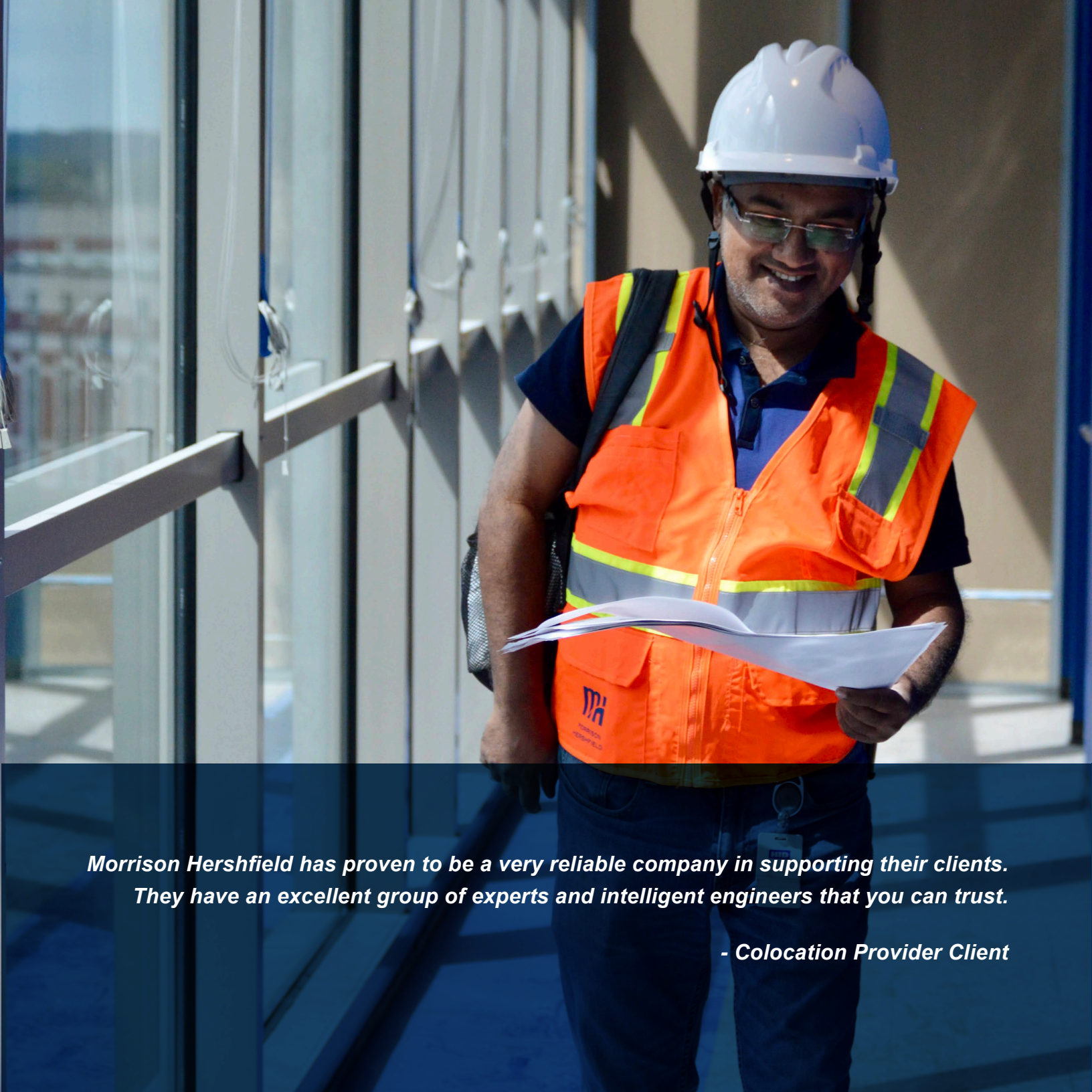




MORRISON HERSHFIELD

People • Culture • Capabilities

MISSION CRITICAL FACILITIES That Make a Difference



*Morrison Hershfield has proven to be a very reliable company in supporting their clients.
They have an excellent group of experts and intelligent engineers that you can trust.*

- Colocation Provider Client

Why choose Morrison Hershfield?

OUR CLIENTS BENEFIT from a well-organized nimble team with local presence backed by over 1000+ staff and 26 offices across North America and beyond; ensuring your project is delivered according to your vision, schedule and requirements.

- ▶ **CLIENT-FOCUSED** - Over 90% of our business comes from recurring clients. We are proud to maintain an “excellent” rating in our customer satisfaction program. Ultimately, our role is to listen to you, help you solve problems and become your trusted partner who is there whenever and wherever you need us.
- ▶ **COST-EFFICIENCY** - We help our clients increase reliability in their data centers and decrease the total cost of ownership so that they can balance their budget.
- ▶ **HIGH PERFORMANCE** - By getting to know your data center, we can help you find solutions that will drive the cost per MW down while meeting energy requirements and optimizing performance.
- ▶ **SPEED TO MARKET** - Our team understands that speed to market is of the utmost importance. We will help you meet your aggressive schedule while providing solutions that are effective, flexible and reliable.
- ▶ **CUTTING-EDGE** - Our team is comprised of dedicated, full-time data center engineers who are committed to advancing the industry and staying at the forefront of its fast-moving technological trends.

Make us your first call.



CLIENT SOLUTION
PROVIDERS



PROBLEM
SOLVERS



PARTNERS WITH
OUR CLIENTS

PROJECT TYPES

- Data Centers
- Edge Networks
- Modular Critical Facilities
- Operations Centers
- Telecom Switches
- Trading Floors

SERVICES

- Assessment & Planning
- Design
- Construction Administration
- Commissioning
- Operations Consulting
- Project Management

ENGINEERING

- Building Envelope
- Civil & Land Development
- Code & Life Safety
- Electrical
- Environmental
- Fire Protection
- Mechanical
- Structural

SOME OF OUR CLIENTS





DIGITAL REALTY WHOLESALE DATA CENTER CONVERSION DESIGN

Vaughan, ON

46
MW POWER

711,000
SQUARE FEET

1.25
PUE

MEP, STRUCTURAL,
LEED CONSULTANT

The iconic Toronto Star newspaper printing facility has been transformed into one of the largest wholesale colocation data centers in the Greater Toronto Area, and one of the most advanced data center facilities in Canada. “TOR1” includes 23 computer rooms ranging from 8,600 to 13,000 SF Midway through construction, DFT was acquired by DRT. The AEC team worked closely with internal experts from DFT and DRT (post-merger) to develop a design that maximized the amount of leasable space within the constraints of the existing footprint and structure, and that met the owner’s density, reliability, and operational requirements.



CLOUDHQ MCC2 WHOLESALE DATA CENTER DESIGN

Manassas, VA

64
MW POWER

375,000
SQUARE FEET

N+1
REDUNDANCY

**FACILITY PLANNING, MEP,
CONTRACT ADMINISTRATION,
COMMISSIONING**

CloudHQ's MCC2 data center is a 375,000 SF single-story pre-cast shell structure, which includes a 47,000 SF engine generator penthouse. The facility consists of computer rooms, UPS rooms, operation centers, offices, general support spaces, and infrastructure support spaces. Each computer room is approximately 12,500 SF with a 4,000kW critical load, for a facility critical design load of 64MW. Morrison Hershfield provided facility planning, MEP engineering, contract administration, and commissioning support for the data center.

SYCAMORE DATA CENTER DESIGN

Maiden, NC

8
DATA HALLS

207,000
SQUARE FEET

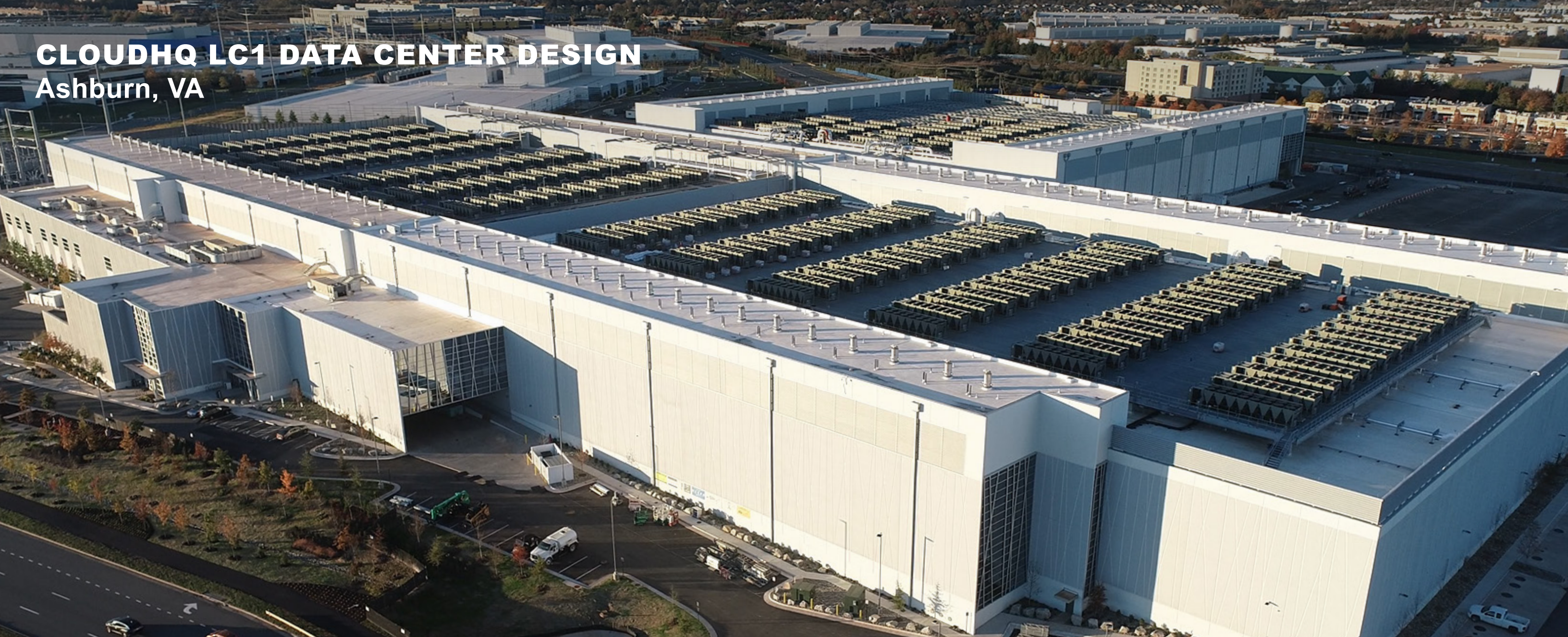
N+1
REDUNDANCY

**FACILITY PLANNING, MEP,
CONTRACT ADMINISTRATION,
COMMISSIONING**

The Sycamore Data Center is a single-story, steel-frame facility with metal panel cladding, housing eight data halls supported by dedicated MEP systems. The data center is the fourth major facility on the client's multi-building campus, supporting a range of business lines for the internet services provider. Thirty-six 3,000kW engine generators support this significant data center. An N+1 redundant PDU distribution system supports the computer room loads and are fed from the UPS Systems arranged in an iso-redundant configuration.

CLOUDHQ LC1 DATA CENTER DESIGN

Ashburn, VA



144
MW POWER

1,095,000
SQUARE FEET

LEED GOLD CERTIFIED
US GREEN BUILDING
COUNCIL

FACILITY
PLANNING, MEP,
COMMISSIONING

CloudHQ delivered LC1 to the Ashburn, VA, colocation market. From concept to occupancy, the team designed a massive 1,095,000 SF two-story facility structure capable of supporting 144 MW of critical load and a total chilled water system installed capacity of 47,520 tons. The LC1 Data Center is one of the largest of its kind and is located at the center of the largest data center market in the world. The data center's electrical infrastructure configuration is designed to maintain continuous availability consistent with a Tier 3 facility.

STACK INFRASTRUCTURE TOR1

DATA CENTER DESIGN

Toronto, ON



8
MW POWER

92,000
SQUARE FEET

N+2
REDUNDANCY

**FACILITY PLANNING,
MEP AND STRUCTURAL,
CONTRACT ADMINISTRATION,
COMMISSIONING**

TOR1 marks STACK Infrastructure's debut in the international market. Located in downtown Toronto, the data center offers low latency to Canada's biggest companies and connectivity to major Midwestern and East Coast markets. The 92,000 SF data center splits into 4MW data halls at an N+2 redundancy on critical systems and cooling. Ten water-cooled chillers cool the facility. Morrison Hershfield provided facility planning, contract administration, commissioning support, and MEP and structural engineering services for the data center and was also retained to design TOR2 once TOR1 is complete.

DP FACILITIES MINERAL GAP SECURE COLOCATION DATA CENTER DESIGN

Wise, VA



65,000
SQUARE FEET

TIER III
UPTIME INSTITUTE
CERTIFIED

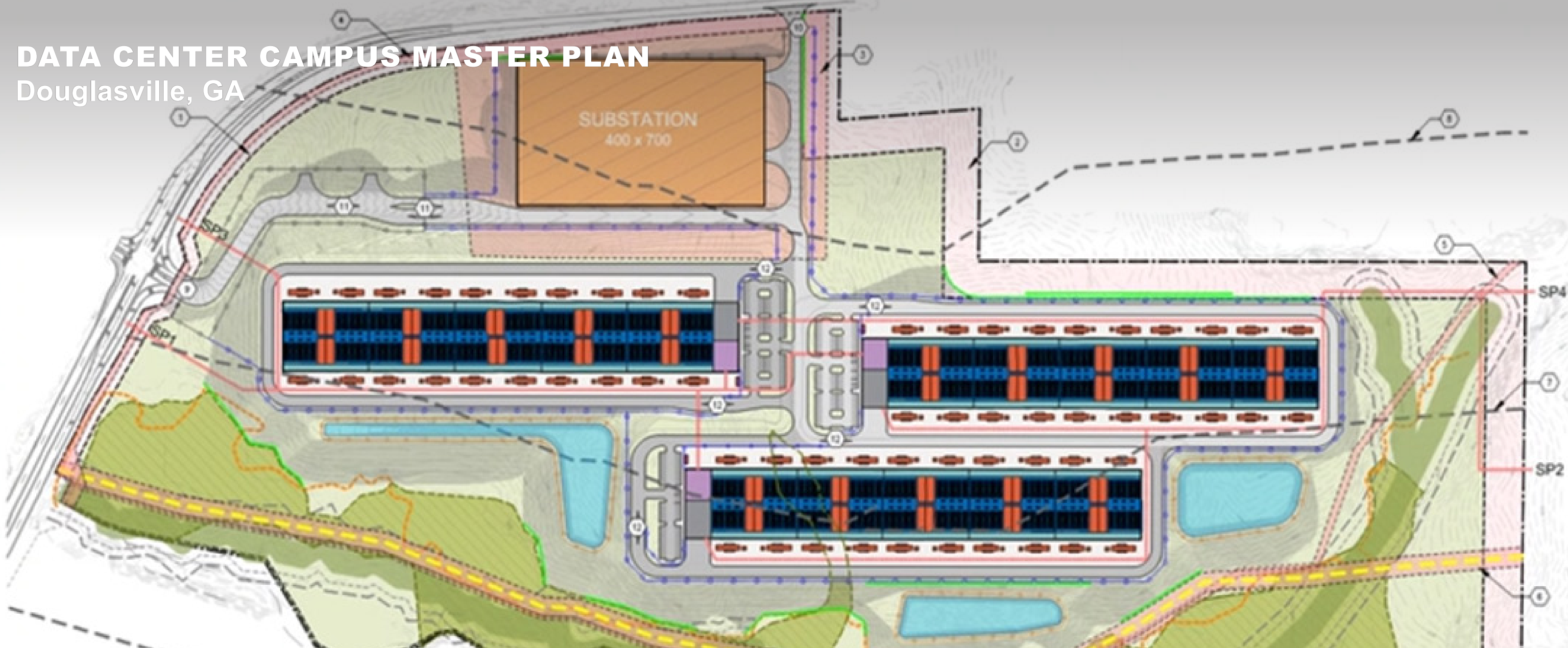
9
MW POWER

**FACILITY
PLANNING, MEP,
COMMISSIONING**

DP Facilities South Mineral Gap Data Center is a Tier III Uptime Institute Certified Data Center developed at the Lonesome Pine Technology Park in Wise, Virginia. This multi-user secure facility will consist of six data hall units and a common services area. The purpose-built data center meets 2N electrical and N+1 mechanical redundancy. The electrical and mechanical systems configurations provide a data center design that maximizes system efficiency and economy while maintaining continuous availability and sustainability objectives. Morrison Hershfield engineered the critical MEP systems, lighting, security, life safety, and data communications systems serving the data center.

DATA CENTER CAMPUS MASTER PLAN

Douglasville, GA



130
ACRES

3
BUILDING CAMPUS

300 MW
SUBSTATION

**DUE DILIGENCE, MASTER
PLANNING, DETAILED
ENGINEERING**

Morrison Hershfield was retained as the Prime to complete site due diligence, master planning, and detailed engineering for a 130-acre, three-single-story building campus. The plan includes provisions for all site features, access, comms, environmental, and utilities to support the full build-out, including a new 300 MW substation.

FOUNDED on technical excellence and ethics.

OUR RICH HISTORY of diverse projects provide exposure to emerging trends in process and design technologies spanning different industry sectors, keeping us ahead of the curve. We regularly adapt and integrate these technologies into solutions for our clients. Our passion to design and build our projects right the first time is recognized throughout the industry and in our communities.

#11
BUILDING DESIGN
+ CONSTRUCTION
Data Center Giants

▲ Building Design and Construction Magazine: Ranked #11 on the list of Data Center Giants: Engineering and EA Firms, ranked by North American revenue.



75+
Years in Business
Serving North America

1000+
Number of Full Time,
In-house Employees

100%
Employee Ownership

90%
Annual Revenue from
Repeat Clients

26
Offices Across
North America and India

WE ARE A MARKET LEADING engineering firm delivering innovative, sustainable, cost effective and technically sophisticated solutions for both horizontal and vertical infrastructure. We are anchored by exceptionally responsive technical experts, thought leaders and high performing employees across North America. Our concentrated approach to the clients and markets we serve ensures that we deliver the value our clients demand.

When our founders established this consulting practice in 1946, they set high standards of ethics, technical excellence, and client service. These standards have become the hallmark of Morrison Hershfield. We continue to be guided by our values of integrity, accountability and mutual respect, and believe in continuous improvement, quality and teamwork.

Contact us to make your vision a reality.



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People • Culture • Capabilities

morrisonhershfield.com