

# BIM for ACS

(Architecture, Concrete and Structure)

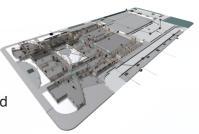


At BIM Collaboration, our goal is to be the preferred BIM partner for architects, concrete contractors, and structural engineers. To achieve this goal, we help our clients accomplish projects on time and at an optimal cost through BIM-based workflows. We engage with clients to understand their design-intent for providing value-added support from early stages of conceptual /schematic design phases and follow that through to construction documentation. BIM Collaboration brings in 15+ years of globally experienced engineers and designers with more than 800+ successfully implemented BIM projects with an understanding of international building codes and procedures.

### **Our Architectural BIM Services**

# 3D Modeling

Coordinate 3D Modeling for architectural components such as exterior and interior walls, floor and ceiling, staircase, door and windows, curtain walls.



#### $3\,\mathsf{D}$ Visualization

Rendering and Walk-throughs of architectural projects through BIM Augmented Reality, Virtual Reality and Animation.



#### Content Creation

Assisting architectural firms with Standard Details, Revit Templates and Revit Families.

#### Construction Documentation

Accurate Documentation for architectural projects such as Conceptual Design, Schematic Design, Detailed Design Development, Permit Stage Documentation.

# Quantity Take-off

Precise material quantities produced from coordinated BIM model for procurement, installation and reliable cost estimation.

### **Our Structural BIM Services**

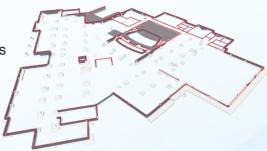
# Design Development and Coordination

Structural design development and coordination throughout the stages of conceptual, schematic and construction documentation.



## Drafting and Detailing

Drafting standardized drawings across design-build stages as per client following redline markups.

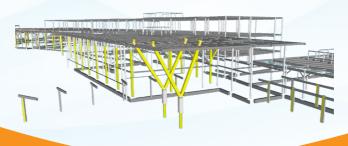


# 3D Modeling

3D modeling of any infrastructure like bridges, roads, dams, high-rise buildings, office complexes.

# Design Analysis and Validation

Analysis, Design and Validation of steel structures based on loads, stress-strain, bending moment through globally used structural design tools.



#### **Our Concrete BIM Services**

# 3D Modeling and Coordination for Cast in Place and Precast Concrete

- Creation of detailed parametric model for concrete design and plan.
- Addressing documentation needs of concrete structure through coordinated 3D model.
- 3D Models of Tilt-Up Panels, Cast in Place Concrete, Tilt-Up Panels, Steel Embeds, Stud Rail.



# Coordination amongst Slab, Reinforcement and MEP

Collaboration amongst various trades of structure for coordination of PT Cables, MEP cutouts and sleeves.



# Quantity Take-off

Accurate material quantities containing RCC and PCC elements for concrete items from the BIM model.

# $\mathsf{S}_{\mathsf{hop}}$ Drawings

- Producing shop Drawings from the BIM model, adhering to AISC and ACI standards.
- Instances of shop drawings include Cast in Place Concrete Line Drawing, Formwork shop drawings, Pre-cast detailing, Embed Shop Drawings.

# BIM Collaboration LLC Murray, Utah











# BIM for MEP Contractors



At BIM Collaboration, our goal is to be the preferred BIM partner for mechanical, electrical, and plumbing contractors. To achieve this goal, we help our clients create and examine virtual representations of the Mechanical, Electrical, and Plumbing (MEP) systems in simulated 3D construction models. We engage with clients at early stages of the conceptual and schematic design phase to understand design intent and create detailed visualization generating coordinated drawings. By implementing our Building Information Modeling (BIM) workflows, our clients have been able to eliminate rework and reduce project interruption thereby saving both time and money in project cost. BIM Collaboration brings in 15+ years of globally experienced engineers and designers with more than 800+ successfully implemented BIM projects with an understanding of international building codes and procedures.

# BIM Services for MEP-FP Contractors

(Mechanical, Electrical, Plumbing & Fire Protection)

## 3D Model Coordination

3D coordinated models are generated after resolving the clashes among all trades (Architectural, Structural, Concrete, Mechanical, Electrical, Plumbing, Fire Protection). It is resolved by re-routing utilities, re-sizing, and changing elevations.

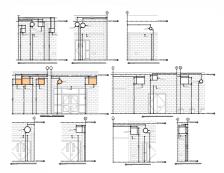


# Quantity Take-Off (Bill of Material)

3D Models assist in accurately estimating quantity information. Bill of Material (BOM) is software generated and automatically updates with changes in the model. It can be detailed and tabulated as per client's requirement for procurement, fabrication, or installation. Bill of Material reports can be formatted in MS Excel and exported to any database for detailed analysis.

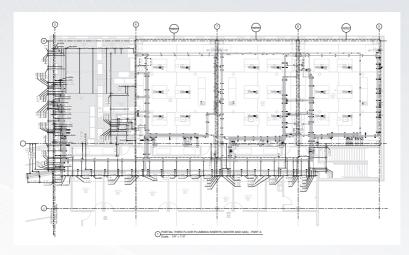
## Block-out/Penetration Drawings

Block-out Drawings are created from coordinated BIM Model after proper alignment with architectural grids. Contract documents and construction codes are followed to keep required clearances for block-outs.



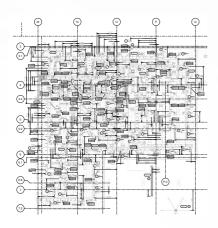
# Sleeve, Hangers and Insert Drawings

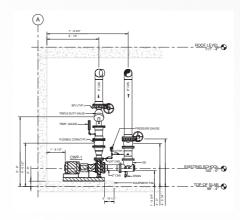
Generate accurate Sleeve, Penetration and Hanger locations from the plumbing model prior to plumbing installation.



# **Shop Drawings**

Generate accurate 2D shop drawings (Sleeve, Penetration, Hanger) directly from coordinated BIM models which are detailed enough for fabrication and on-site construction.



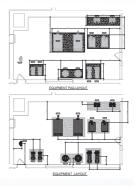


#### Fire Protection

Provide 3D Modeling, Shop Drawings, and Fire Fighting design validation considering the NFPA standards.

# Equipment Pad Layout

BIM Model provides accurate Equipment Pad Layout which ensures proper installation of MEP equipment with access clearance.



# Spool Drawings

Generate accurate spool drawings from 3D models for pre-fabrication on-site or off-site following contractor's pre-fabricating standards and preferences.

