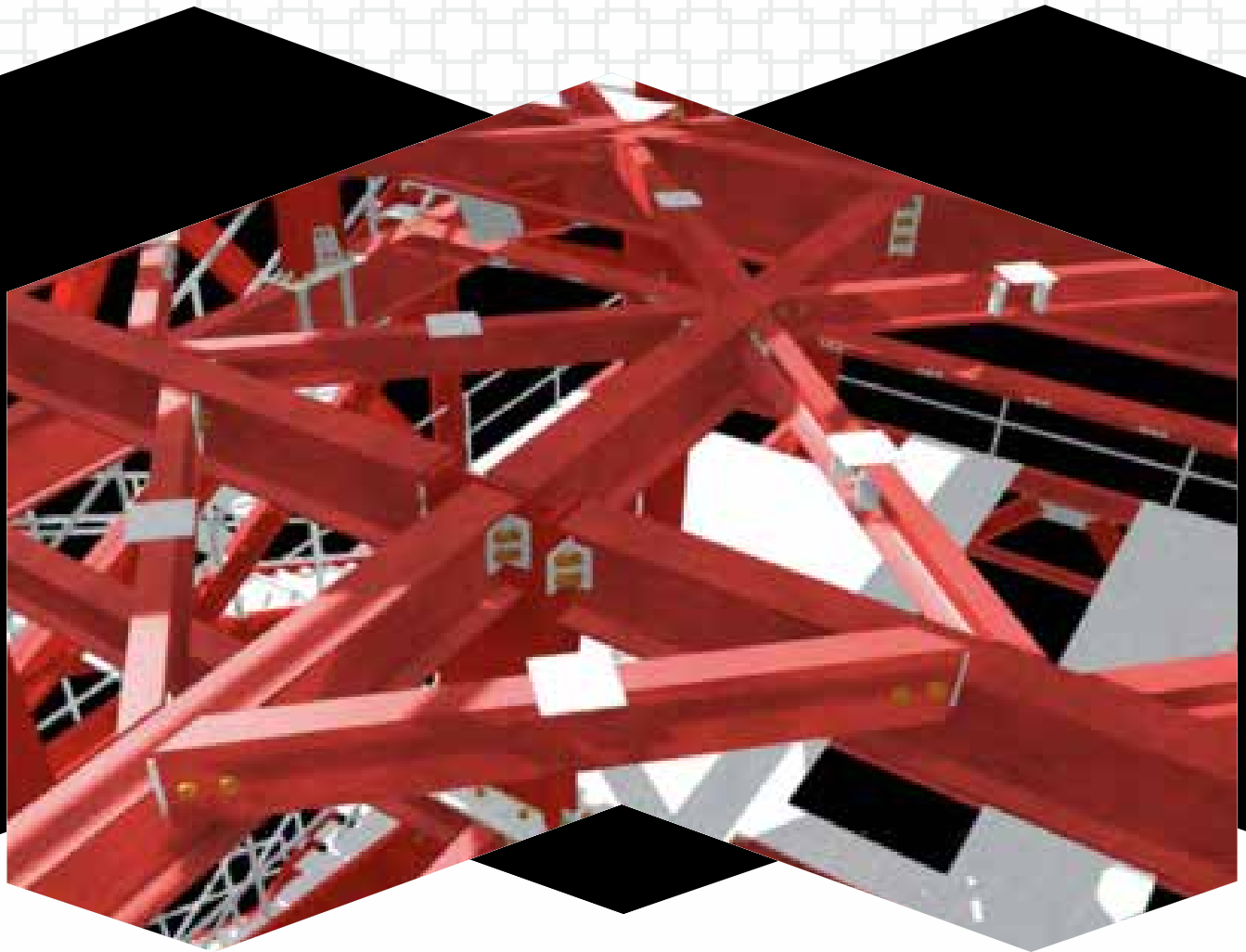




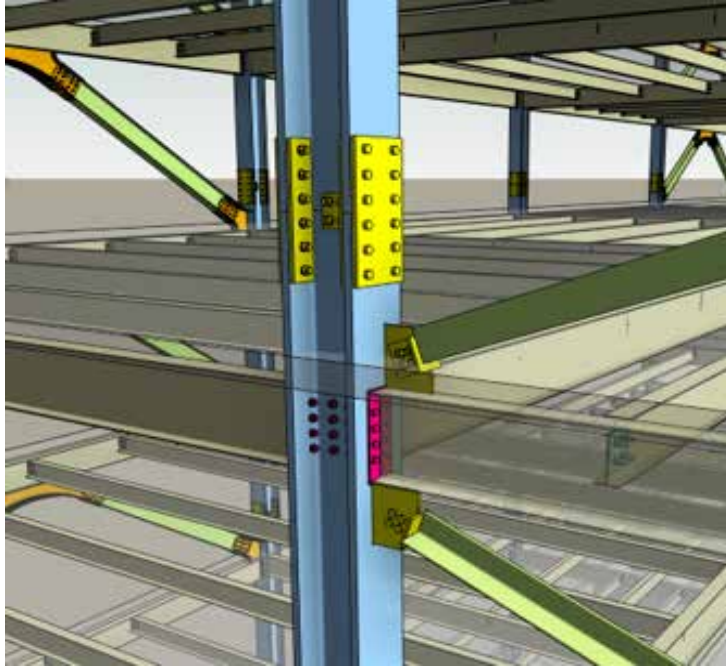
LOD 400 Structural Steel Modeling

(Structural Modeling, BIM & VDC Coordination Services)

CASE STUDY



TECHTURE



Client : General Contractor

Team Size : 2 Nos. (BIM Coordinator & BIM Engineer)

Disciplines : Structure

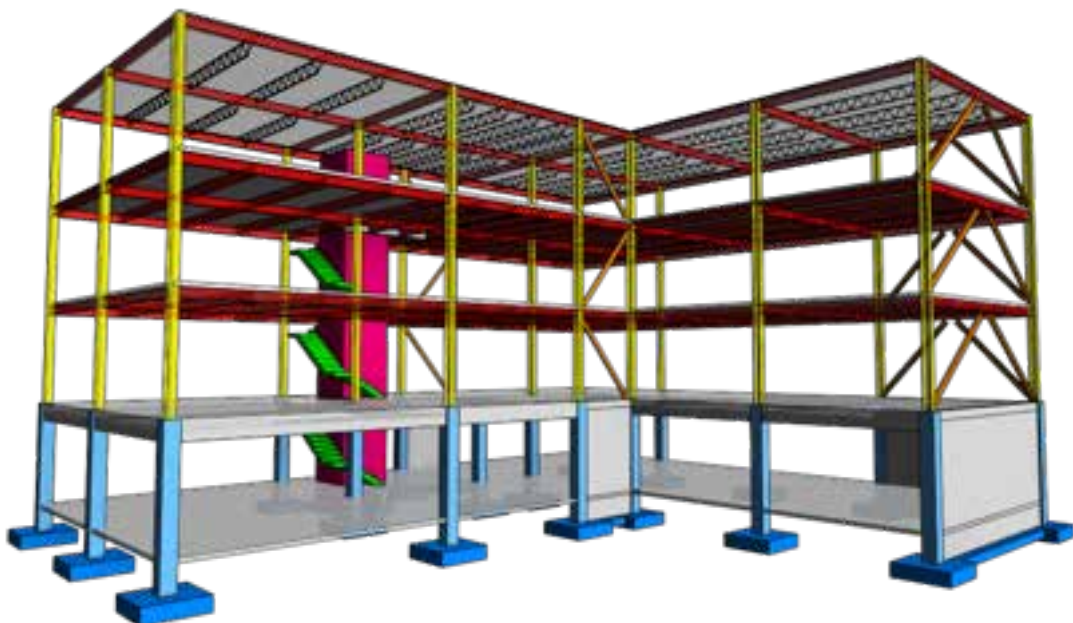
Duration : 1 Month

Scale : 48,000 SF

Software : Autodesk Revit, Autodesk Advance Steel

Type : Commercial

Location : Texas, USA



Project Overview

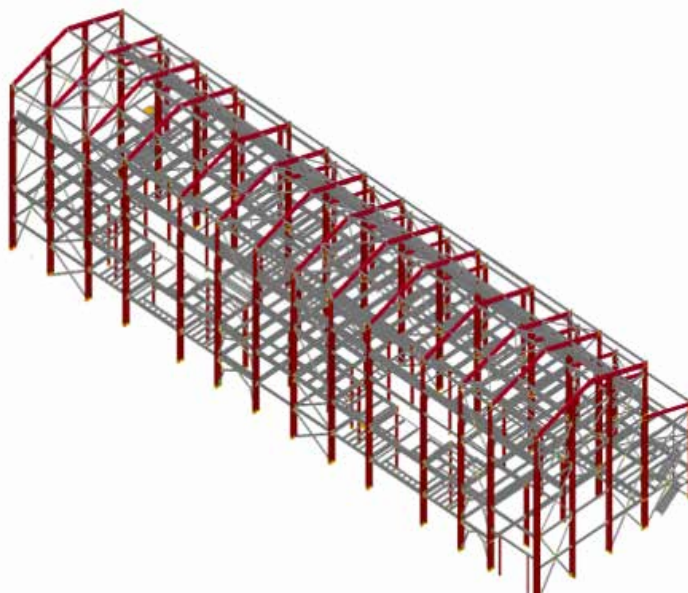
This project located in Texas, involved the development of a detailed 3D BIM model and fabrication documentation for the structural steel scope. Techtur was responsible for delivering LOD 400-level detailing, ensuring every element was ready for fabrication and installation. The project included complex multi-level steel platforms and ramp systems, demanding precision modeling and coordination.

Scope & Deliverables

- ❏ Develop a 3D structural steel model to LOD 400 in Autodesk Advance Steel, including beams, columns, braces, and miscellaneous supports.
- ❏ Model steel framing platforms and ramp systems for all levels.
- ❏ Detail all connections per structural drawings, with placeholders for undocumented joints.
- ❏ Prepare Shop drawings and maintain a revision-controlled drawing log.
- ❏ Generate Excel-based quantity takeoffs and hardware lists, and coordinate with the client for clarifications.

Challenges

- ❏ Managing complex multi-level steel framing and connection details.
- ❏ Addressing incomplete or unclear connection information in input drawings.
- ❏ Delivering high-precision outputs within a tight 2–3 week timeline.
- ❏ Ensuring compliance with fabrication-ready LOD 400 standards.



Techture Approach

- Utilized Autodesk Advance Steel for efficient modeling, detailing, and automated drawing generation.
 - Implemented a strict QA/QC process to ensure geometry accuracy and fabrication consistency.
 - Maintained a centralized drawing log for clear documentation and version control.
 - Coordinated actively with client teams for quick resolution of input discrepancies.
 - Delivered all outputs in IFC, NWD, CAD, and Excel formats to align with fabrication workflows.
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Benefits

- Delivered a fully fabrication-ready model ensuring seamless production.
- Improved project coordination with clash-free and constructible detailing.
- Enabled faster decision-making through accurate takeoffs and documentation.
- Supported efficient project execution within the stipulated timeline.
- Enhanced client confidence through transparent communication and documentation control.