

 **Trinity Consultants** is a leading global consulting firm that brings 50 years of experience providing services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Within our Built Environment Division, we bring together renowned firms—Cerami, Longman Lindsey, Valcoustics, Jaffe Holden, and WorkingBuildings—under one banner. From cultural landmarks to mission-critical facilities, we deliver innovative solutions in acoustics, technology, commissioning, and operational support, driven by excellence and human-centered design.

## Data center demand is surging, with over \$250 billion in capital outlays planned by major tech firms for 2025–2026 – we know data centers.

At Trinity Consultants, we deliver integrated acoustics, technology, security, and commissioning services for mission-critical data center environments. From hyperscale and colocation to enterprise and edge facilities, our work ensures that every system operates with reliability, resilience, and efficiency – supporting the uptime, security, and scalability that modern digital infrastructure demands.

### Acoustics, Technology, and Security

Advanced acoustical design is essential in protecting sensitive IT equipment and ensuring occupant comfort. We apply predictive modeling, on-site measurements, and internationally recognized standards (ANSI/ASA and ISO) to address sound power levels (SPL), transmission loss (TL), and vibration criteria (VC). By mitigating noise and vibration from high-capacity cooling equipment, standby generators, and MEP systems, we deliver quiet, stable operating environments that reduce risk and protect both infrastructure and adjacent spaces.

Our technology and security practice integrates physical and digital protection to safeguard uptime, data integrity, and resilience. Structured cabling systems, robust network infrastructure, and audiovisual (AV) solutions are designed to align with Tier-level expectations and Uptime Institute standards. Comprehensive security strategies – including perimeter hardening, IP-based CCTV, access control, and security operations centers – reinforce zero-trust policies while supporting compliance with PCI DSS, ISO/IEC 27001, and other regulatory requirements.

### Commissioning Services

Commissioning (Cx) is critical to ensuring mission-critical systems function as designed the moment they go live. Our team provides



a comprehensive, phased approach – from design reviews through integrated systems testing (IST) and turnover – to validate performance, identify single points of failure, and mitigate risks.

We rigorously test mechanical, electrical, and plumbing (MEP) systems, uninterruptible power supply (UPS), backup generators, building automation systems (BAS), and building management systems (BMS). By confirming redundancy strategies (N, N+1, 2N) and optimizing cooling loops to reduce chiller use, we enhance both reliability and energy efficiency, improving Power Usage Effectiveness (PUE).)

Our methodology includes detailed commissioning reports, O&M documentation, wiring diagrams, and operator training – equipping owners with the knowledge and tools to sustain long-term reliability, efficiency, and scalability. From Level 1 through Level 5 commissioning, our focus on QA/QC, operational continuity, and scalability ensures that data centers are fully functional, resilient, and future-ready.

### Sustainability and Efficiency

We recognize the increasing importance of energy efficiency and sustainability in data center operations. Our strategies prioritize system optimization to minimize energy consumption and reduce mean time to repair (MTTR). By integrating sustainable practices and innovative cooling strategies, we help clients meet environmental goals without compromising performance, supporting both compliance targets and corporate ESG initiatives.

**Trinity Consultants is a trusted partner in delivering Tier-certified, resilient, and sustainable data centers. By integrating acoustics, technology, security, commissioning, and sustainability, we provide solutions that reduce risk, optimize performance, and future-proof critical infrastructure.**



## Confidential Campus & Data Center

NEW YORK, NY | 1 MIL+ SQFT

We provided space planning, MEP coordination, infrastructure design, and construction administration for two large data halls housing over 420 high- and medium-density cabinets (10-16 KW) to support mission-critical broadcast, streaming, and communications for a confidential client. The complex scope included full 3D pathways and space coordination, IT infrastructure, hot aisle containment, multi-tier ladder racks, high-capacity fiber trunking, splicing, distribution, and local UTP cabling. Beyond delivery, we continue to provide IT, AV, security, and acoustical consulting for the client's downtown NYC campus consolidation, shaping the technology vision and strategy to unify diverse business entities and integrate their communications on a common platform. Our work spans 650,000 SF of workplace, 250,000 SF of broadcast, and 140,000 SF of amenity space, with the goal of enabling seamless collaboration and an 'always on' operational culture.



## Confidential Hyperscale Data Center

400 MW+

Trinity participated in the program management, preconstruction and construction of multiple "Mission Critical" data centers totaling more than 100,000 SF within a campus setting. Our designs incorporated state-of-the-art energy efficient strategies. The master plan included site design & development; site utilities; critical infrastructure; utility substations; central utility plants; large scale generation plants; critical environment construction; office & support spaces; high, medium, & low voltage distribution systems & associated equipment; combined air & water side mechanical distribution systems, & multiple redundancy levels. Trinity has provided commissioning services for this client at four separate campuses, assisted in delivering over 400MW of data center capacity. We have been involved in all aspects of QC and commissioning on these projects from Level 1 to Level 5.



## Comcast Technology & Data Center

PHILADELPHIA, PA | 10MW

To meet Comcast and NBC's live broadcasting needs, we provided space planning, MEP design, and construction administration for two redundant data centers within the headquarters, accommodating over 500 medium- and high-density cabinets (10-15 KW each). Our work included cooling systems, high-capacity spliced fiber, carrier entrances, and conduit connections through underground tunnels to link with Comcast's urban campus and other data centers, along with tethered equipment rooms for seamless integration. For the Comcast Technology Center—a landmark project in Philadelphia—we also served as technology consultants, delivering communication technology and acoustic design solutions that unified systems and enhanced stakeholder accessibility.



## [“Sweet Tea” Facility, – National Security Agency](#)

10 MW

WorkingBuildings provided electrical and mechanical commissioning for this data center facility. This (Tier III designed) data center was supplied by multiple UPS plants, multiple closed transition unit substations, and medium voltage (MV) generator paralleling gear. Static switches enhanced the redundancy throughout the data center at both the UPS and PDU level. Cooling for the data center was provided by two redundant chiller plants to supply chilled water to CRAC units spaced throughout the data center areas.