatek Engineering's Role: Vidhatek Engineering was responsible for providing expert BIM deployment on-site, including the deployment of BIM Engineers, BIM Coordinators, and 4D & 5D experts. We played a crucial role in ensuring the integration of Building Information Modeling (BIM) processes, enhancing project coordination and delivering a high level of accuracy in design and construction. Our team supported the implementation of 4D scheduling and 5D cost management, streamlining project timelines, optimizing resource allocation, and improving cost control across the project lifecycle.

Impact and Significance: The Six Senses resort is part of Saudi Arabia's Vision 2030 initiative, which aims to transform the Kingdom into a global tourism hub by promoting sustainable development and diversifying the economy. This project is set to raise the bar for luxury hospitality in the region and further enhance Saudi Arabia's appeal as a premium destination for international travelers.

Program Highlights	
Hotel Keys	100 hotel keys
Branded Residences	25 units
Positioning	Luxury
Architect	U+A
Operator	Six Senses



Six-Senses Triple Bay

Project: Rosewood Resort, Saudi Arabia
Location: Red Sea Coast, Saudi Arabia
Client: Red Sea Global
Scope: Luxury Resort Development

Project Overview:

The Rosewood Resort is a high-end luxury development located along Saudi Arabia’s pristine Red Sea coastline. Designed as a sustainable, world-class destination, the resort combines luxurious accommodations, wellness facilities, and immersive cultural experiences. With an emphasis on sustainability, the resort will offer exclusive villas, a state-of-the-art spa, fine dining, and unique leisure activities that reflect the natural beauty and rich culture of the region.

Vidhatek Engineering’s Role:

Vidhatek Engineering provided key BIM support for the Rosewood Resort project, deploying BIM Engineers, BIM Coordinators, and 4D & 5D experts on-site. Our team facilitated seamless project coordination through advanced BIM technologies, ensuring effective design integration, precise scheduling, and efficient cost management, optimizing the construction process from start to finish.

Impact:

The Rosewood Resort is a vital part of Saudi Arabia’s Vision 2030 initiative, aimed at enhancing the Kingdom’s tourism sector. Through its commitment to luxury and sustainability, the resort will solidify the Red Sea region as a premier destination for global travelers.

Program Highlights	
Hotel Keys	110 hotel keys
Branded Residences	26 units
Positioning	Luxury
Architect	ANTONIO CITTERIO PATRICIA VIEL
Operator	Rosewood



Project: Neom, Saudi Arabia

Location: Northwest Saudi Arabia, Red Sea Coast

Client: Saudi Arabian Government

Scope: Smart City Development

Type: Mixed-Use Urban, Residential, and Commercial Hub

Project Overview:

Neom is an ambitious, transformative project in the northwest of Saudi Arabia, envisioned to be a global leader in innovation, sustainability, and technology. Spanning over 26,500 square kilometers, Neom aims to create a futuristic smart city that integrates cutting-edge technologies, renewable energy, and sustainable urban planning. Designed as a multi-sector hub, the city will feature smart infrastructure, AI-driven systems, and green technologies, offering a mix of residential, commercial, and recreational spaces.

Neom will host various industries, including advanced manufacturing, biotechnology, tourism, and entertainment, and is set to become a magnet for international investment, businesses, and talent.

Vidhatek Engineering's Role:

Vidhatek Engineering is providing essential BIM and digital delivery support for the Neom project, deploying BIM Engineers, Coordinators, and 4D & 5D experts to ensure seamless integration of design, construction, and scheduling. Our expertise in advanced BIM technologies is contributing to efficient project coordination, cost management, and resource optimization.

Impact:

Neom is central to Saudi Arabia's Vision 2030, aimed at driving economic diversification and positioning the Kingdom as a leader in innovation and sustainability. As one of the most advanced urban developments globally, Neom is set to attract international businesses and residents, offering a truly futuristic living environment.



Project: Qatar Metro, Green Line

Location: Doha, Qatar

Client: Qatar Rail

Scope: Metro Line Development

Type: Public Transport Infrastructure

Project Overview:

The Qatar Metro Green Line is a key component of the Doha Metro network, designed to enhance the city's public transportation infrastructure and provide a sustainable, efficient travel solution for residents and visitors. The Green Line spans 13 stations and covers a total length of 13 kilometers, connecting important urban areas, commercial hubs, and residential districts in Doha. This modern metro line is part of Qatar's broader transportation strategy to reduce congestion, improve mobility, and support the nation's rapid urbanization. The Green Line features fully automated, driverless trains and is integrated with state-of-the-art technology for real-time monitoring and passenger convenience. The line is designed to meet international safety and sustainability standards, including energy-efficient systems, smart ticketing, and eco-friendly station designs.

Vidhatek Engineering's Role:

Vidhatek Engineering provided expert BIM deployment and digital delivery services for the Green Line project, supporting the design, construction, and operation phases. Our team contributed by deploying BIM Engineers, Coordinators, and experts in 4D & 5D BIM to ensure seamless integration across various disciplines, optimize scheduling, and manage costs effectively throughout the project lifecycle. This enabled efficient project coordination, clash detection, and the timely delivery of high-quality results.

Impact:

The Green Line of the Qatar Metro is a cornerstone of Doha's efforts to modernize its public transportation system and improve urban mobility. As part of Qatar's National Vision 2030, the metro network will help reduce traffic congestion, promote sustainable development, and enhance the overall quality of life in the city. Vidhatek Engineering's involvement in the project highlights its expertise in delivering complex infrastructure projects with advanced BIM solutions and effective project management.

Qatar Metro Greenline



Project: Hamad International Airport Expansion

Location: Doha, Qatar

Client: Qatar Airways / Hamad International Airport

Scope: Terminal Expansion and Infrastructure Development

Type: Aviation Infrastructure

Project Overview:

The Hamad International Airport Expansion is a significant development aimed at enhancing the airport's capacity to meet growing passenger demand, especially ahead of major global events like the FIFA World Cup 2022. This expansion involves the addition of new terminals, concourses, gates, and state-of-the-art passenger amenities, alongside advanced technologies to streamline airport operations and improve the overall travel experience. The project will feature additional retail and dining options, upgraded baggage handling systems, and modernized facilities designed to accommodate future growth while maintaining exceptional standards of service.

Key Features:

Expansion of Terminal and Facilities: New gates, check-in counters, lounges, and increased passenger capacity to meet growing demand.

Advanced Airport Technologies: Incorporation of biometric systems, automated baggage handling, and efficient security and ticketing processes.

Sustainable Design: Energy-efficient infrastructure, water management systems, and renewable energy solutions to minimize environmental impact.

Enhanced Passenger Experience: Premium dining, luxury lounges, and retail spaces designed for comfort and convenience.

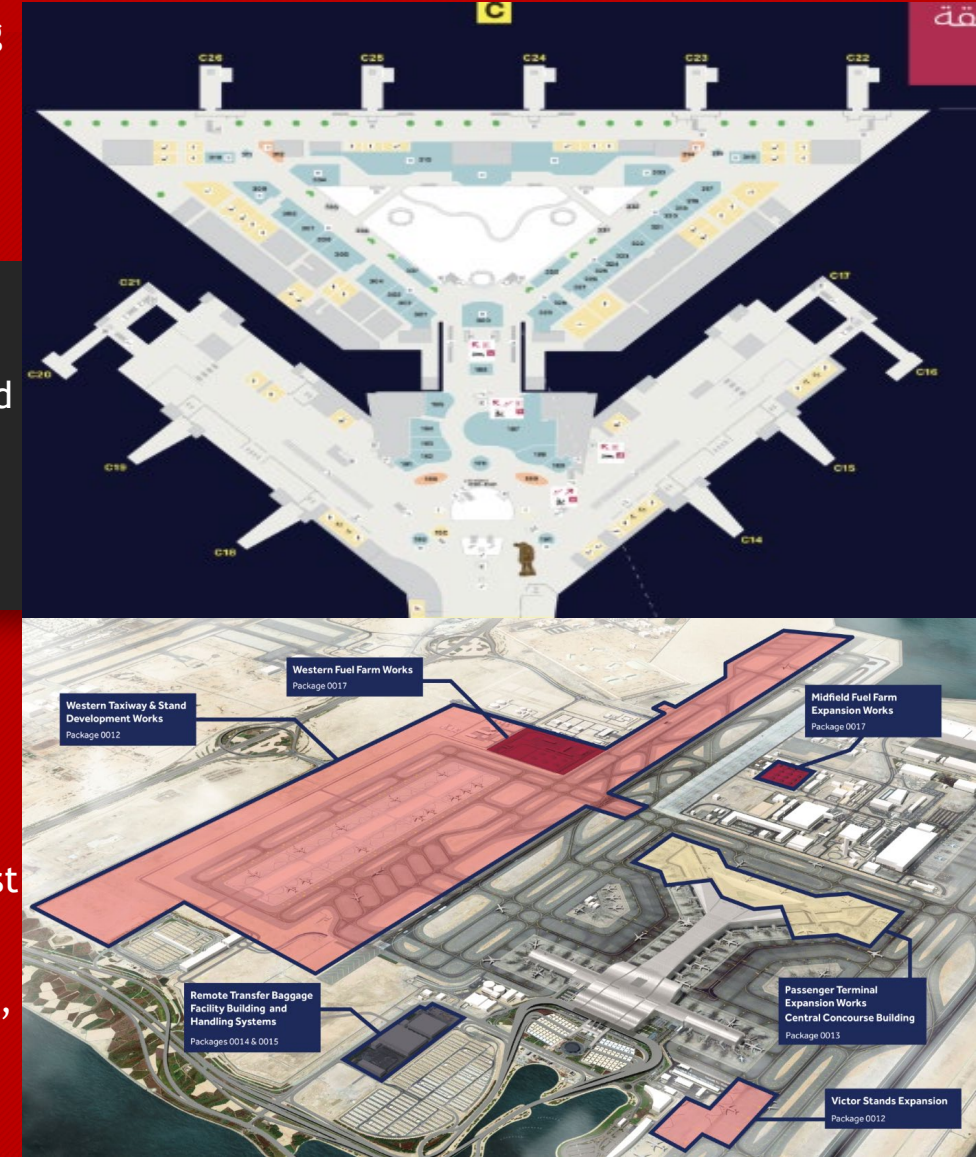
Vidhatek Engineering's Role:

Vidhatek Engineering contributed to the success of the Hamad International Airport Expansion by deploying a **BIM Manager** and **MEP Coordinators** on-site to oversee the integration of MEP systems. Our BIM experts ensured smooth collaboration between design and construction teams, leveraging 4D and 5D BIM technologies for accurate scheduling, cost control, and enhanced project coordination, ensuring efficient execution of the expansion.

Impact:

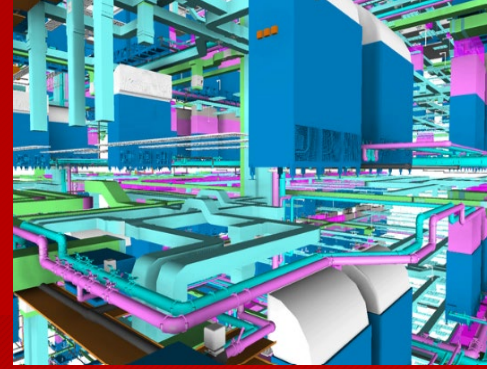
This expansion positions Hamad International Airport as a leading aviation hub in the region, supporting Qatar's Vision 2030 by enhancing its infrastructure, boosting tourism, and improving operational efficiency. Vidhatek Engineering's role in deploying advanced BIM solutions helped ensure the timely and successful delivery of this high-profile project.

Hamad International Airport Expansion



Global Switch Data Centre

Global Switch Singapore Woodlands is centred around state-of-the-art design, from its striking yet welcoming reception, through to the fully equipped technical areas. As with all our data centres, the experience is simply 'world-class'. The project was delivered with a high-level of modular components including Facade, Slabs, Walls and MEP Modules for the raised floor and overhead systems.



Scope of Work

Global Switch Singapore
Contractor BIM Management
As-Built Documentation Room-by-Room
Asset Data Integration and Compliance
Checks
BIM Modelling and Coordination
Site walks to verify as-builts and asset data
match site with BIM

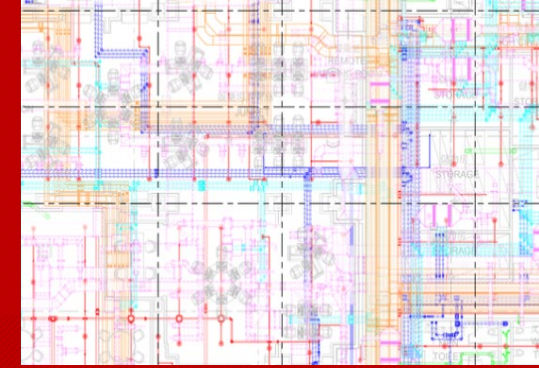
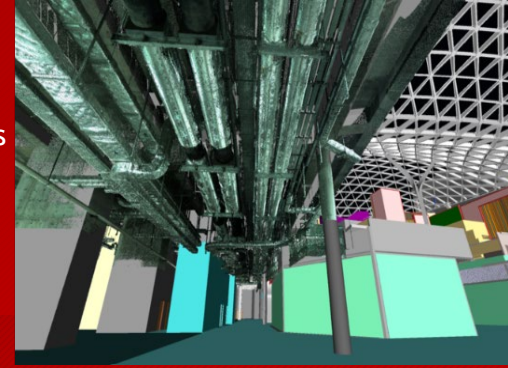
Project Information

- Area - 25,157 sqm
- Duration - 9 Months
- LOD - 500
- Client - Global Switch
- Contractor - Gammon Construction



MGM Cotai

Designed with a facade that glitters over Cotai Strip, MGM Cotai is one of Macau's icons of innovation and is known as the "Jewellery Box" of Cotai. **MGM Cotai** is a casino resort in Cotai, Macau, China that opened on 13 February 2018, Owned by MGM Resorts International, MGM Cotai is its second property in Macau, the first being the MGM Macau. The hotel consists of 1,390 rooms and suites, a 2000-seat MGM Theatre, a casino, meeting spaces, and a retail promenade. It also features the world's largest art garden, Nature's Art, which houses over 100,000 plants and more than 2,000 plant species.



Scope of Work

Virtual Design and Construction Services

MEP BIM Modelling of Basements, Podium, Theatre and Mansion zones.

Structural Modelling of the entire facility.

Architectural Modelling of the Basements, Podium, Theatre, Tower Facade, Key Room Types.

Laser Scanning of critical zones within the facility for coordination.

Combined Service Drawing (CSD) and Individual Service Drawings (ISD)

Virtual Reality Mock-ups and Animated Videos

Project Information

- Area - 400,000 sqm
- Duration - 2 years
- LOD - 300 to 500
- Client - MGM Cotai
- Contractor - China State Construction



Banner Health Center

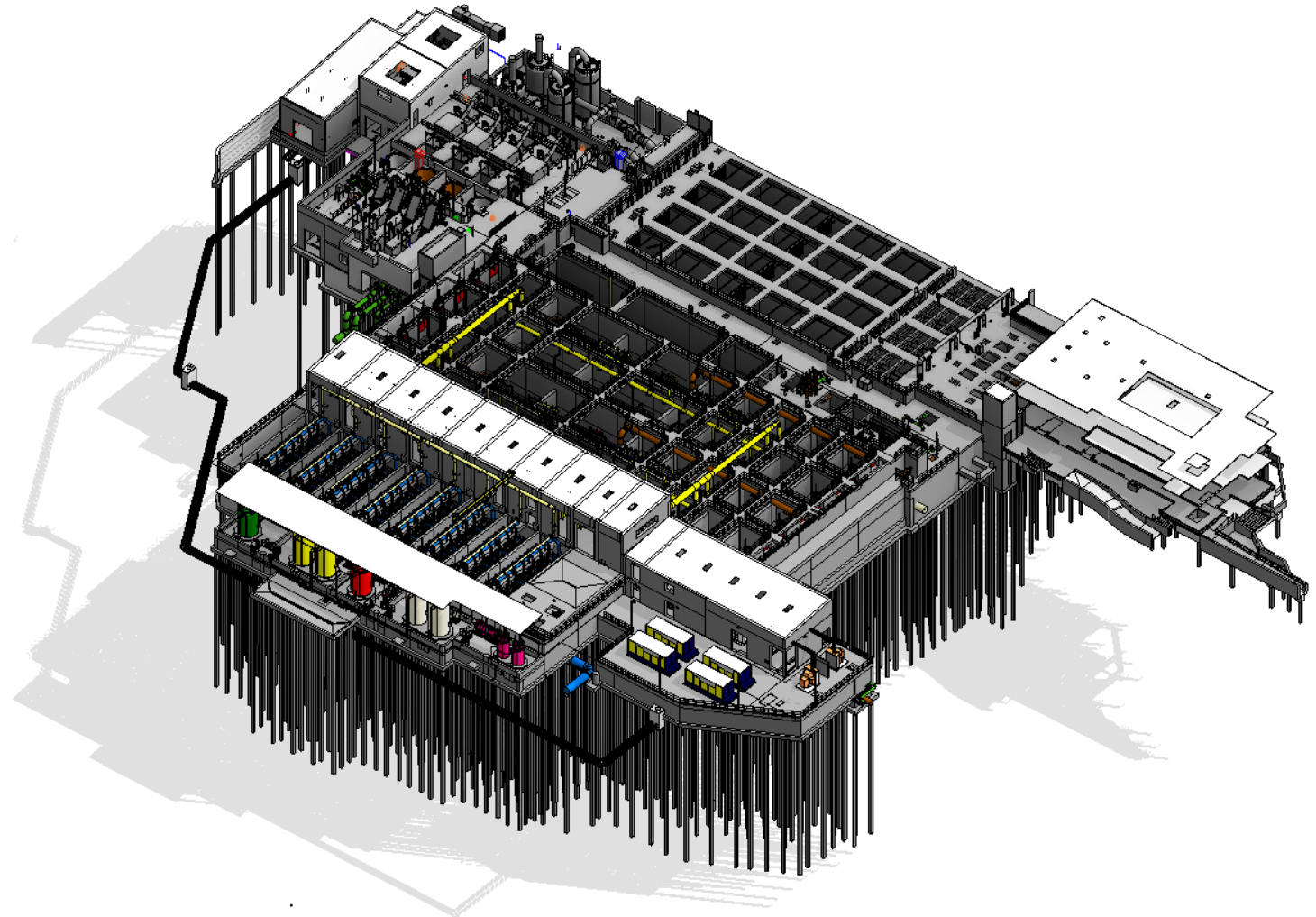
The Wastewater Treatment Plant of 400,706 sq. ft. included eight buildings, and each had different chambering sections. This project was an upgrade and expansion of the wastewater treatment plant located in San Mateo, California. The project's objective was to protect public health and the environment by providing high-quality wastewater treatment services effectively and efficiently. The Wastewater Treatment Plant is managed by the City of San Mateo's Public Works Department. Our team was tasked to work on crafting detailed 3D models and extracting element quantities using a client-provided macro-enabled spreadsheet. The project scope was subsequently expanded to involve the integration of summarized information, seamlessly embedded with corresponding element counts. The client later engaged us for lift drawings concerning eight buildings, involving precise water-stop calculations and penetration drawings.

Scope of Work

Vidhatek was responsible for creating 3D Models and extracting quantities of the elements in a client-provided macro-enabled spreadsheet. Our scope of work was later enhanced to include Summarized and embedded information with the count. Clash Co-ordination model between Structure and MEP trade. Detailed clash report preparation in MS Excel format as the client was not used to referring to Navisworks viewpoints. The project was in a rush, so the client was not accepting questions and RFIs. To cater to this situation, we provided a detailed Assumption log in MS Excel format. Later, Kiewit approached us for lift drawings for eight buildings with accurate water-stop calculation and penetration drawings.

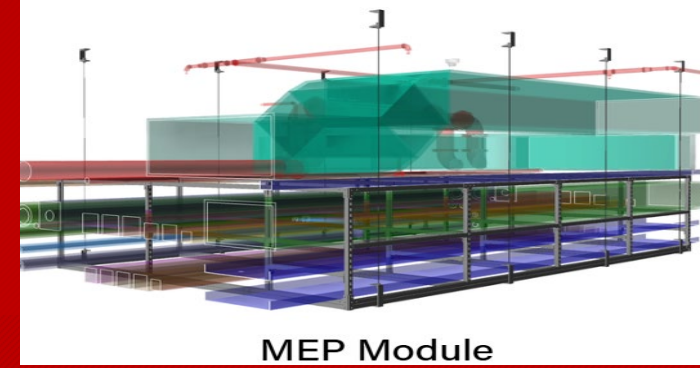
Project Information

- Area - 400,706 Sq Ft (Approx.)
- Duration - 2 years
- LOD - 450
- Contractor - Webcor Concrete & Kiewit Infrastructure



Advance Manufacturing Centre

The AMC equips companies of different scales with scalable, efficient, and dedicated logistics serviced manufacturing space, and assists them in embarking on technological innovation, high value-added and low volume but highly customised production with the application of advanced manufacturing and testing processes. The AMC also provides comprehensive services for logistics, warehousing, prototyping, low-volume assembly and cleanroom-enabled space.



Scope of Work

Virtual Design and Construction Services

Digital Project Strategy Advisory and Consulting
MEPF Modelling and Coordination
Modular and Pre-Fabricated Component development and coordination.
Modular MEP and DfMA fabrication drawings

Project Information

- Area - 1,000,000 SQFT
- Duration - 12 Months
- LOD - 500
- Client - Hong Kong Science and Technology Parks (HKSTP)



Integrated Waste Management Facility

The IWMF will be developed in phases. The IWMF Phase 1 will have a treatment capacity of 3,000 tonnes each day. It will adopt advanced incineration as the core treatment technology as well as a demonstration-scale mechanical sorting and recycling facility for the recovery of useful resources from the mixed MSW.

Scope of Work

Virtual Design and Construction Services

Joint-Venture BIM Manager and BIM Consultant
Multi-Disciplinary BIM Coordination and Model Federation

Project BIM Execution Plan

Digital Project Strategy Advisory and Consulting

MEPF Modelling and Coordination

Combined and Individual Service Drawing Production

Project Information

- Area - 16 Hectares
- Duration - 5 yrs.
- LOD - 500
- Client - Environmental Protection Department of the HKSAR
- Contractor - Keppel Seghers - Zhen Hua JV
- Project Cost - HKD 31 billion



Dubai Festival City

The Dubai Festival City is a 1300 acre, premier waterfront urban community. It is an Al-Futtaim Group Real Estate development project covering 5.2 million Sq. m. and stretching up to 3 km along the historic Dubai Creek. It comprises three distinct districts and is connected by a 30 km internal road network and creekside promenade. Upon completion, the community will house 50,000 residents living in 20,000 villas and apartments.

Scope of Work

Virtual Design and Construction Services

Joint-Venture BIM Manager and BIM Consultant
Multi-Disciplinary BIM Coordination and Model Federation

Project BIM Execution Plan

Digital Project Strategy Advisory and Consulting

MEPF Modelling and Coordination

Combined and Individual Service Drawing Production

Project Information

•Area - 5.2 million Sq. m

Client - HOK

Contractor - Al-Futtaim Carillion

•Project Cost - HKD 31 billion



Waste Management Facility

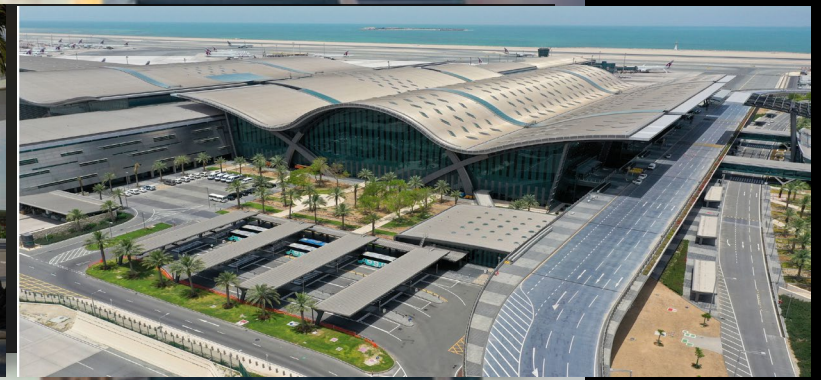
This design-build-operate facility represents a groundbreaking project, being the first of its kind to be constructed in Hong Kong. Set on 16 hectares of reclaimed land, the facility will utilize advanced waste-to-energy technologies to convert waste materials into energy and by-products. We are providing expert BIM Management services to the joint venture, overseeing the digital implementation and lifecycle management of the project. Our role includes the integration of BIM processes for efficient project coordination, ensuring precision and optimization throughout all stages of development.



Health Centre

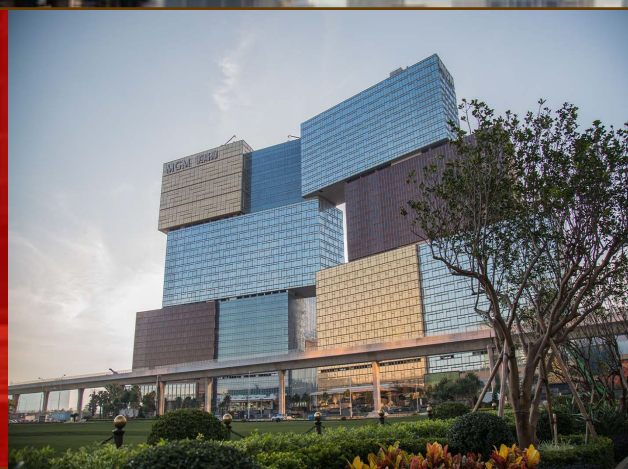
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Profile Work Across Teams



Commercial High-Rise

Vidha-Tek has been actively involved in the design and tender phases of BIM development for an office tower project in Hong Kong. Drawing on our contractor expertise, we have engaged with multiple sub-contractors to advance the coordination and optimization of the various BIM models, ensuring precise integration for installation and the generation of detailed shop drawings.



Metros & Airports

Vidha-Tek has played a pivotal role in the design and tender phases of BIM development for large-scale metro and airport infrastructure projects in Qatar. Drawing on our extensive contractor expertise, we have collaborated closely with a wide range of sub-contractors to enhance the coordination and refinement of multiple BIM models. Our team has focused on ensuring the precise integration of complex systems, such as structural, MEP (Mechanical, Electrical, and Plumbing), and architectural elements. This comprehensive approach has enabled the efficient development of installation-ready models, as well as the preparation of detailed and accurate shop drawings to facilitate seamless execution on-site.

Aviation BIM

We provide skilled aviation industry BIM modellers, coordinators and managers to develop mega projects such as Terminals, Hangers, Runways, Automated People Movers, Baggage Handling Systems, Tunnels and Viaducts.



Data Center

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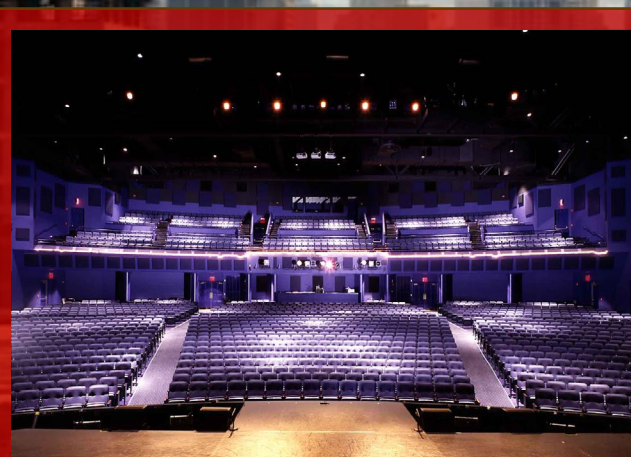
The project was delivered with a high-level of modular components including Facade, Slabs, Walls and MEP Modules for the raised floor and overhead systems.

Profile
Work
Across
Teams



Theatre BIM

VidhaTek are servicing three theatre and performance hall projects throughout Hong Kong and USA. We specialize in the digital delivery and BIM management services for MEP coordination, specialized theatre equipment and architectural fit-out



Heritage BIM | Oil & Gas

Our first Heritage Information Modelling project, the Green Island Lighthouse Compound is an exemplary use of Laser Scanning, Drone Photogrammetry, BIM and Asset Data collection and storage. Each element is highly detailed and hosting data about the object and its historical significance.

BIM Content Creation

- ARC/STR/MEP families
- Food Service equipments
- Materials & Texture
- Templates
- Fixtures & Details



BIM Consulting & Manpower

- BIM Managers and Coordinators
- BIM Modellers and Engineers
- BIM Developers



Profile Work Across Teams



3 D, 4D, 5D and 6D BIM Services

- Site logistics
- Construction Simulation
- MiC Construction
- 4 D Programmes
- Method Statements

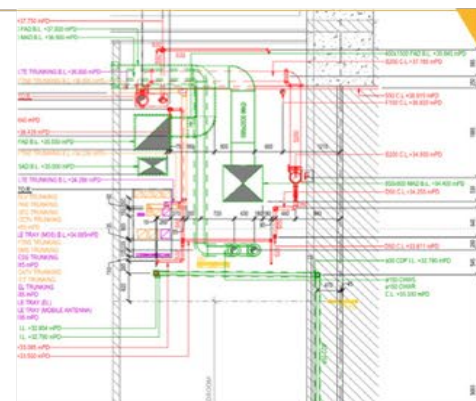


Immersive Experiences

- 360 Renderings
- Virtual Reality & Augmented Reality
- Mixed Reality
- Interactive Experiences

Drawing & Documentation

- Combined and Individual Service
- Architectural Builders Work and Finishes
- Combined Builders Work
- Sections, Elevations and Details



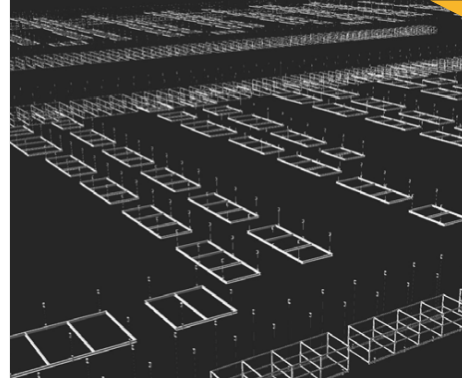
Scan to BIM

- Laser Scanning
- 3 D Model from Scan
- Integrate Asset Data
- As-Built Records



Digital Twins

- Asset Data Entry
- Scan to BIM
- Cloud Based Intelligent Model

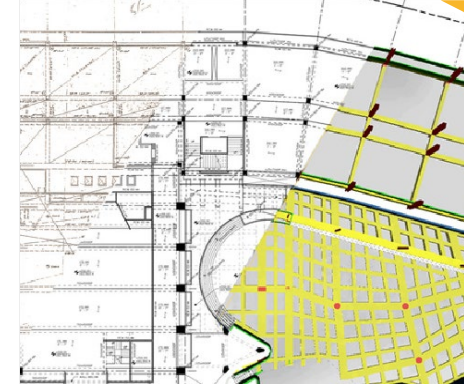


Construction Industrialization

- Design for Manufacture & Assembly
- Modular Integrated construction
- Pre Fabrication

Rendering & Animation

- Exterior Renderings
- Interior Renderings
- 3 D Floor Plans
- Product Visualization



2 D to 3D Conversion

- Large Volume Batch Processing
- Automated CAD to 3D BIM Production
- Digitization of Hand Drawn Drawings

Training

- Bespoke Training Modules
- Project-Based Training
- Modelling Softwares
- Coordination Softwares



Outsource Modelling

- Remote Modelling Teams
- Coordination On/Off-Site
- Quality Assurance and Check
- Software Licenses

Profile
**Work
Across
Teams**



The Team

While successful projects are the result of skilled professionals, truly outstanding projects are delivered by Vidhatek Engineering.



Our teams are proficient in the specification, planning, coordination, and execution of BIM processes and workflows across diverse projects. We offer comprehensive expertise, technical proficiency, and dedicated support to empower project teams in maximizing the benefits of BIM, driving efficiency, reducing costs, and enhancing project outcomes. Through strategic implementation, we help optimize workflows and ensure that BIM is effectively utilized throughout the project lifecycle, from conception to delivery.

Vidhatek Engineering

Vidhatek Engineering is a distinguished global digital delivery firm, providing expert support to developers, designers, builders, and operators in the construction of world-class assets. Since its establishment, the firm has successfully managed the coordination of over 11 million square feet of construction projects, demonstrating a proven track record of excellence and innovation in the industry.



The Team

While successful projects are the result of skilled professionals, truly outstanding projects are delivered by Vidhatek Engineering.



Ramya Sudha, the Managing Director and Founder of Vidhatek Engineering, is the driving force behind the company's remarkable success and global expansion. With a visionary leadership style and unwavering commitment to excellence, she has steered the company to new heights, establishing Vidhatek as a recognized leader in digital delivery for the design and construction industry. Under her guidance, Vidhatek has expanded its reach worldwide, consistently delivering innovative solutions and building lasting relationships with clients across diverse markets. Her expertise, passion, and strategic foresight continue to shape the company's growth and future success.

Ramya Sudha
Founder & CEO

A Digital Company's Greatest Assets

The greatest assets of a digital company lie in its people, expertise, and access to critical information. Vidhatek Engineering stands as a leader in digital delivery, offering a vertically integrated supply chain of support services tailored to the design and construction industry. We specialize in delivering high-quality models and data that are optimized for both on-site application and operational use.

Global Reach

With teams strategically located in India, we deliver faster and more efficient solutions for your global operations than our competitors. Our commitment to flexibility, innovation, and expertise consistently exceeds client expectations, fostering long-term relationships and ensuring repeat business for future projects.

Inclusive, not exclusive

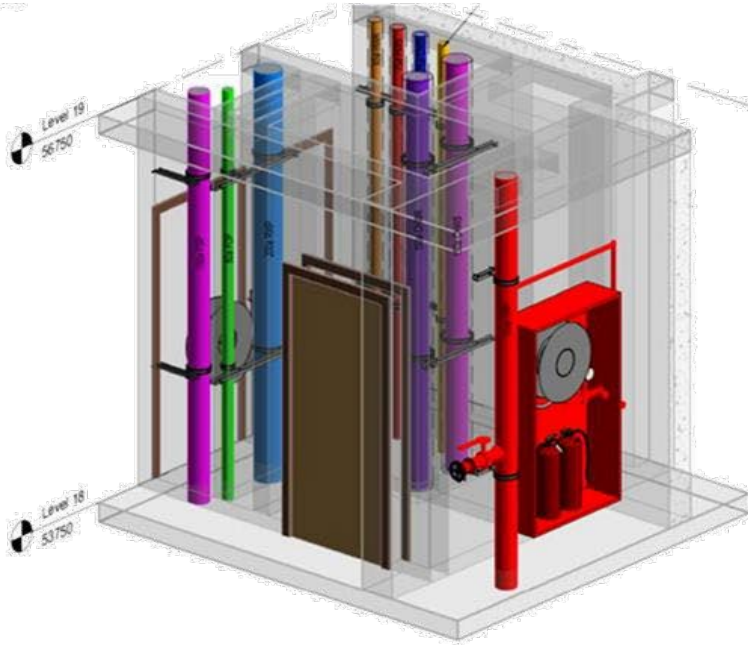
Our teams are built on diversity and collaboration, and we believe your project will benefit from this synergy. With our industry expertise and technical proficiency, we seamlessly complement your team, transforming your project into one of your greatest assets. With a robust portfolio of successful projects and fluency in English, Hindi, Telugu, and Bengali, we offer a comprehensive, adaptable approach to meet your unique needs.

Work samples

Samples

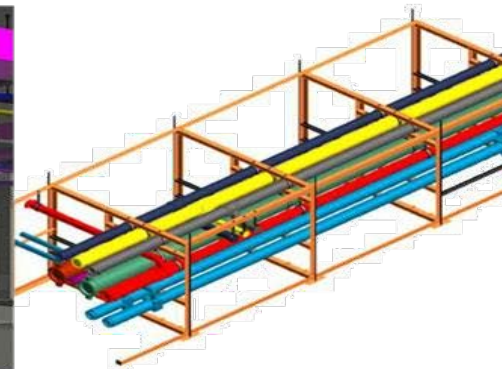
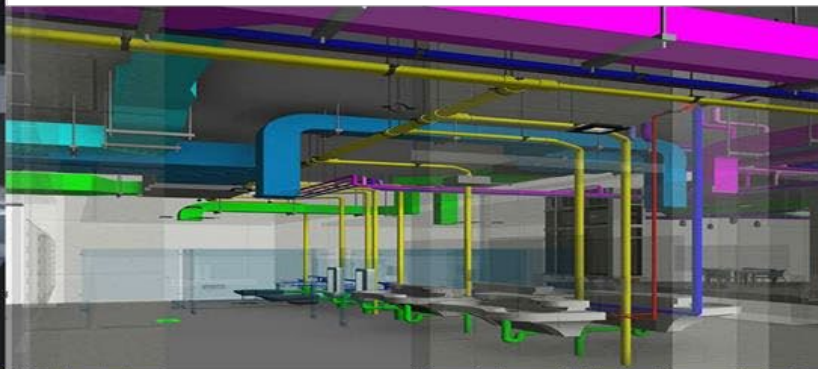
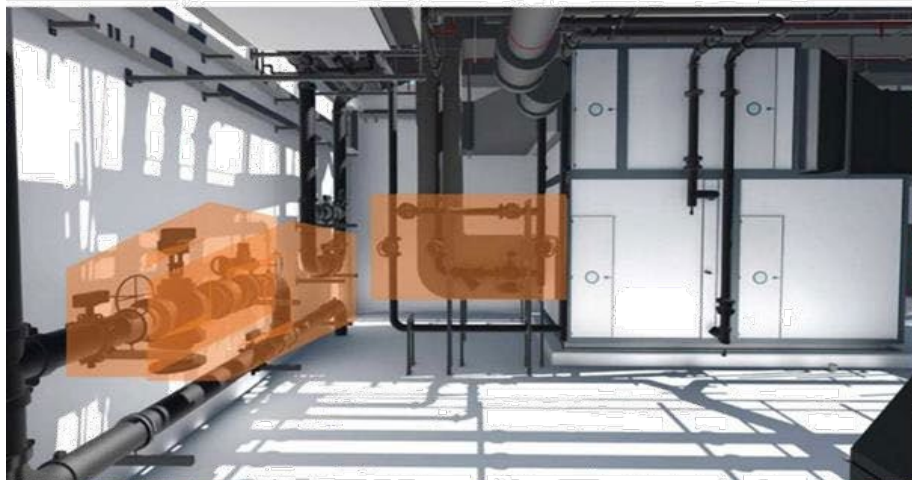


Space Management and Safety check



Space management is a process in which BIM is utilized to effectively distribute, manage, and track appropriate spaces and related resources within a facility. A facility building information model allows the facility management team to analyse the existing use of the space and effectively apply transition planning management towards any applicable changes. Such applications are useful during a project's renovation where building segments are to remain occupied and new services need to run for existing facility or for new facility. Space Management and Tracking ensures the appropriate allocation of spatial resources throughout the life of the facility. This use benefits from the utilization of the record model.

Model Safety Check is a process in which BIM is utilized to effectively distribute, manage appropriate accessibility within a facility. Such applications are useful during Maintenance or operations. It ensures the appropriate accessibility for resources throughout the life of the facility.



Quantity Extraction

<Window Schedule>				
A	B	C	D	E
Type Mark	Count	Family	Width	Height
Assembly 1				
1	1	MULLED WINDOW	6' - 0"	5' - 0"
	1	CASEMENT	2' - 0"	5' - 0"
	1	FIXED	4' - 0"	5' - 0"
Assembly 2				
2	1	MULLED WINDOW	6' - 0"	5' - 0"
	2	CASEMENT	2' - 0"	5' - 0"
	1	FIXED	2' - 0"	5' - 0"
Window				
3	1	CASEMENT	3' - 0"	5' - 0"
4	1	FIXED	3' - 0"	4' - 0"

Bill of Materials (BOQ) involves extracting quantity and material information directly from the Revit model. While Revit is primarily a Building Information Modeling (BIM) software for designing buildings and structures, it does offer functionalities that can be leveraged to generate BOQs.

TWO FACTOR IMPACT QUANTITY EXTRACTION

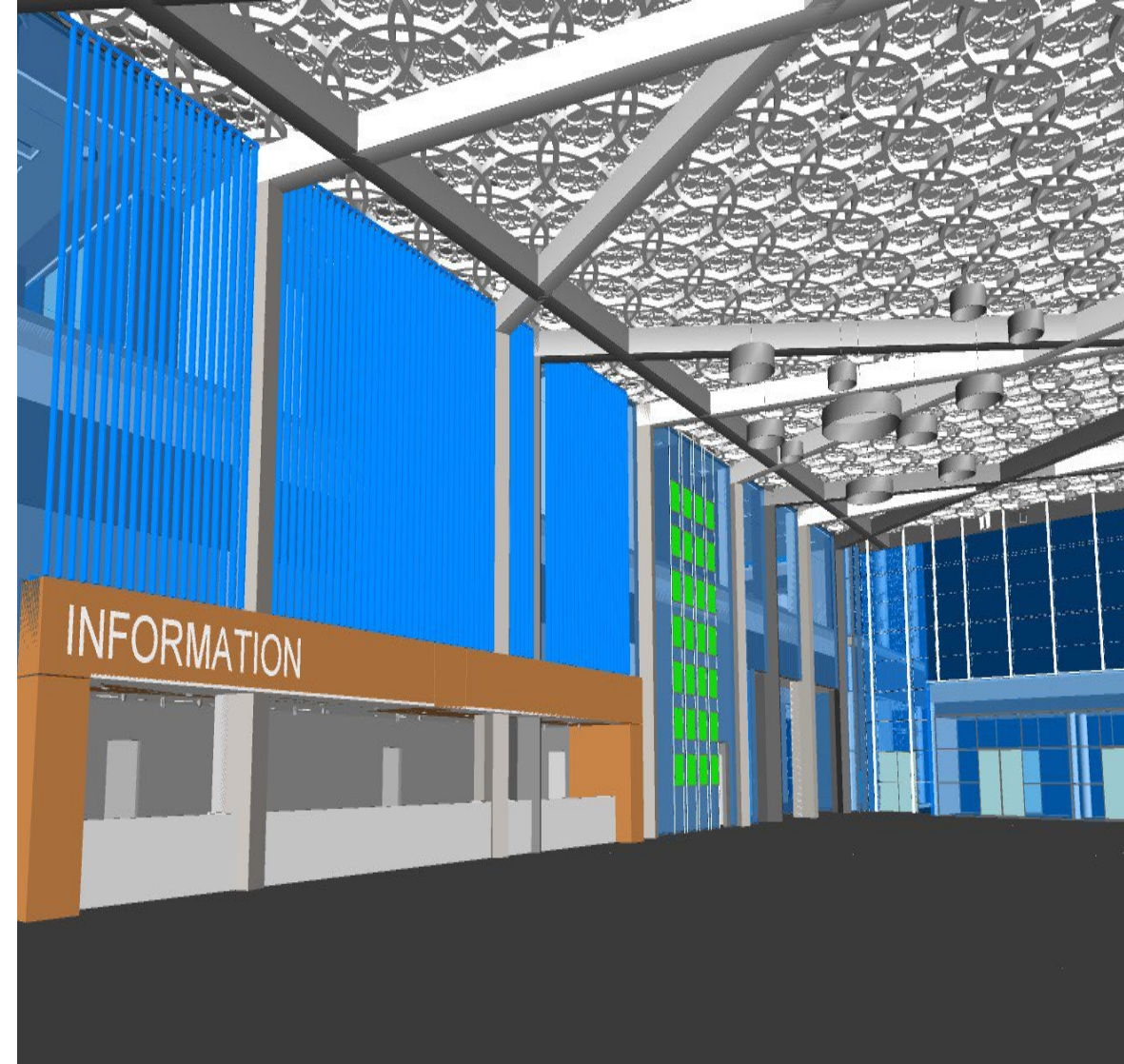
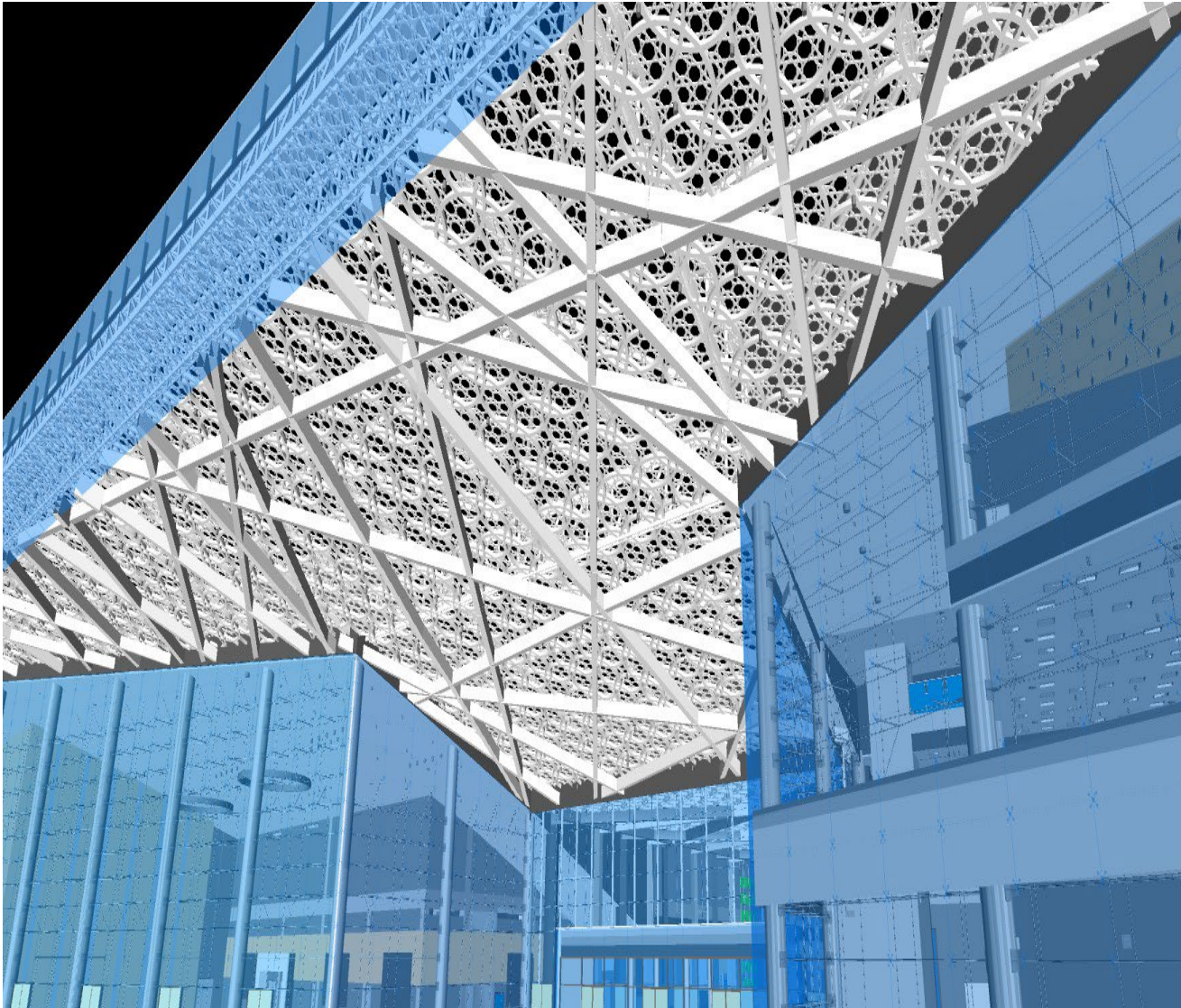
1. Modeling with Detail
2. Parameterization

Light Fixture Space Schedule					
Number	Name				
Type	Wattage	Lamp	Electrical Data	Panel	Circuit Number
101	Lobby				
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	4	120 V/1-96 VA	LP-1	15
2x4 - 120	96 W	2	120 V/1-96 VA- 120 V/1-32 VA	LP-1	15
2x4 - 120	96 W	2	120 V/1-96 VA- 120 V/1-32 VA	LP-1	15
2x4 - 120	96 W	2	120 V/1-96 VA- 120 V/1-32 VA	LP-1	15

<Air Terminal Schedule>					
A	B	C	D	E	F
DESIGNATION	FLOW CALCULATIONS			BASIS OF DESIGN	
	MIN	ACTUAL	MAX	MANUFACTURER	MODEL
SD1	0 CFM	125 CFM	150 CFM	TTUS	LX1000
SD1	0 CFM	125 CFM	150 CFM	TTUS	LX1000
SD1	0 CFM	125 CFM	150 CFM	TTUS	LX1000
SD1	0 CFM	125 CFM	150 CFM	TTUS	LX1000
SD2	150 CFM	170 CFM	250 CFM	TTUS	LX1000
SD2	150 CFM	170 CFM	250 CFM	TTUS	LX1000
SD2	150 CFM	170 CFM	250 CFM	TTUS	LX1000
SD3	250 CFM	300 CFM	350 CFM	TTUS	DX50
SD4	350 CFM	450 CFM	500 CFM	TTUS	DX50
SD4	350 CFM	450 CFM	500 CFM	TTUS	DX50

BEAM SCHEDULE			
MARK	SIZE	BEAM DEPTH	TOTAL No
B4	PFC200x90x30	200	1
B5	RHS100x50x6.3	100.0	1
B7	UB203x102x23	203.2	23
B8	UB203x133x25	203.2	611
B9	UB203x133x30	206.8	32
B10	UB254x146x31	251.4	38
B11	UB254x146x37	256.0	4
B12	UB254x146x43	259.6	1
B13	UB305x127x37	304.4	1
B14	UB305x165x40	303.4	12

Steel Structure



AHU Mechanical Room

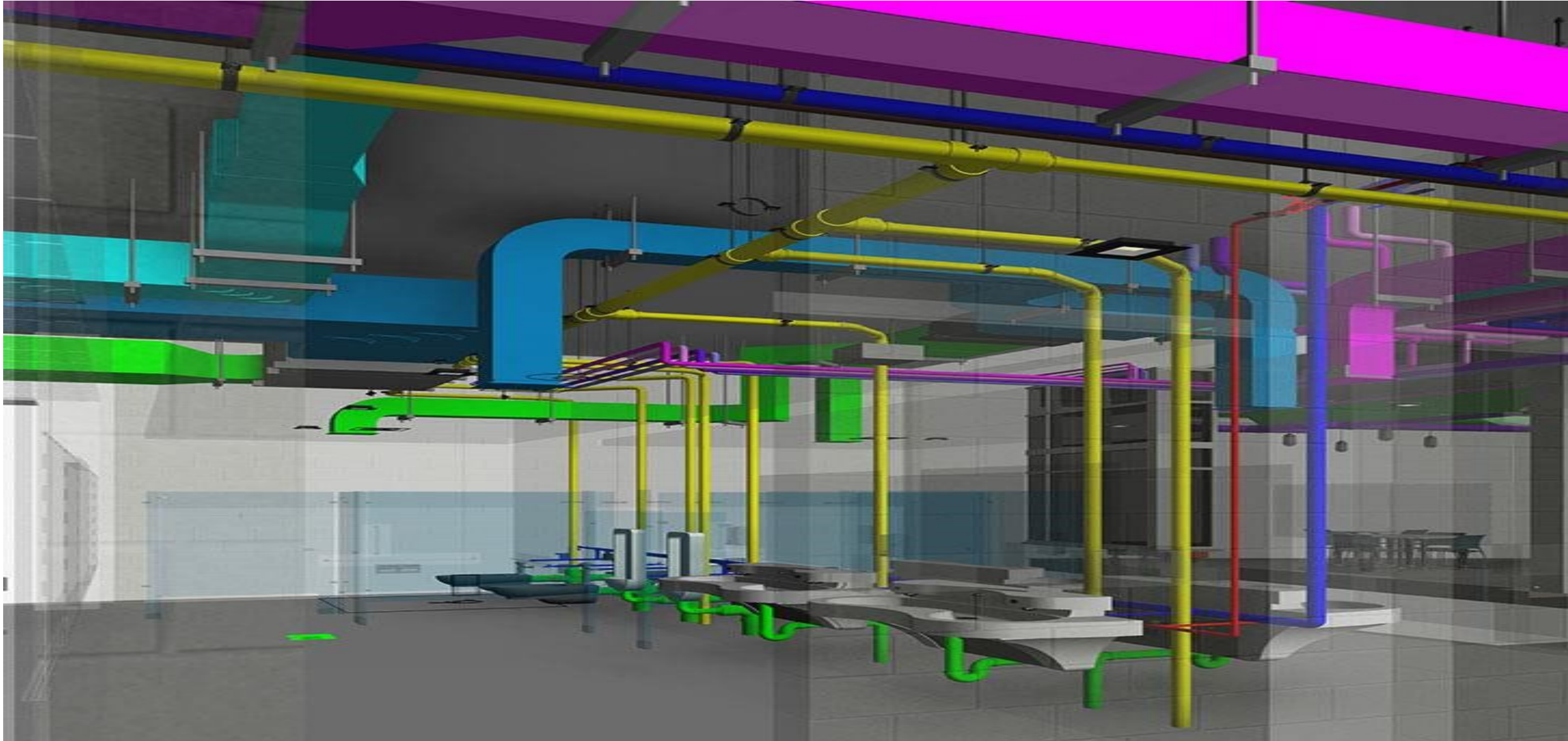


ALL VALVES & ACCESSORIES ARE MODELED AS PER GA

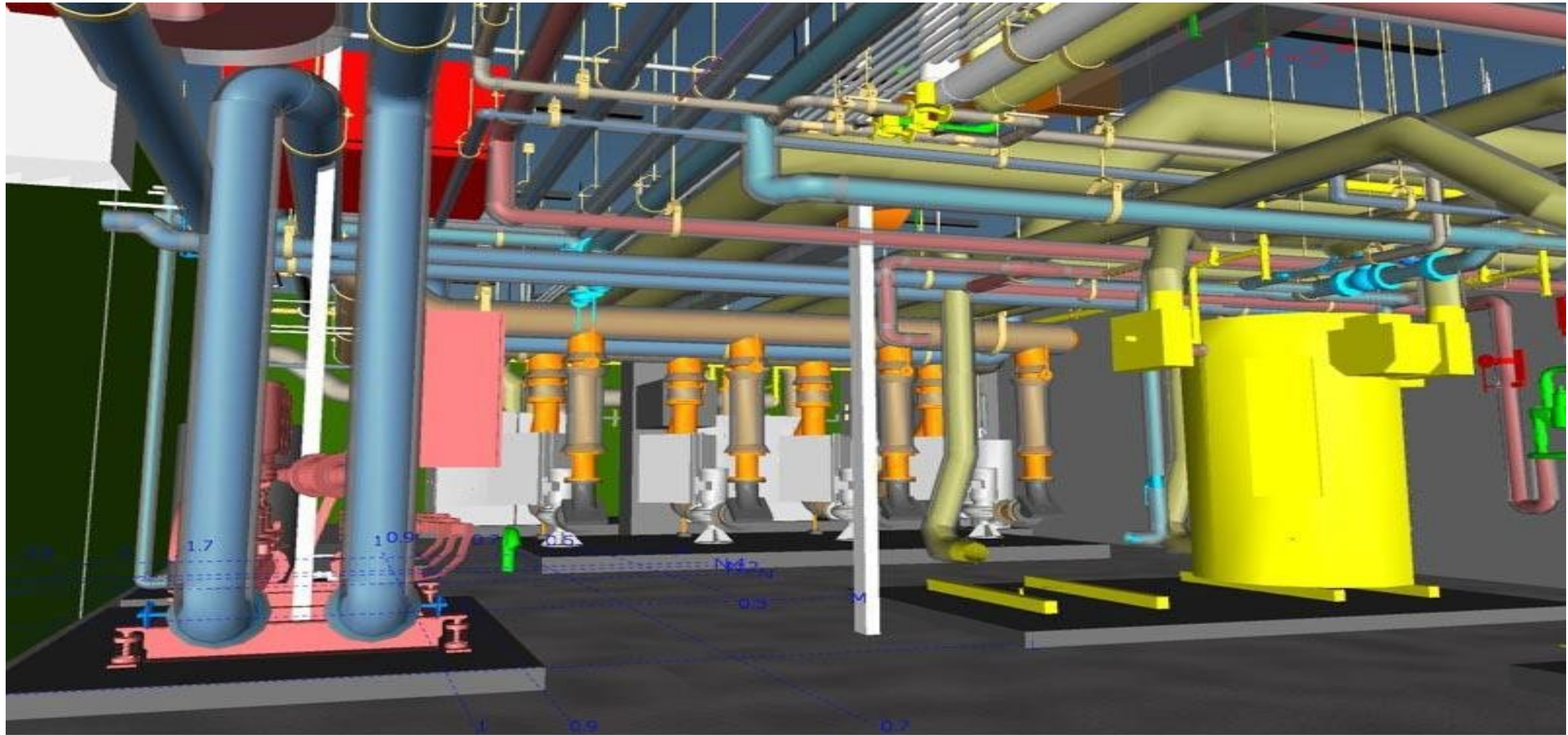
ALL SUPPORT MADE AS PER SPECIFICATION

ELEMENTS CREATED IN REVIT & RENDERED IN THIRDPARTY SOFTWARE AS PER REQUIREMENT

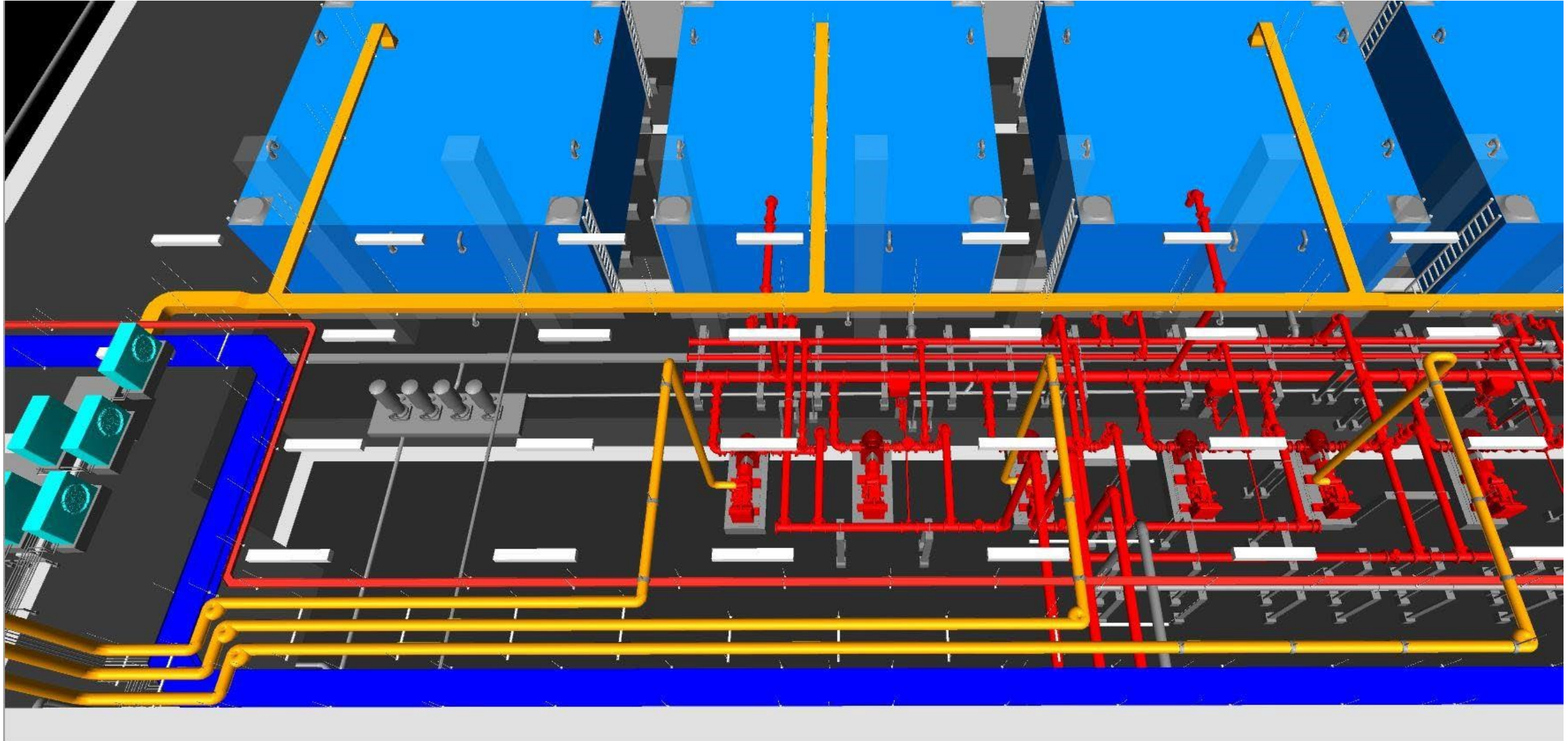
MEP Services



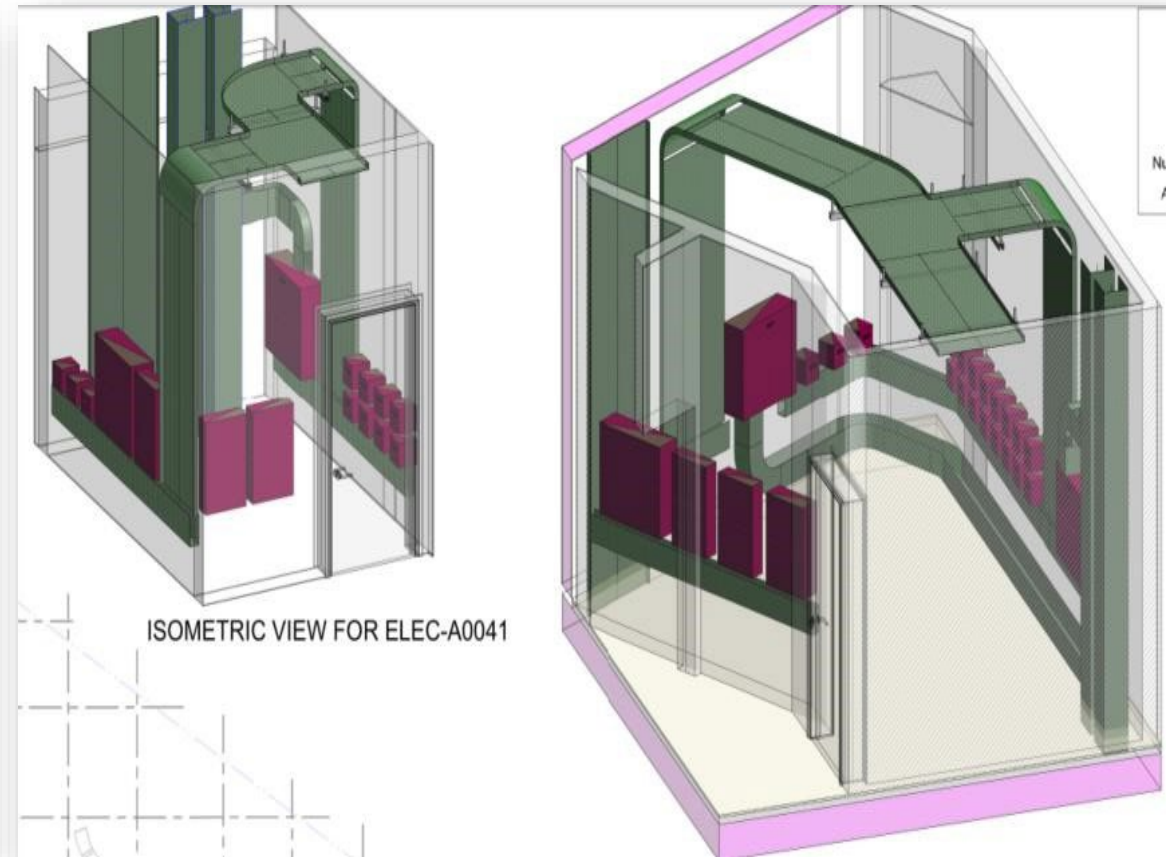
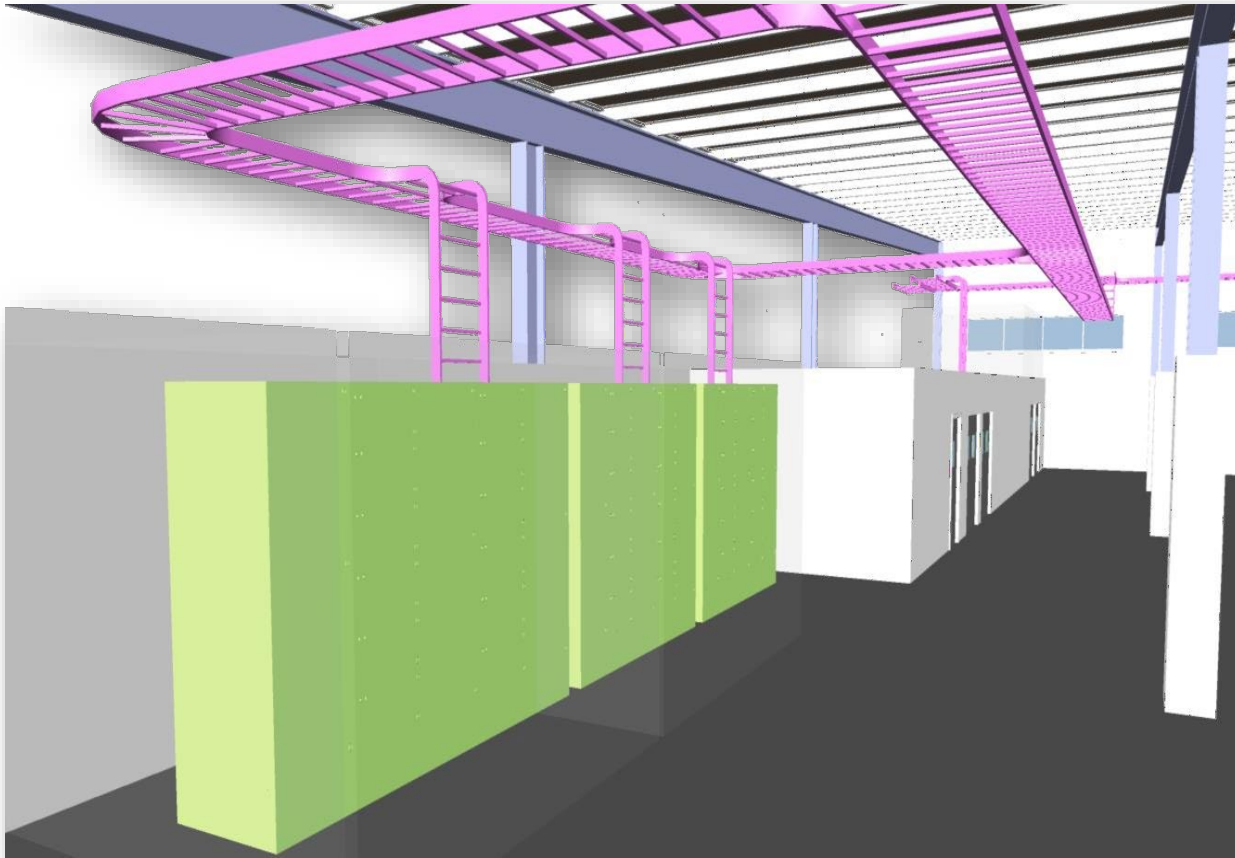
Plant Room



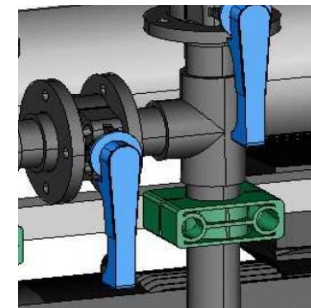
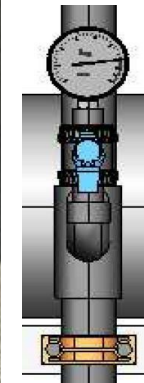
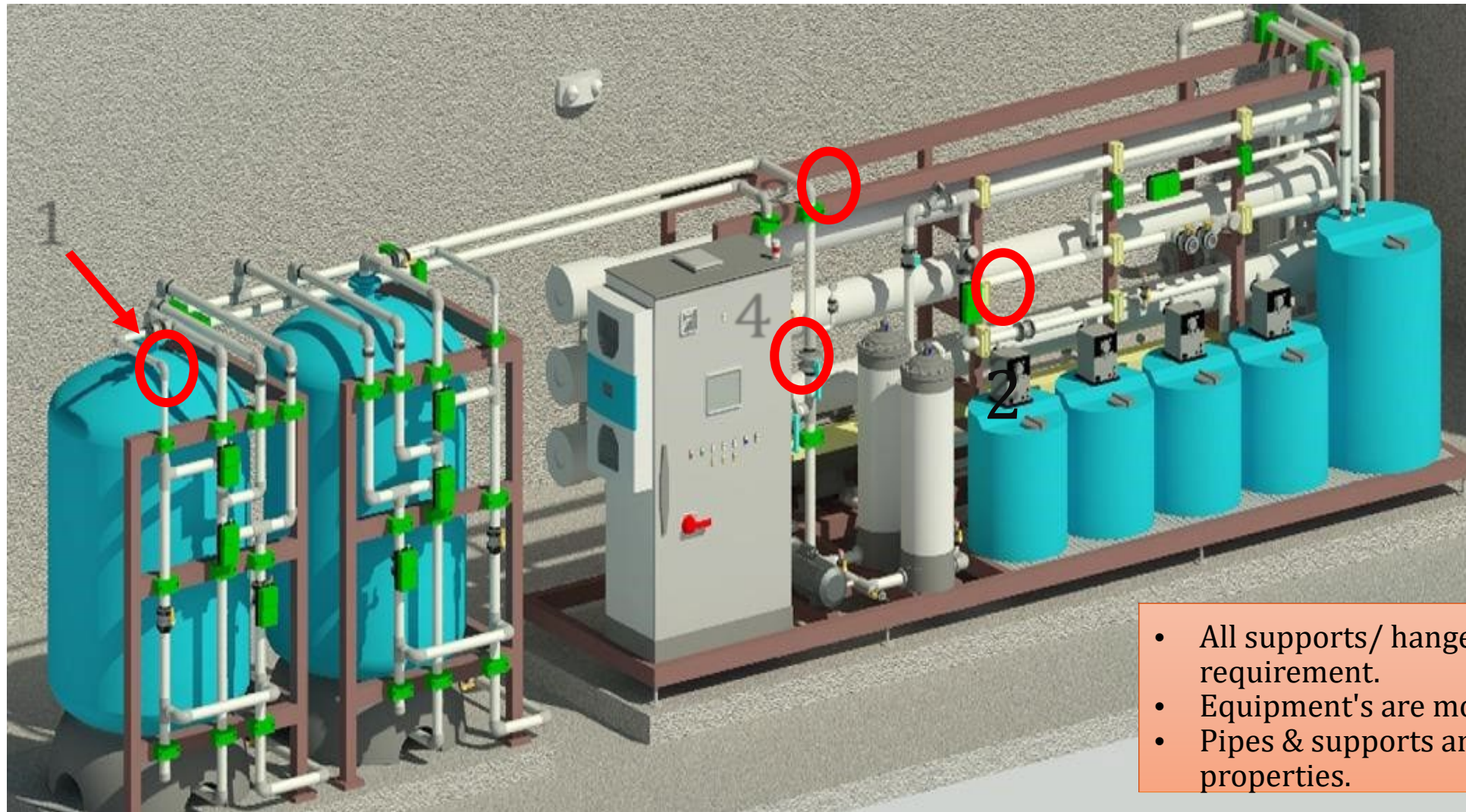
Fire & Irrigation Pump Room



Electrical Cable Tray

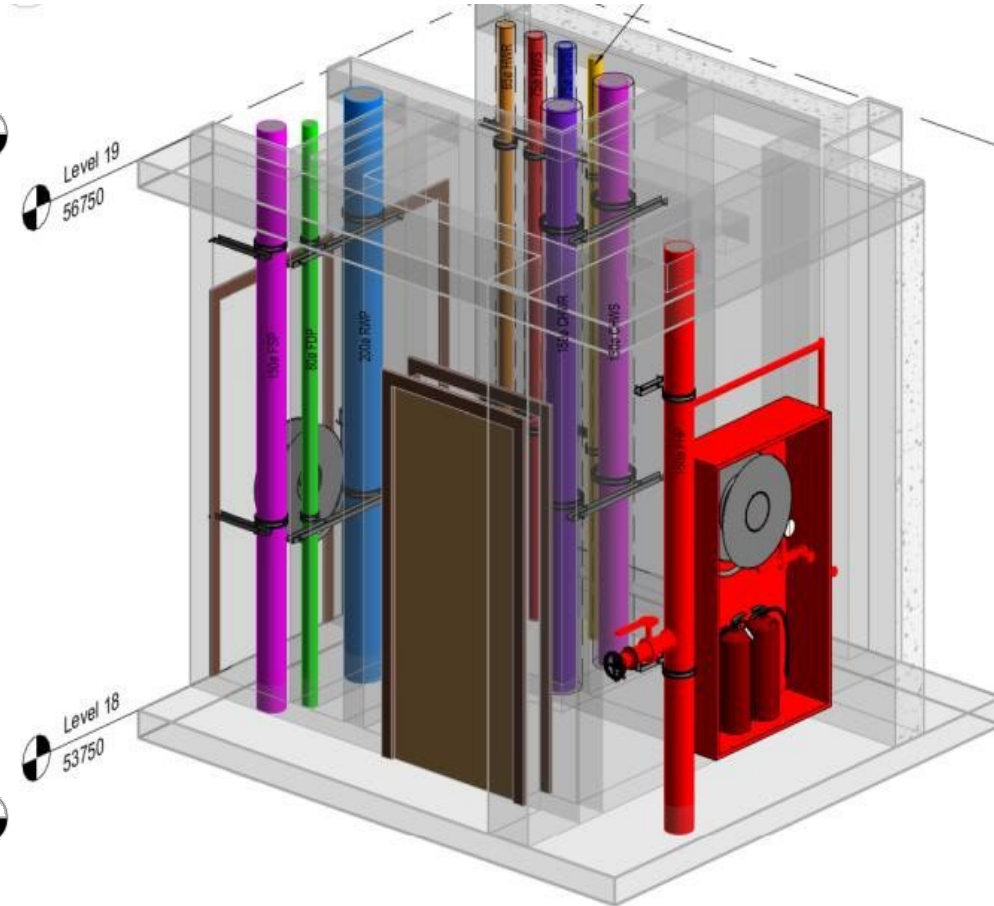
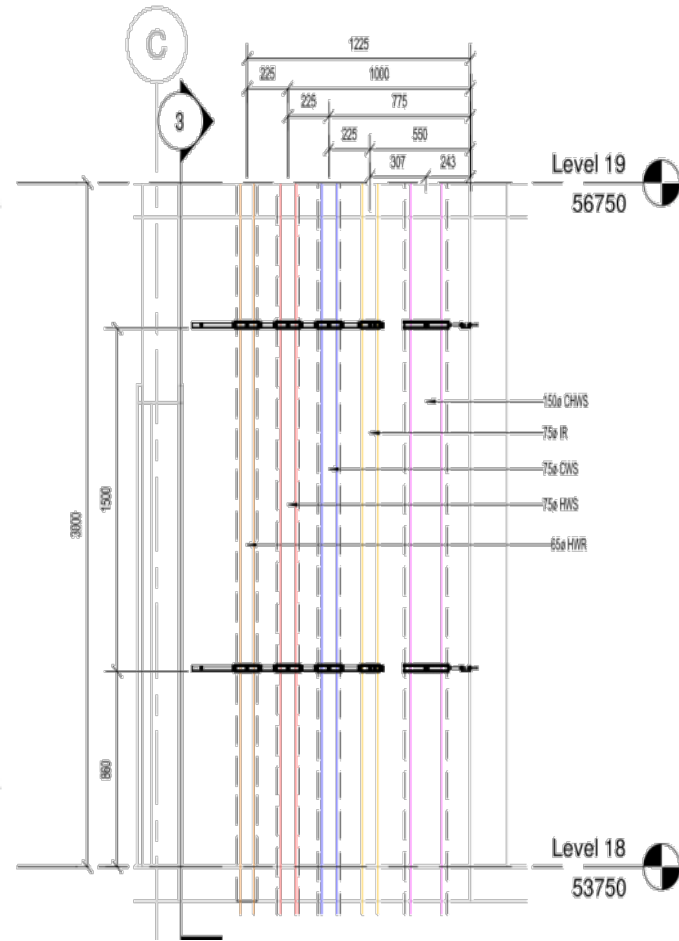
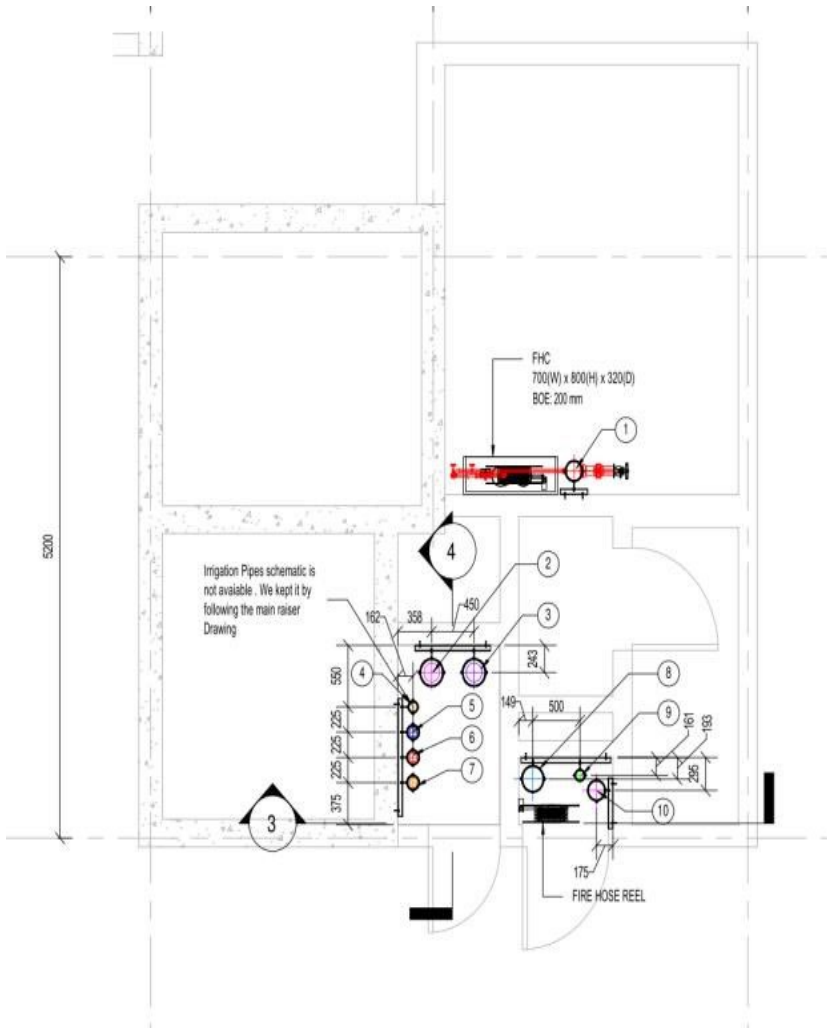


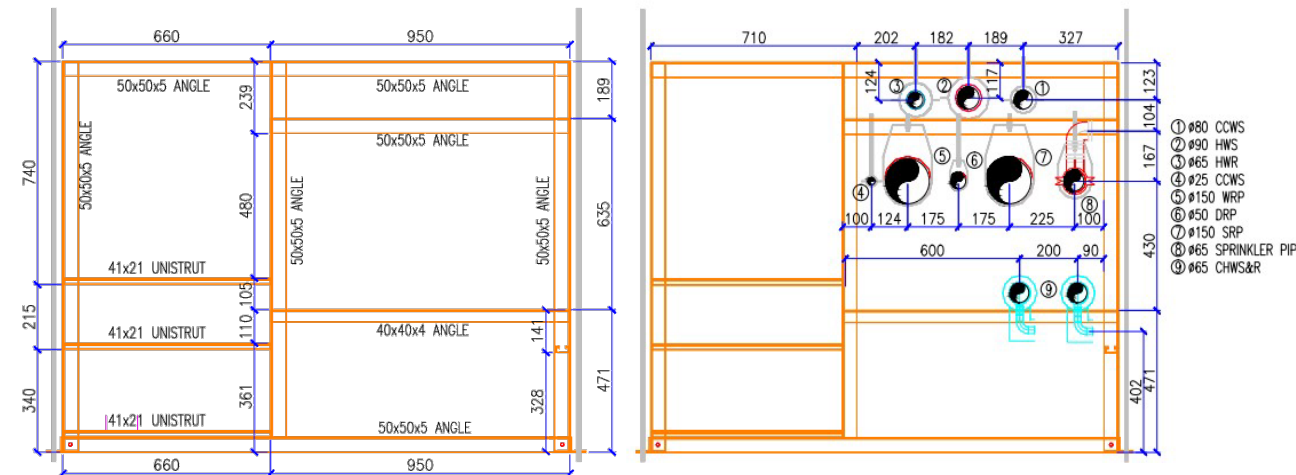
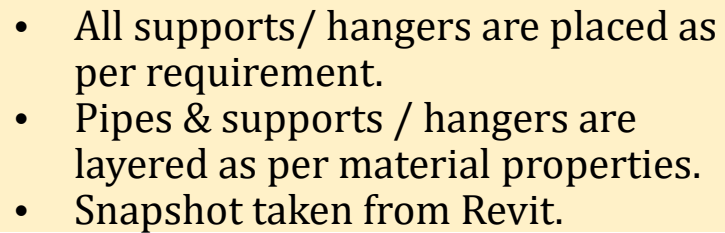
Sample SWRO



- All supports/ hangers are placed as per requirement.
- Equipment's are modeled as per GA drawings.
- Pipes & supports are layered as per material properties.

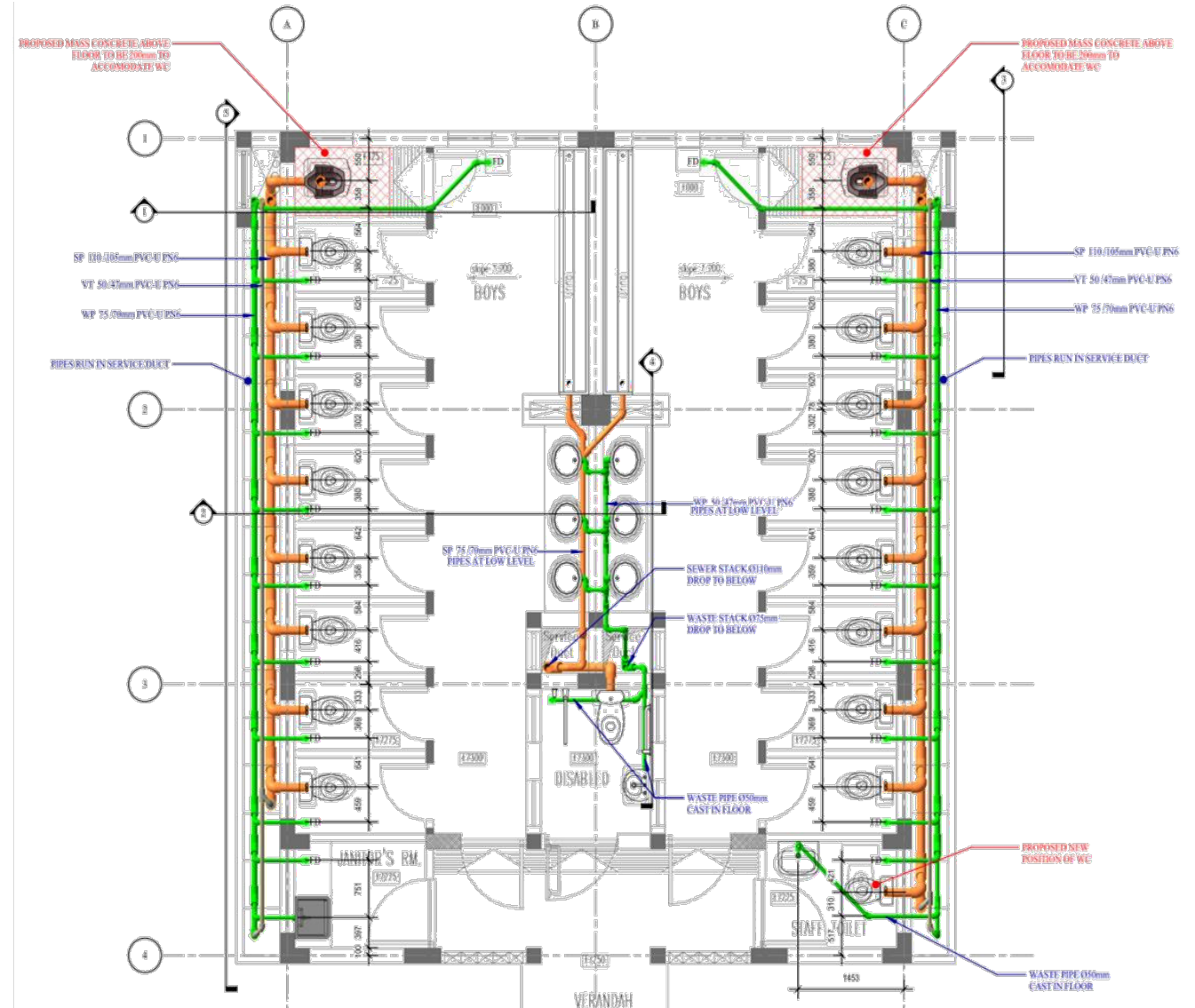
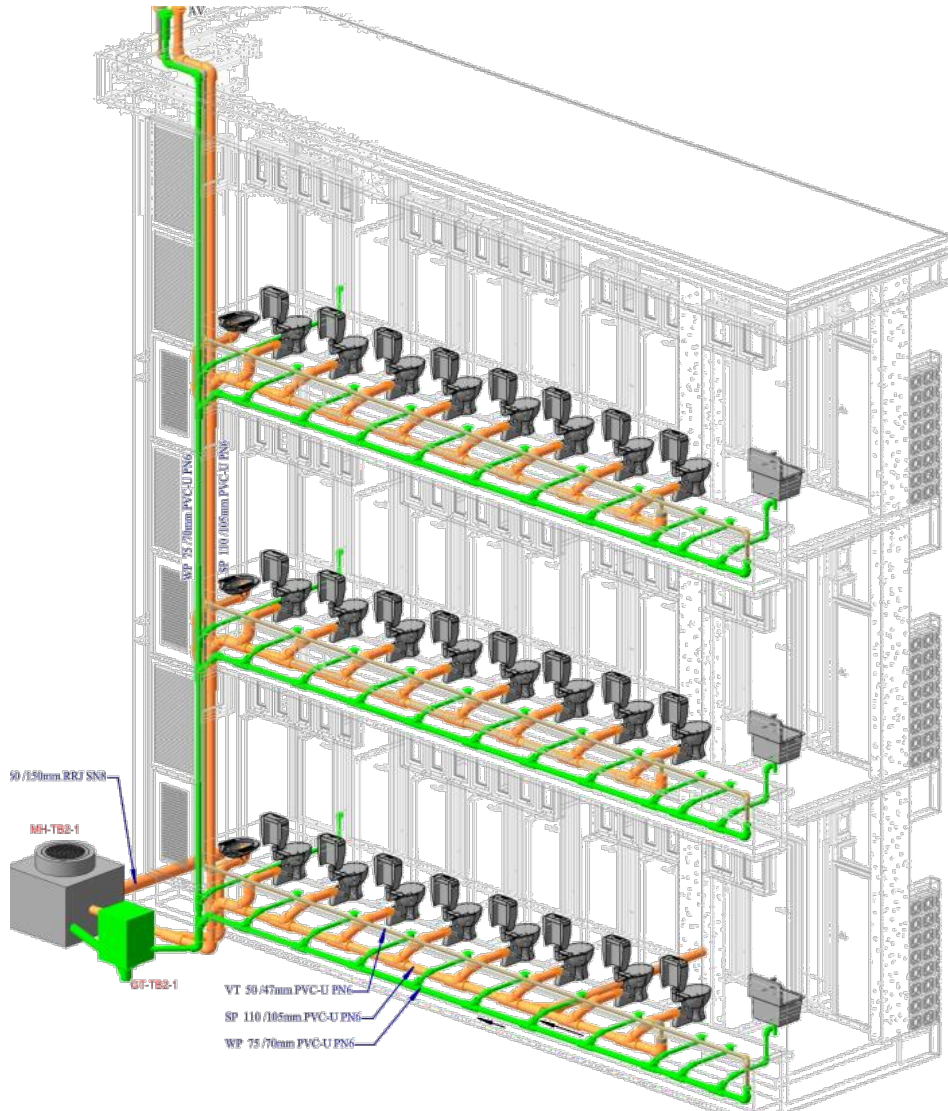
Building Raiser





	MEP SERVICES	COLOUR
PIP	HVACT(DUCTING)	
	HVAC (CHW)	
	DRAINAGE (WP,SP,VP,CDP)	
	DRAINAGE (RWP)	
	WATER	
	FIRE FIGHTING	
	ELECTRICAL	
	GAS	
	SECTION MARKS	

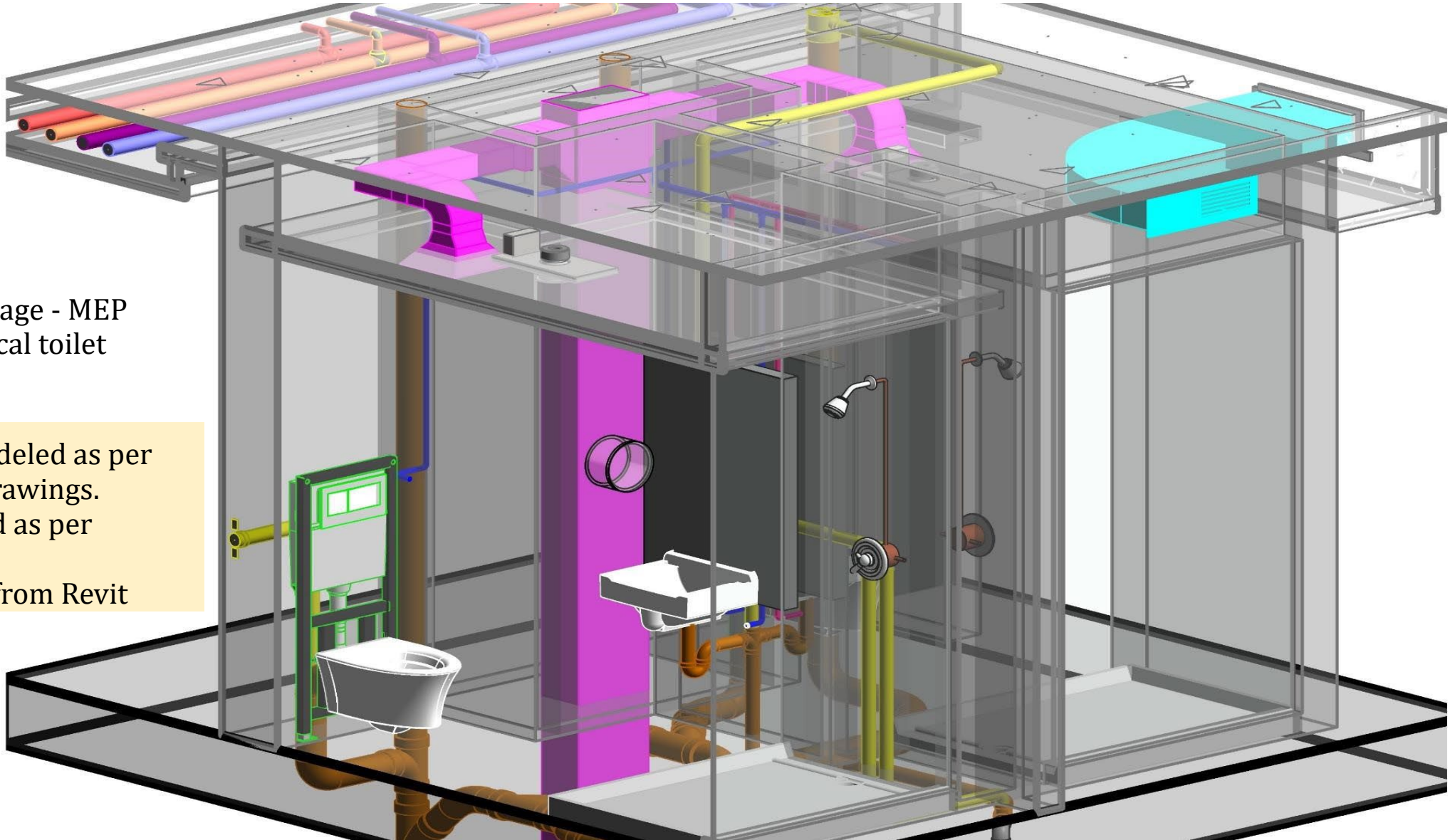
Plumbing Details



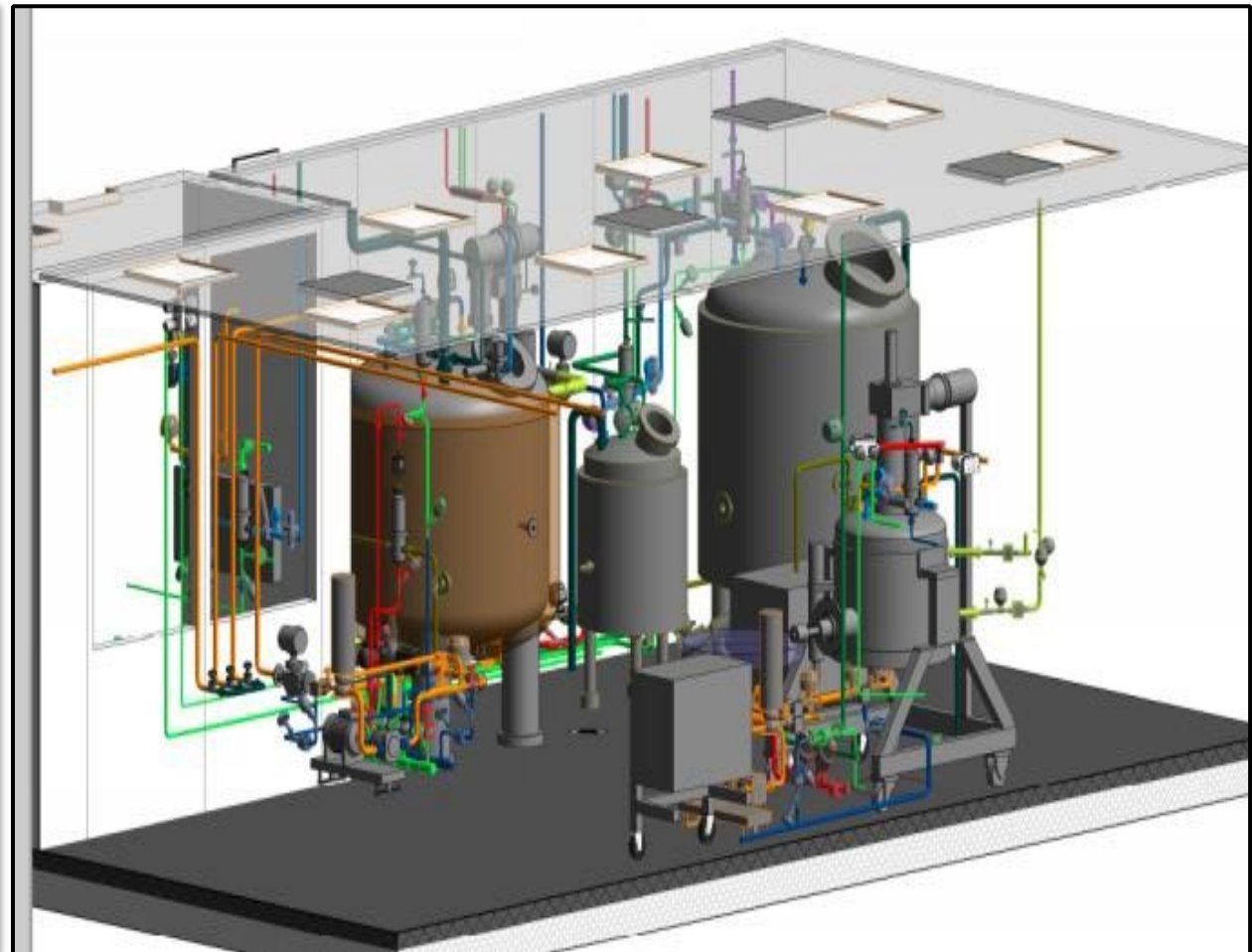
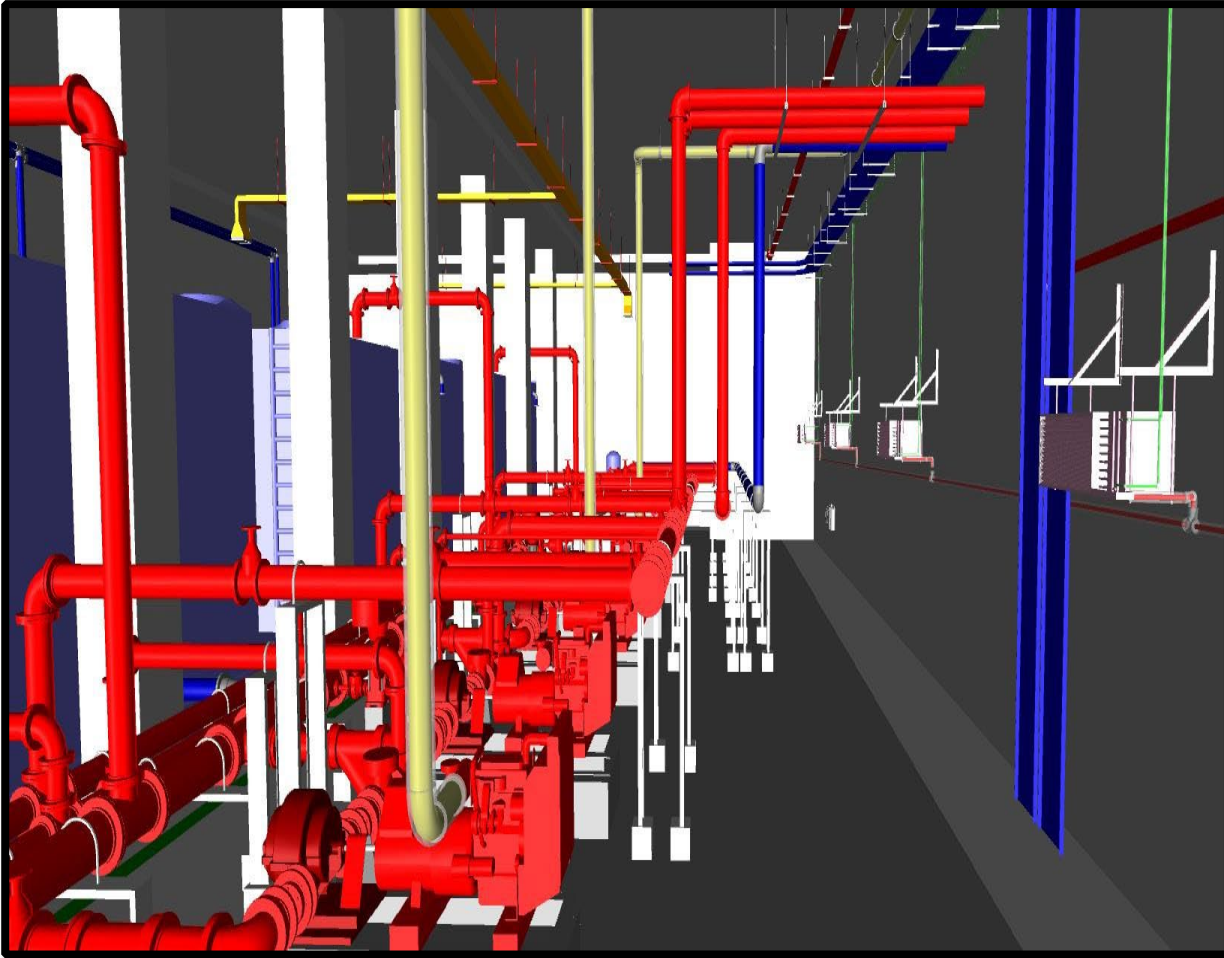
Coordinated Detail Services- Toilet

Revit Transparent Image - MEP
services in one typical toilet

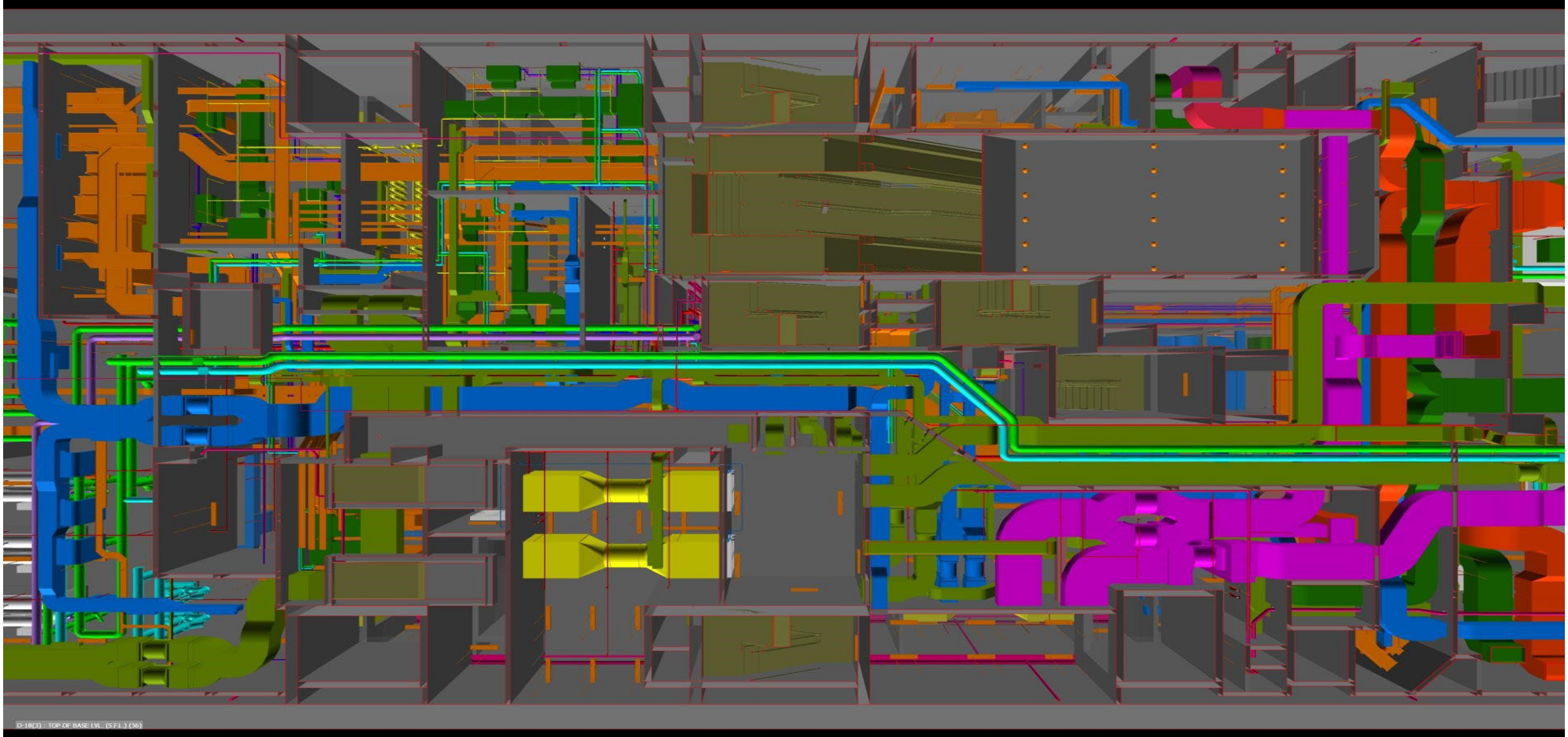
- Equipment's are modeled as per final approved GA drawings.
- Elements are layered as per material properties.
- Non rendered Snap from Revit



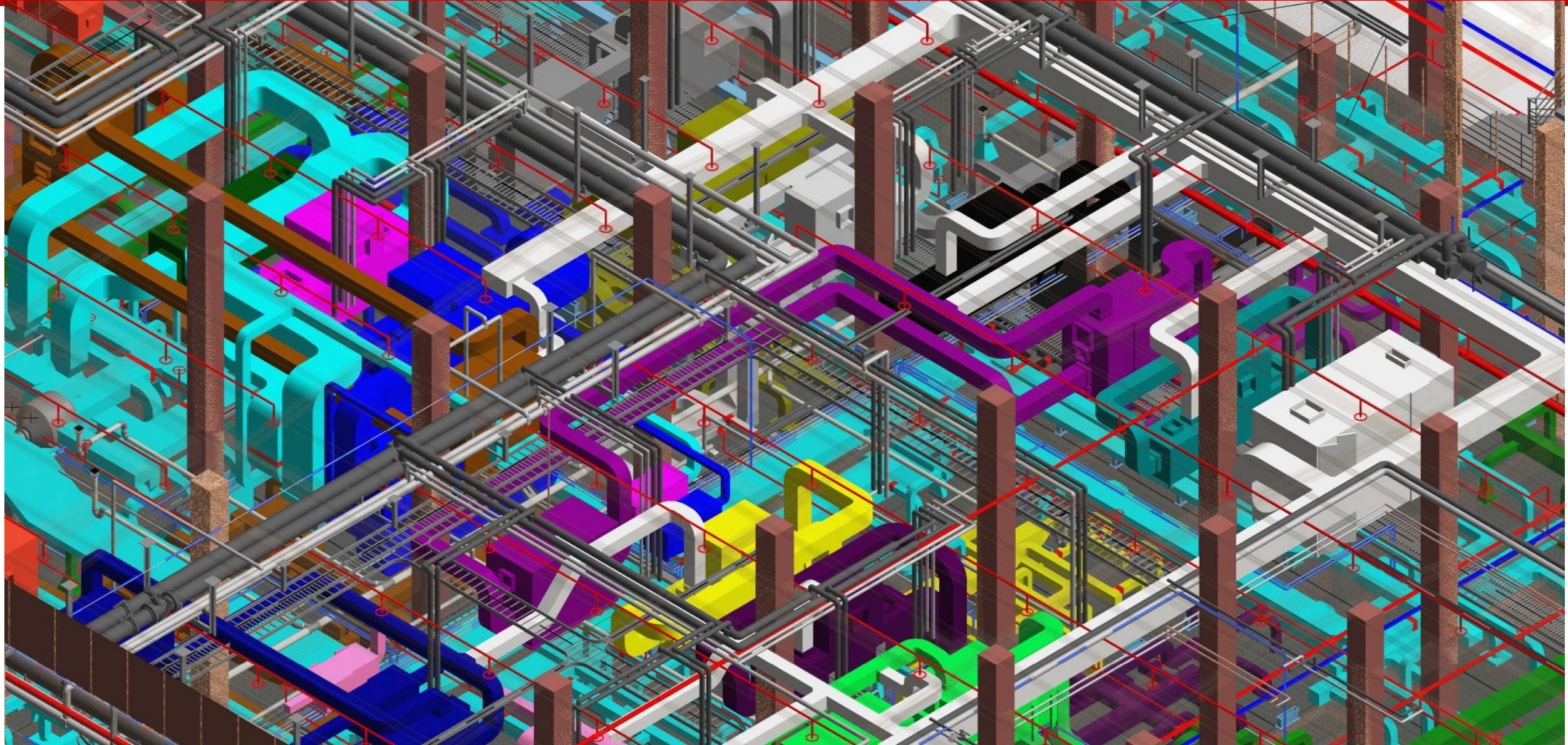
Pump Room & Process Tank



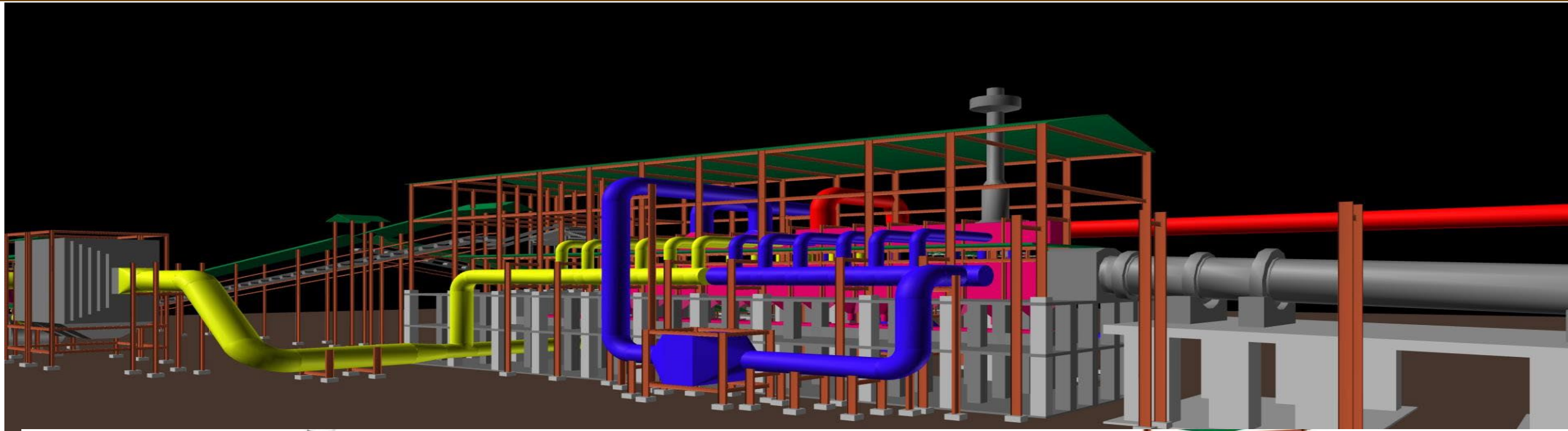
Coordinated Service Model



Combined Services



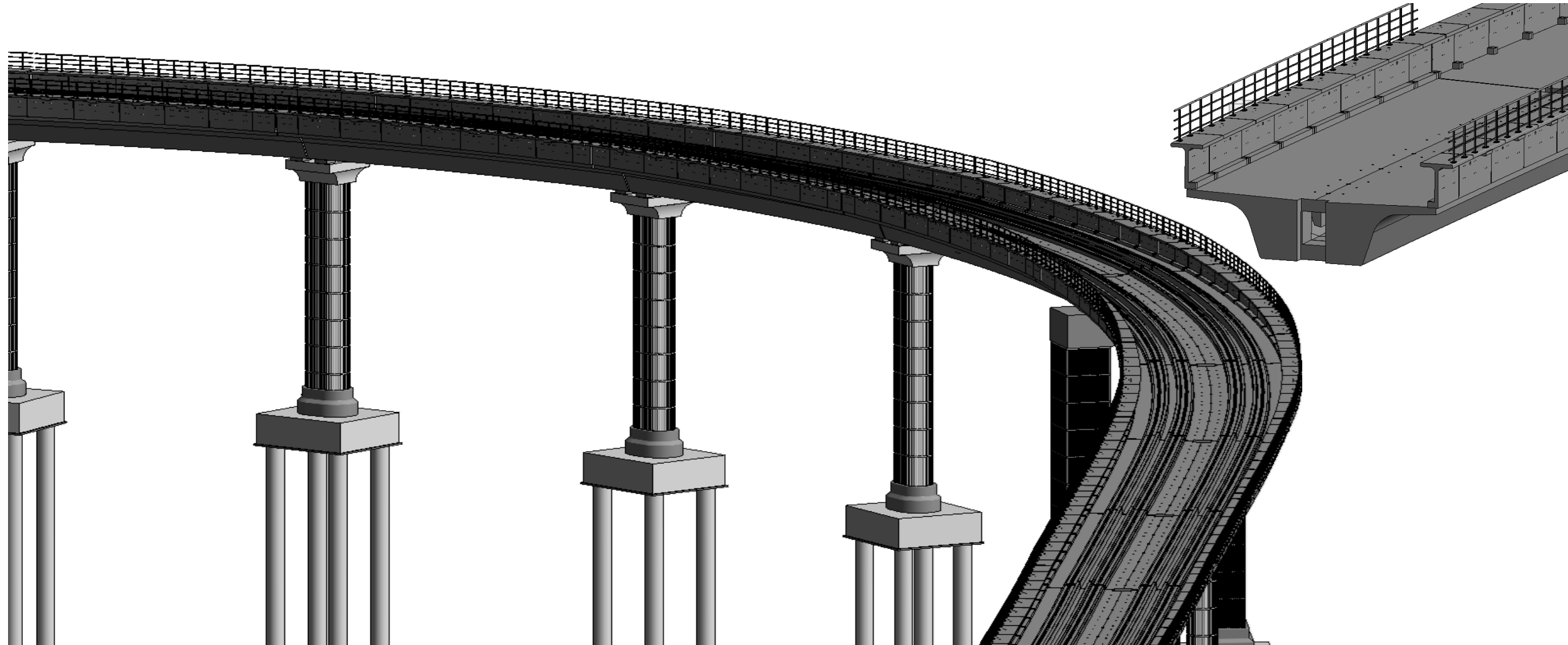
Service Model



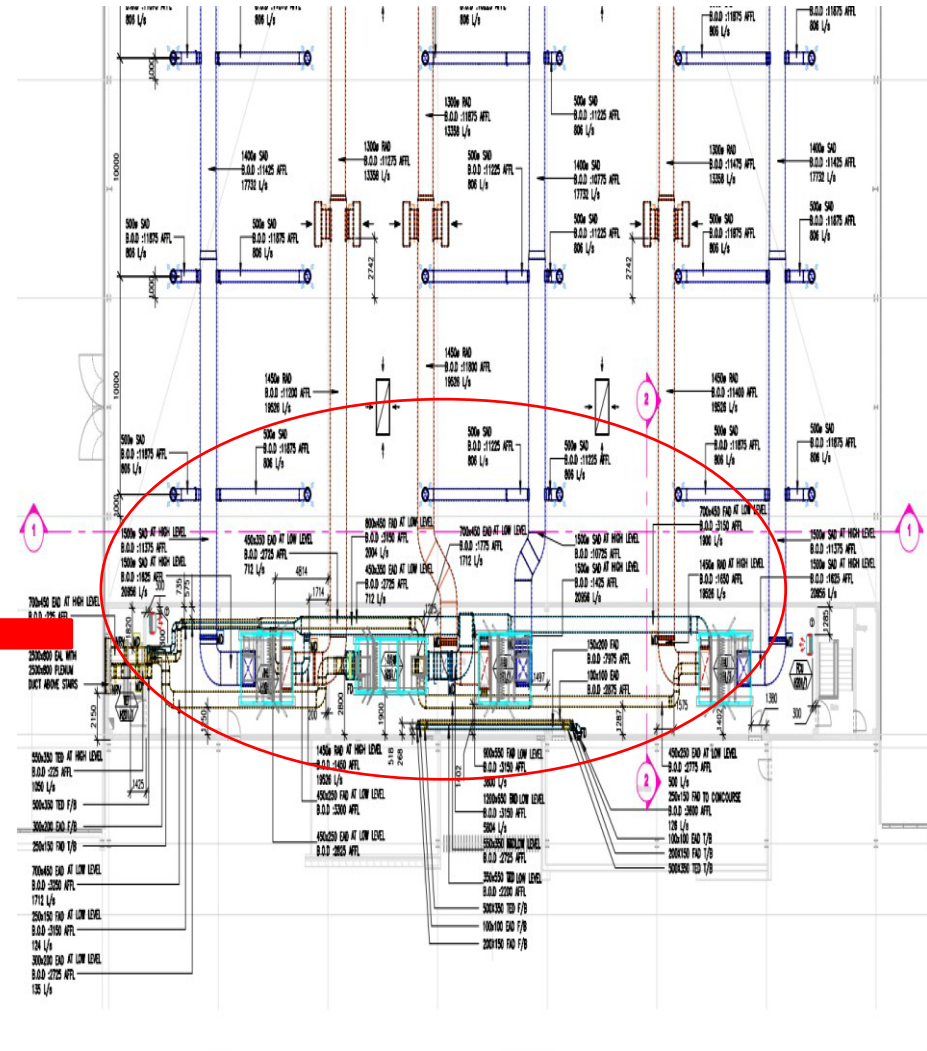
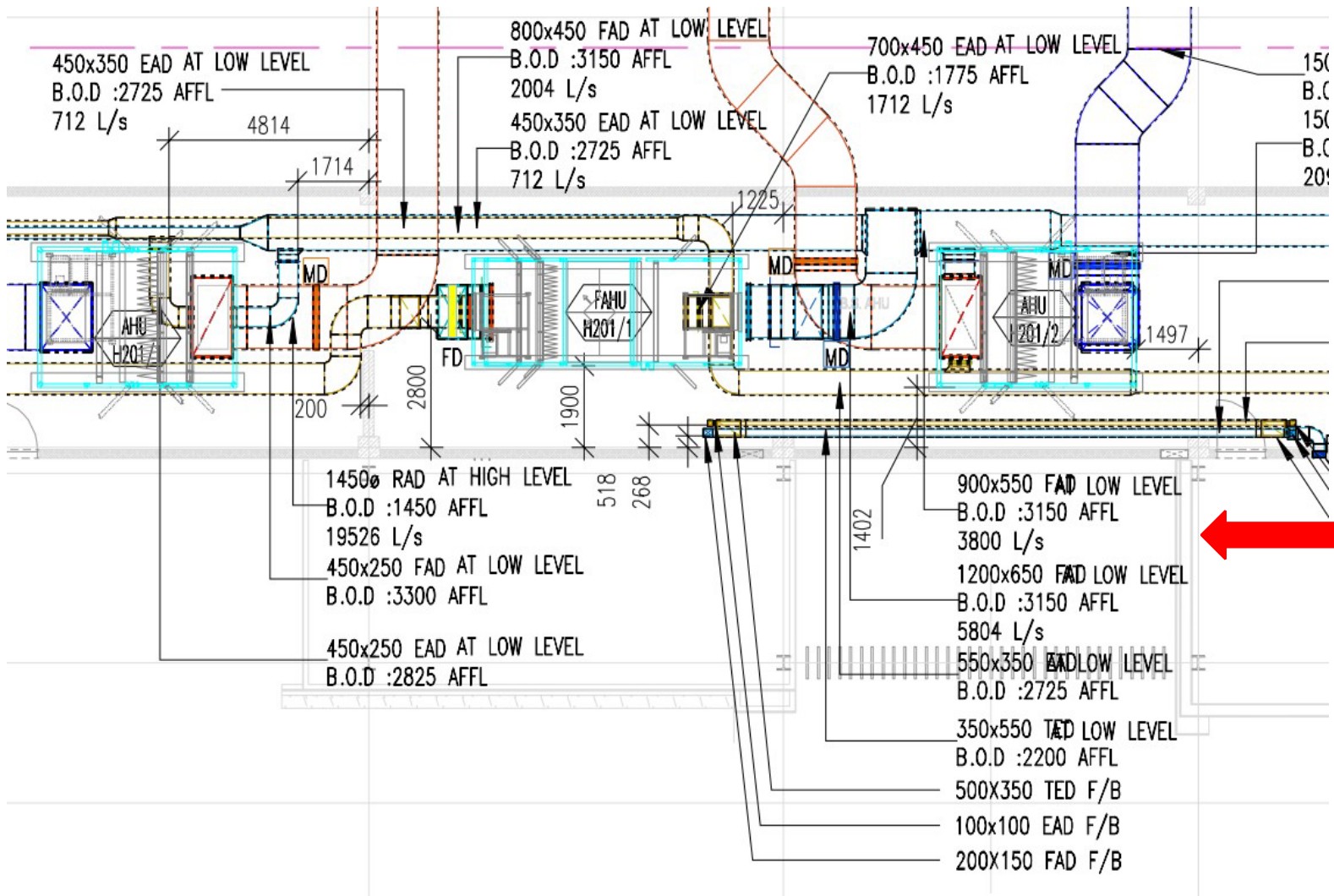
**1.6 MTPA CAPACITY
IRON ORE & BENEFICATION PLANT
KAZAKHASTAN**

MTPA= MILION TON Per Annum

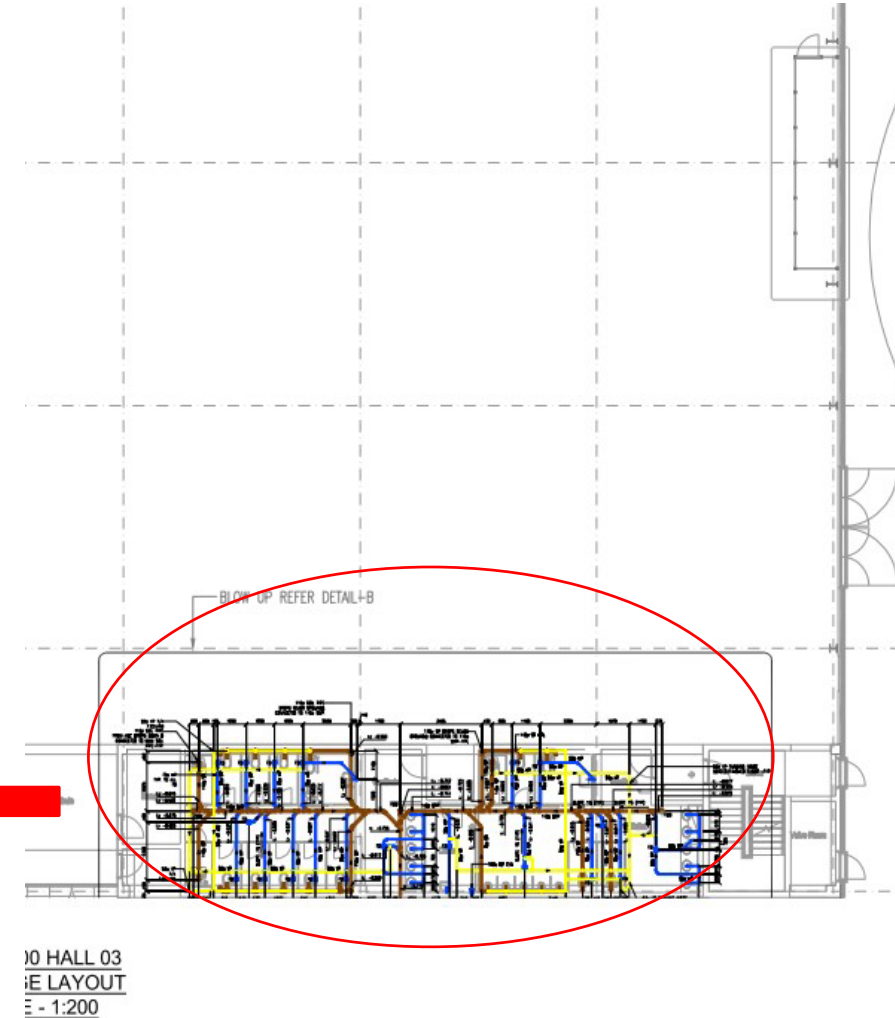
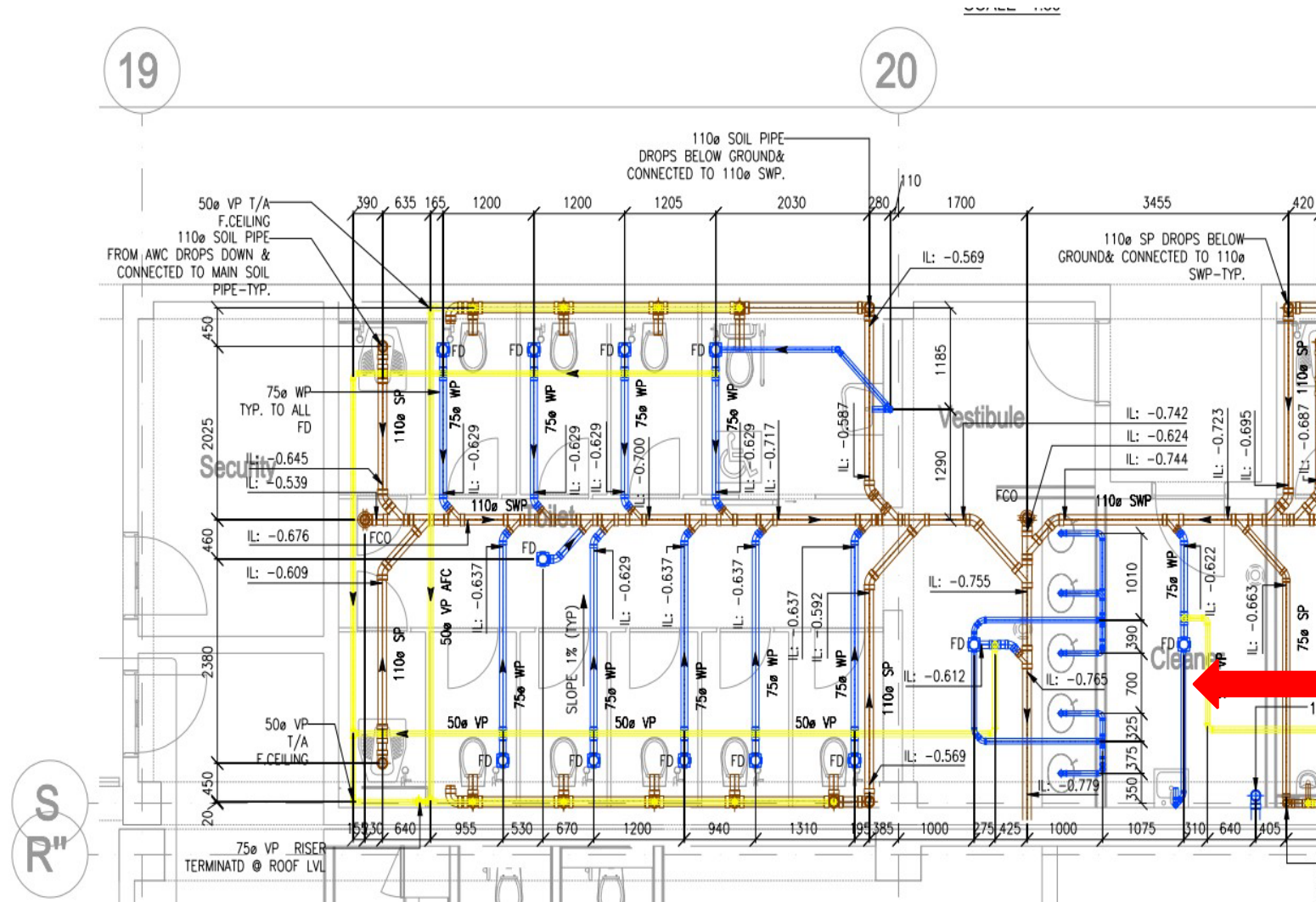
Detail Steel Structure



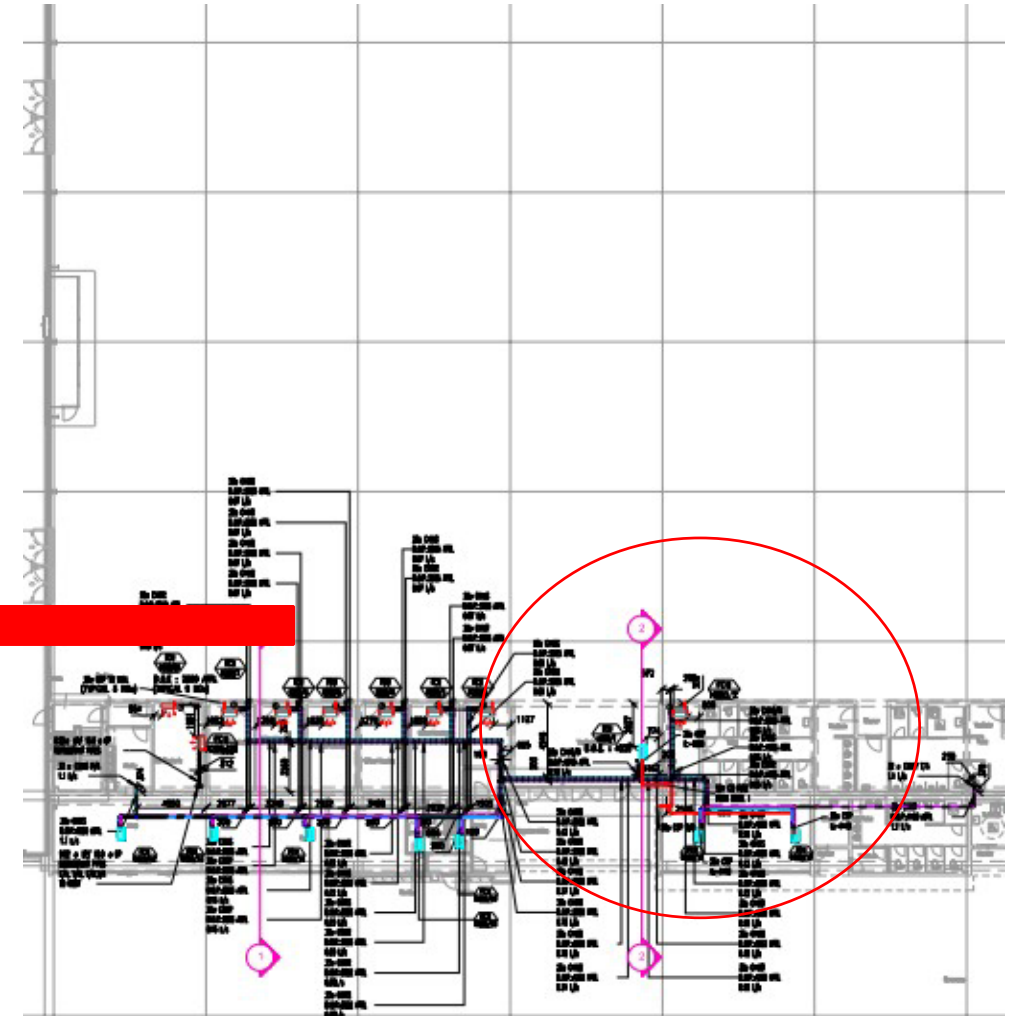
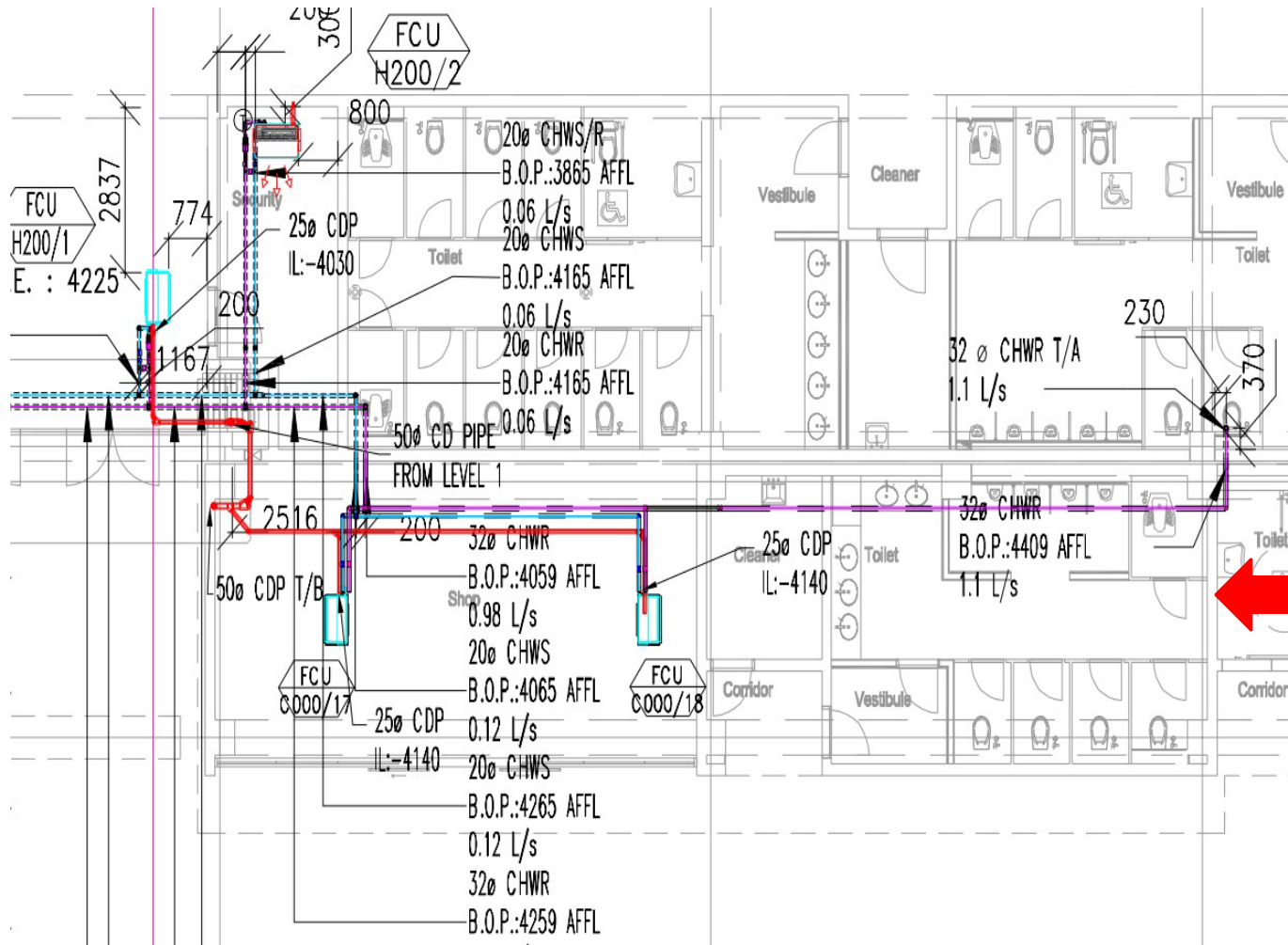
HVAC Shop Drawing



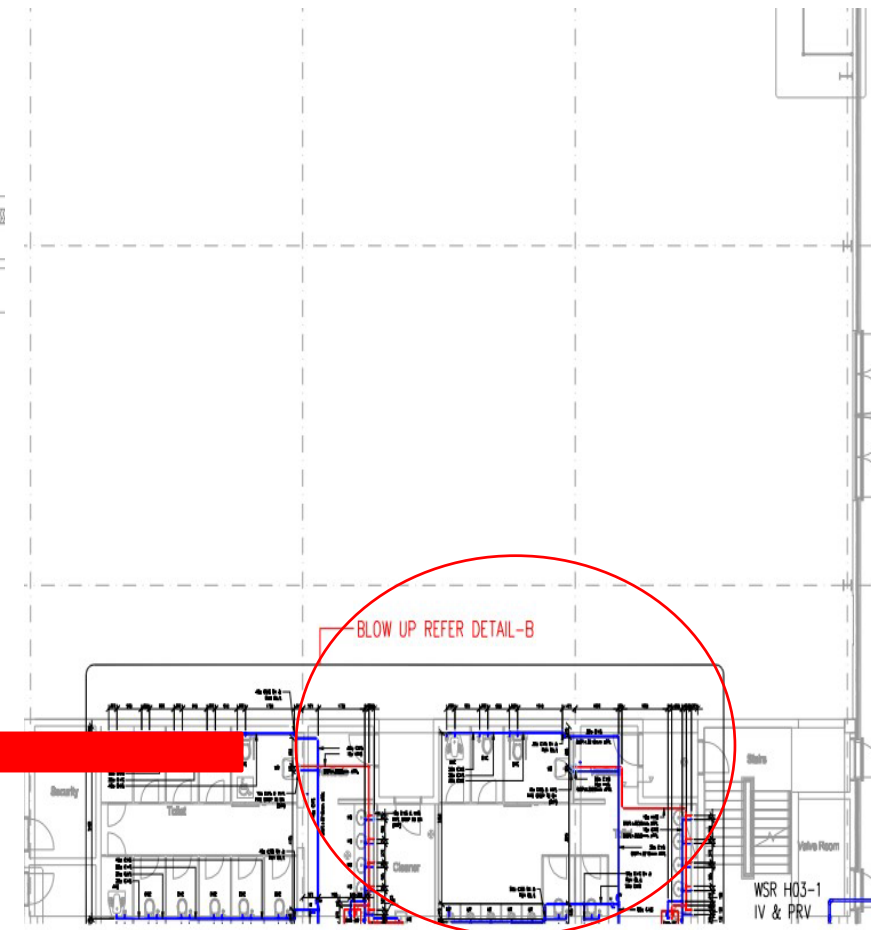
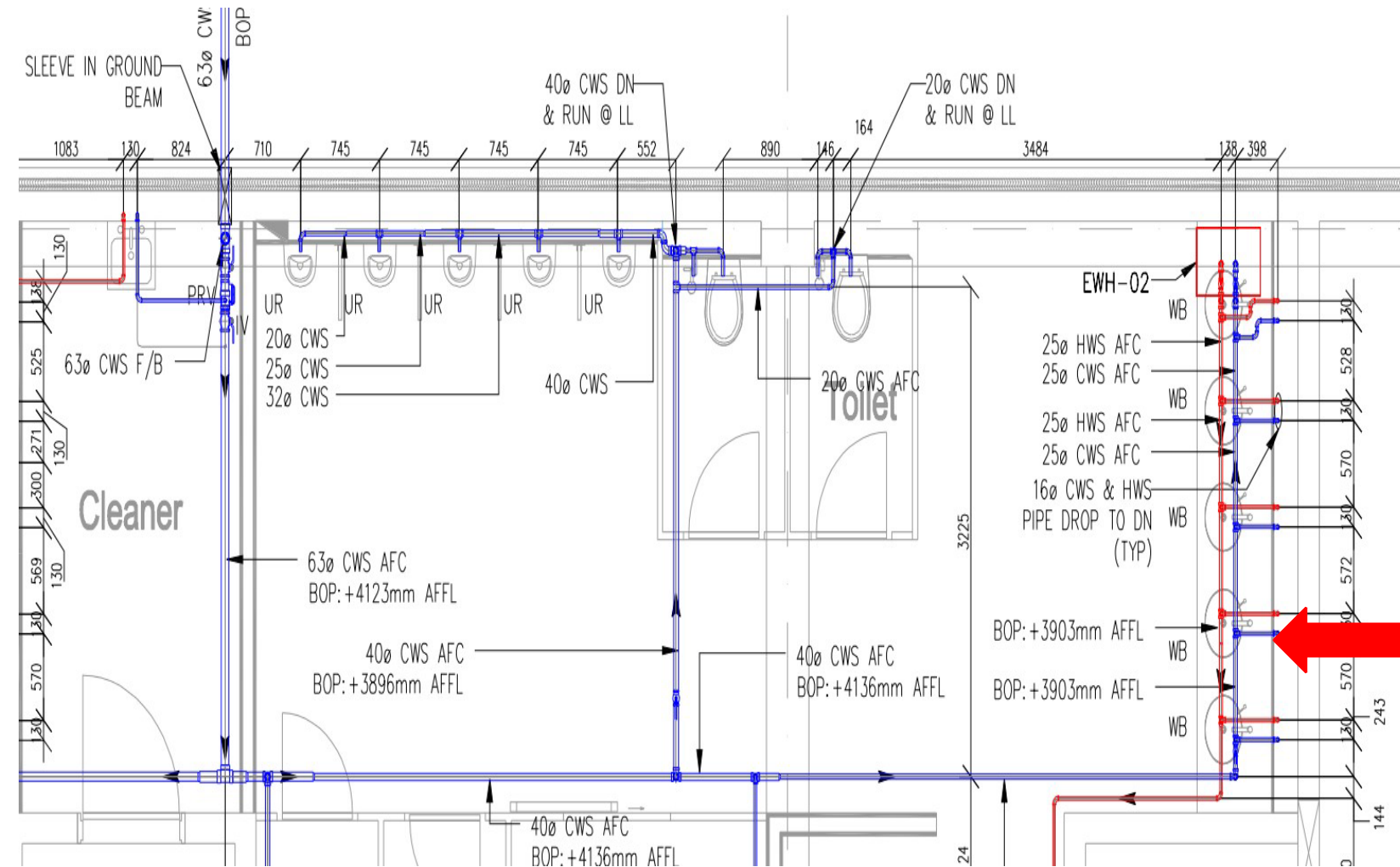
Plumbing Shop Drawing



HVAC Piping Shop Drawing



Water-Supply Drawing





Our Footprints

Hyderabad | India



info@vidhatek.com



www.vidhatek.com





Create
Construct
Manage

**Digitally
Mastered**

thank you