

Hyperscale Design, Certified by Architecture

Business Objective

A hyperscale client required full MEP design for a 24 MW data centre, demanding a TIA-942 certified design approach covering project planning, integrated MEP methodology, space optimisation, and multi-standard compliance — at a scale requiring the highest levels of engineering rigour and coordination.



BUSINESS NEED

Deliver a TIA-942 Certified 24 MW MEP Design

- Develop a fully compliant, certification-ready MEP design for a 24 MW hyperscale facility under TIA-942 licensed certification body oversight.

Engineer a Scalable, Integrated Design Methodology

- Apply an integrated design approach across electrical, mechanical, and plumbing systems that supports phased build and long-term hyperscale expansion.

Optimise Space Planning & Multi-Standard Compliance

- Ensure space planning, structural coordination, and design compliance across all applicable international standards simultaneously.

SOLUTION & IMPACT

24 MW MEP Design Delivered

- Full TIA-942 certified design under licensed body oversight, internationally credible from day one.

Coordination Risk Eliminated at Scale

- Integrated electrical, mechanical and structural design removed cross-discipline conflicts common at 24 MW.

Space-Optimised. Multi- Standard Compliant.

- Compliance matrix across TIA-942, ISO, ASHRAE, IEEE and IEC, ready for phased build without redesign.

Conclusion

Technavious delivered a landmark 24 MW hyperscale MEP design under TIA-942 licensed certification body oversight — combining integrated multi-discipline engineering, rigorous space planning, and comprehensive standards compliance into a single, coherent design package. For a project at this scale, the quality of the design foundation determines the success of everything that follows, and Technavious delivered exactly that.