From Concept to Completion

How AI-Powered Generative Design is Transforming Electrical Design Workflows

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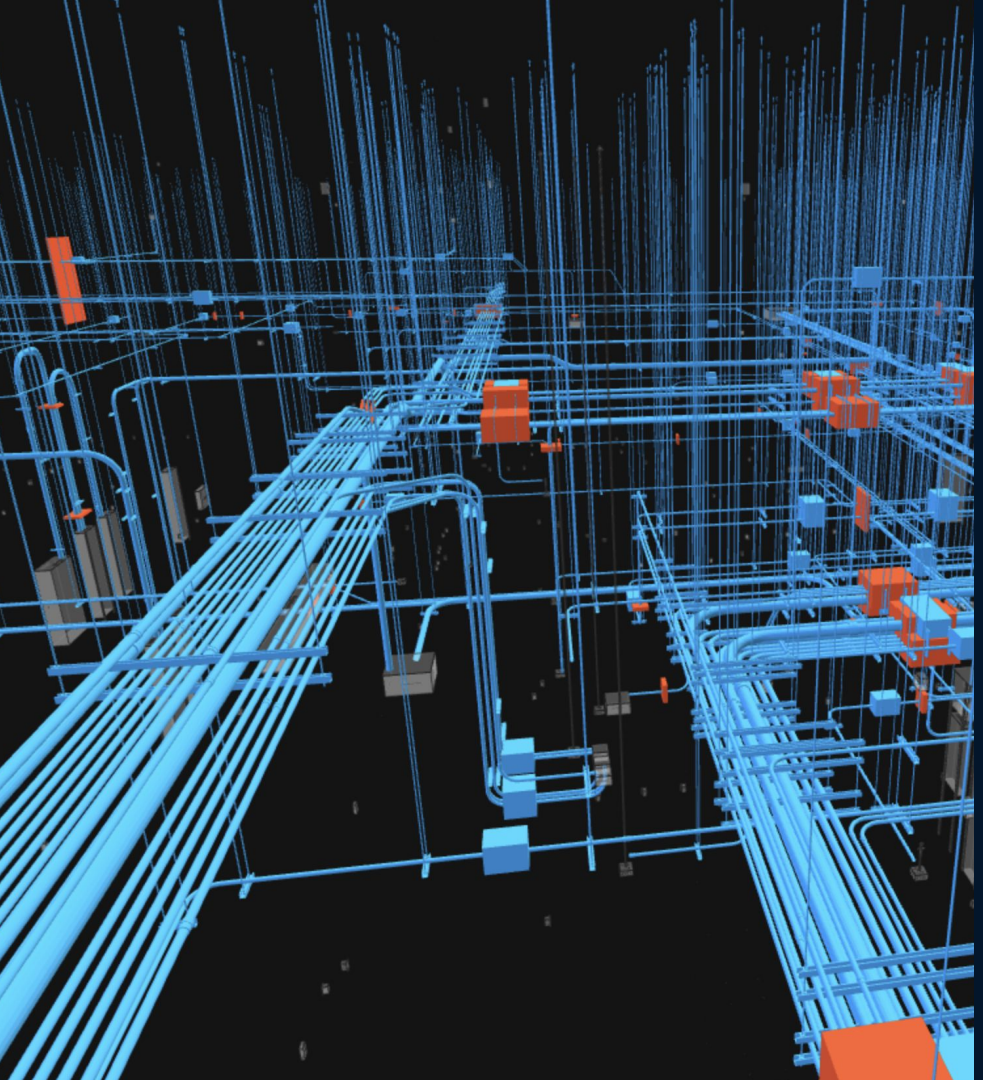


WHAT WE'LL COVER

AI in Construction
Spatial AI
Augmenta Intro
Customer Case Study
How ACP Works
Our Vision
Q&A

THE REALITY CHECK

AI Adoption in Construction: The Reality

Significant usage, mixed satisfaction, notable readiness gap

65% of construction professionals have **neutral or low trust** in AI outputs

74%
Use AI weekly
Individuals

6.95/10
Satisfaction score
Individuals

53%
Still experimenting
Companies

68%
Not AI-ready
Companies

Source: Placer Solutions, A.I. Excellence in Construction Survey (2025)

WHAT'S HOLDING THE INDUSTRY BACK

Why Are People Skeptical?

Preconstruction and office workflows show highest ROI. Field adoption is lagging.

Data Privacy	Highest	Proprietary project data, IP leakage
Overreliance	High	Loss of critical thinking and field judgment
Inaccuracy	High	Schedule and profit impact from rework
Transparency	Elevated	Black box decisions erode trust
Job Displacement	Moderate	Workforce and role concerns

Source: Placer Solutions, A.I. Excellence in Construction Survey (2025)

WHERE AI IS SHOWING UP TODAY

Common Uses of AI in Construction

Each has real upside. Each has real limitations.

Analysis & Reporting

- Environmental and performance simulations
- Sustainability and financial data export
- Scenario analysis at scale

Design & Generation

- Floor plan generation
- MEP systems autorouting
- Reuse past projects for design intelligence

Coordination & Collaboration

- Live multi-trade collaboration
- Fabrication optimization
- Clash detection and resolution

So what makes Spatial AI fundamentally different?

THE CORE DISTINCTION

Why Spatial AI Is Fundamentally Different

LLMs generate words. Spatial AI navigates 3D physics, building codes, and constructability.

Text-Based AI (LLMs)

ChatGPT, Claude, Copilot, etc.

Best for:

- Writing documentation
- Research and retrieval
- Proposal generation
- Code assistance

When wrong: Typos, awkward phrasing, retry the prompt

vs

Spatial AI / Generative Design

Augmenta, Transcend, TestFit, ALICE

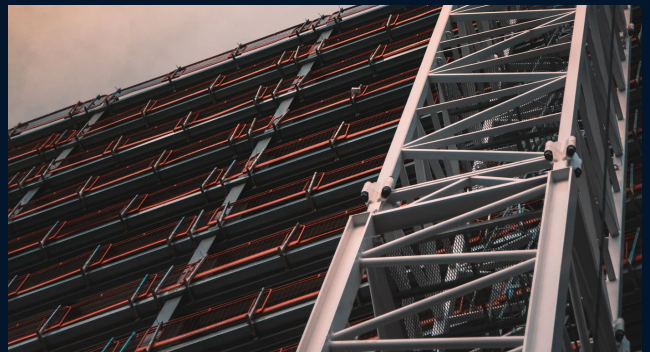
Must account for:

- Physics: gravity, loads, support, clearances
- Multi-trade coordination and clashes
- Building codes: NEC, NICET, IBC, local AHJ
- Constructability and prefab readiness

When wrong: $$$ change orders, delays, work stoppages

Sources: Transcend Report (2025), Augmenta Case Study, Industry Analysis

Augmenta is building AI that **automates the design of core engineered systems** - empowering you to work faster and at lower cost.



THE FUTURE OF DESIGN

From requirements to fully coordinated, constructible, and ready to build at the click of a button.

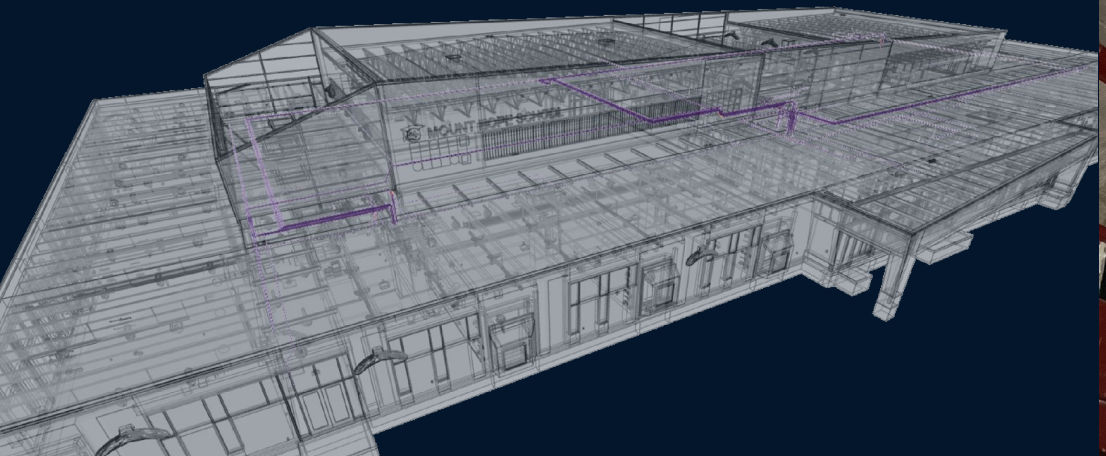
Fully coordinated and detailed designs - in hours.

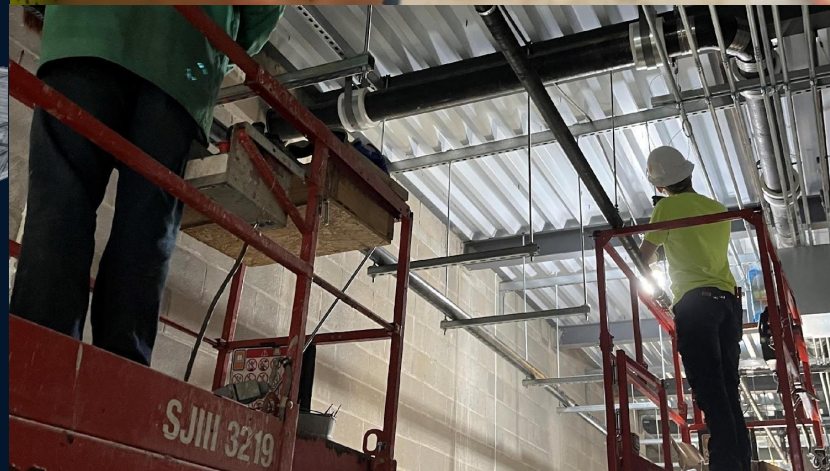
Augmenta

C&R ELECTRIC

Two consecutive school projects

1. Mt. Hope Elementary
2. Willow Elementary





Projects and Scopes

	Mt Hope	Willow
Size	50,000 sq ft	80,000 sq ft
Configuration	Single K-5 building	4 buildings, single service + solar
Conduit	11,000 linear feet	40,000 linear feet
Complexity	Standard overhead routing	Racks up to 30 pipes (3/4" to 2.5")




CASE STUDY: C&R ELECTRIC

Two Projects. Compounding Results.

Back-to-back K-5 elementary school builds.
Same team, same platform, better results the second time around.

	Mt. Hope Elementary	Willow Elementary	Change
Set Up Time	**8 hrs**	**4 hrs**	⬇️ **50%**
Time Savings	**25%**	**40-50%**	⬆️ **2x**
Hours Saved	**100+**	**320**	
Total Time with ACP	—	**80 hrs (2.5 weeks)**	
Manual Estimate	—	**300-400 hrs (6-8 wks)**	

*modeling work completed mid 2024

"With ACP, it took about two full weeks. With manual modeling, we expected 300 to 400 hours of drafting time."
Travis Terrell, BIM & VDC Director, C&R Electric

What contractors are saying

“The Mt. Hope Elementary School project represents a significant step forward in how we approach educational facility construction. We are always seeking innovative methods to deliver high-quality, efficient buildings for the communities we serve, and with Augmenta’s help, this school is a shining example of that commitment.”

— Andrew Dobbs PM, The Christman Company

"We witnessed remarkable time savings, and our prefabrication-ready drawing time was cut down by a full month. Augmenta is a game-changer for efficiency. It's the next logical step to get fabrication out the door faster and more accurately.”

— Kyle Sponseller, VP C&R Electric

“I think ACP is a game-changer for the electrical contracting industry. After using it on two projects ... it makes things faster. It takes all this wasted time off their hands. You can figure out your time savings ahead of time. You can figure out how much you’re going to need of everything and how much it’s going to cost.”

— Travis Sorrell BIM/VDC Lead, C&R Electric

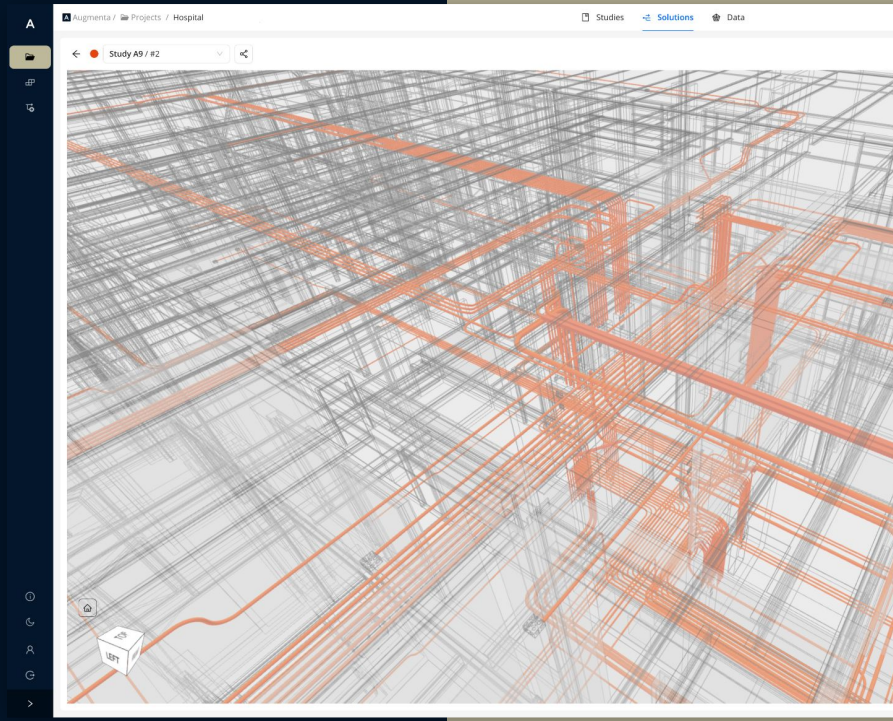
Augmenta Electrical

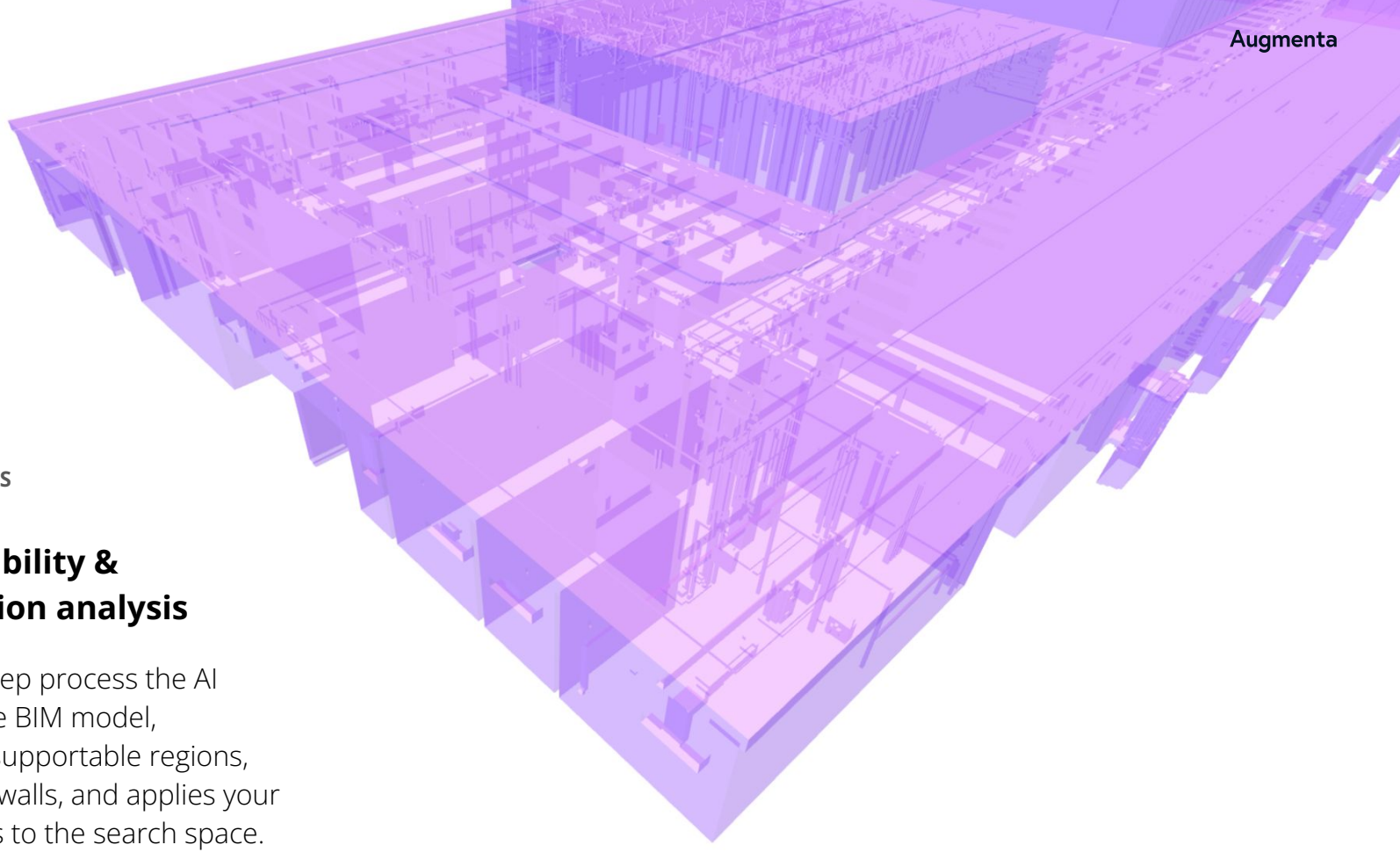
AI-powered routing, modeling and coordination for overhead conduit.

Significantly cuts time to initial model population.

Integrates directly into Revit, with minimal change to your workflow.

Easy to use, meaning everyone on your team can do more.

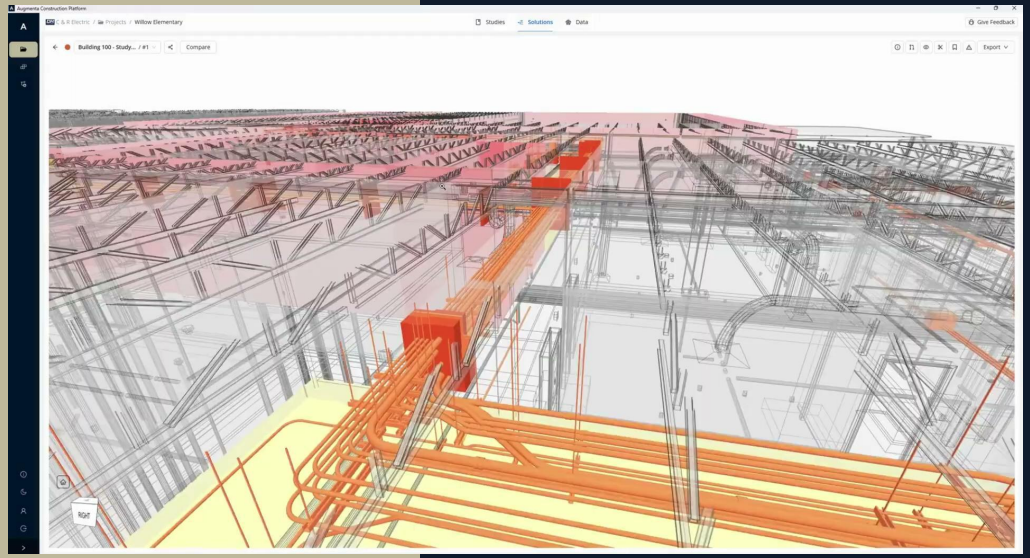




HOW IT WORKS

Supportability & penetration analysis

In a multi-step process the AI analyzes the BIM model, identifying supportable regions, penetrable walls, and applies your design rules to the search space.

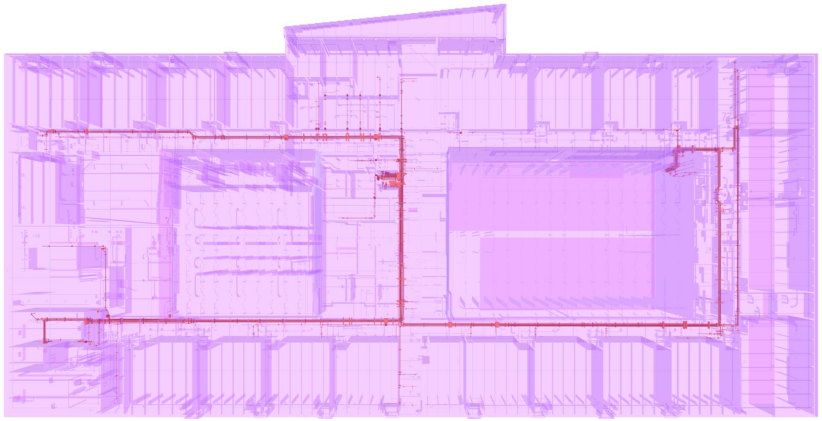


HOW IT WORKS

Routing Optimization

Next, ACP searches for multiple routing options in parallel, optimizes the rack layout, and coordinates against the background model.

Routes are optimized to minimize length, bends, penetrations, cost and install time.



HOW IT WORKS

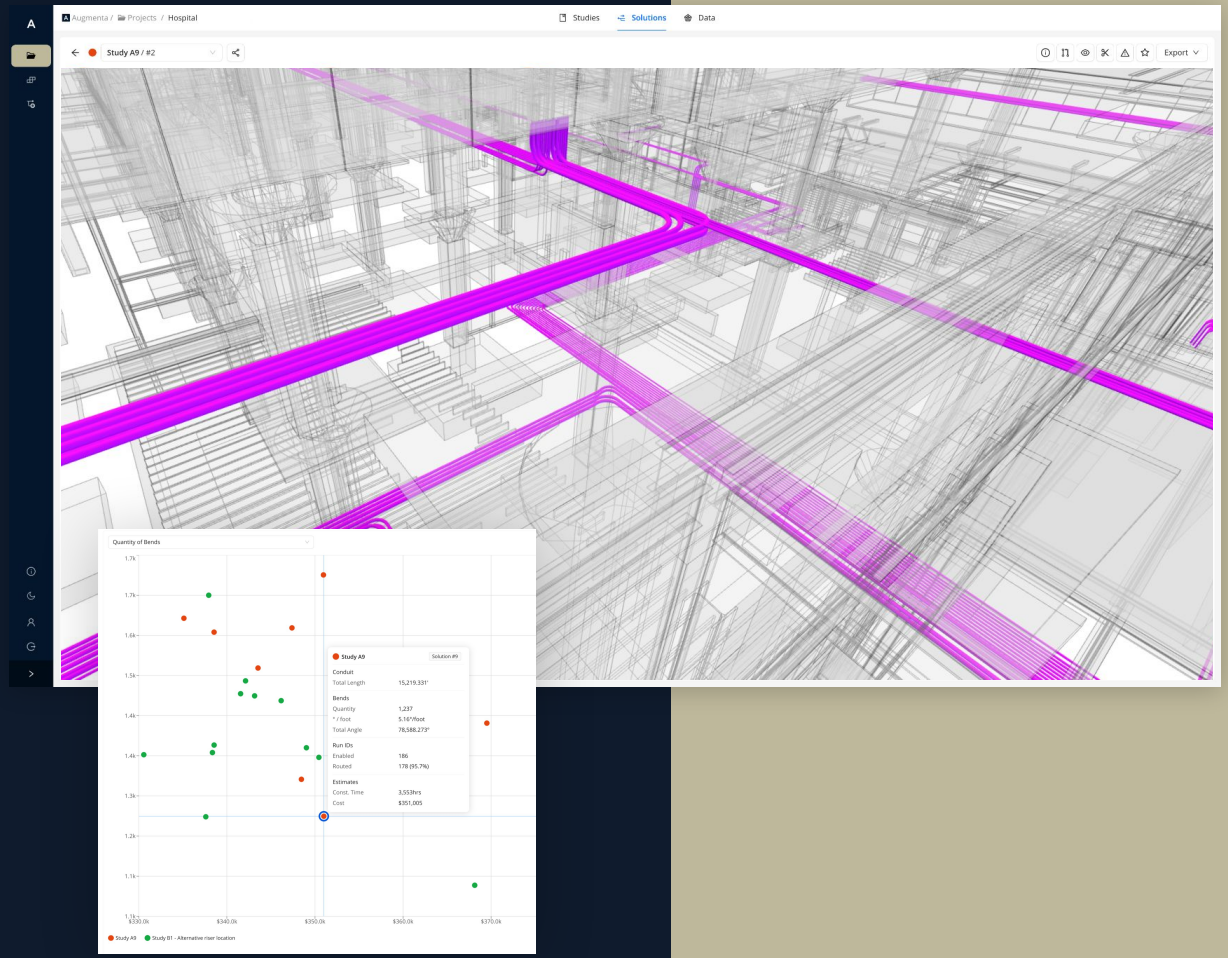
Route generation, rack optimization and coordination

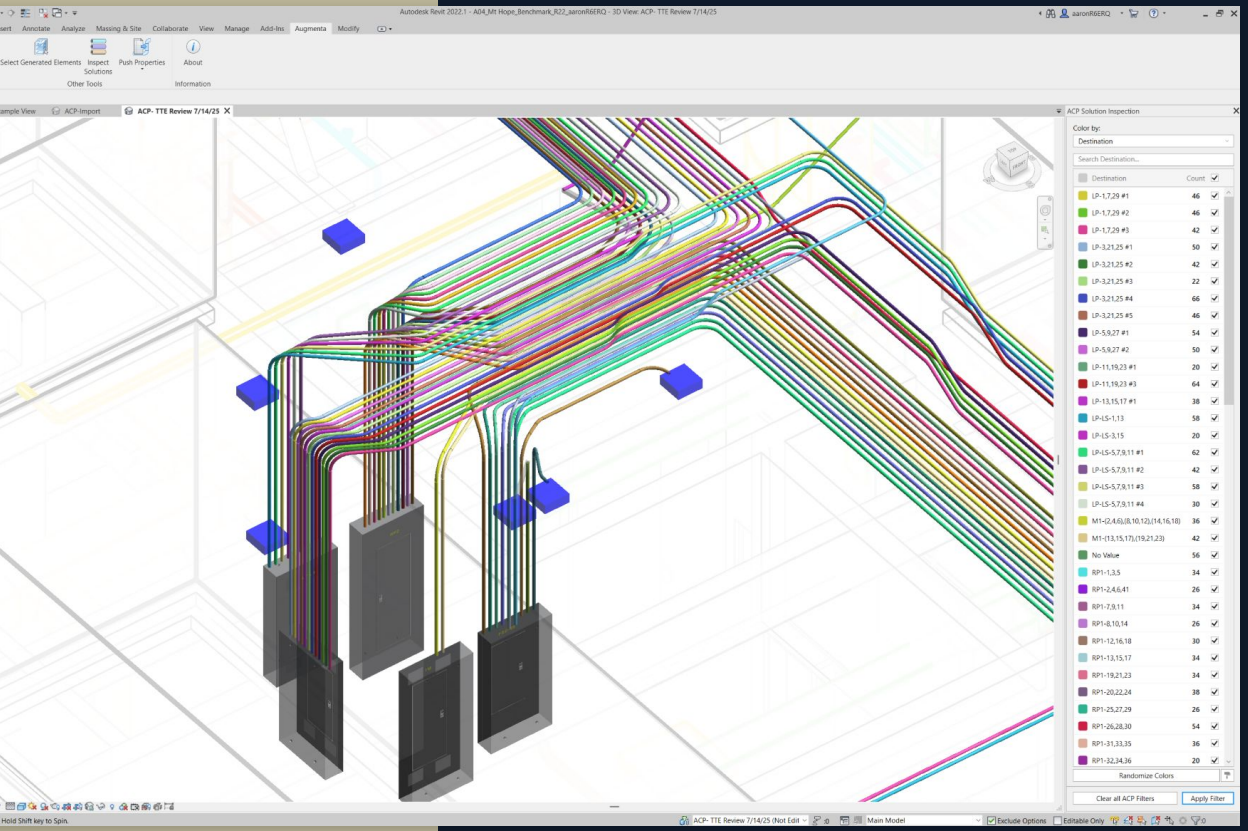
Next, the AI searches for multiple routing options in parallel, optimizes the rack layout, and coordinates against the background model.

Routes are optimized to minimize length, bends, penetrations, cost and install time.

Review your solutions

Compare solutions using time and cost estimates, and preview designs in 3D before exporting them to Revit.





Solutions are ready to edit and detail in Revit

Export directly to Revit for further editing, coordination, and detailing.

ACP's in-Revit analysis tools make complex models easy to understand and edit.

CASE STUDY

Healthcare Facility

Manual Modelling Time:

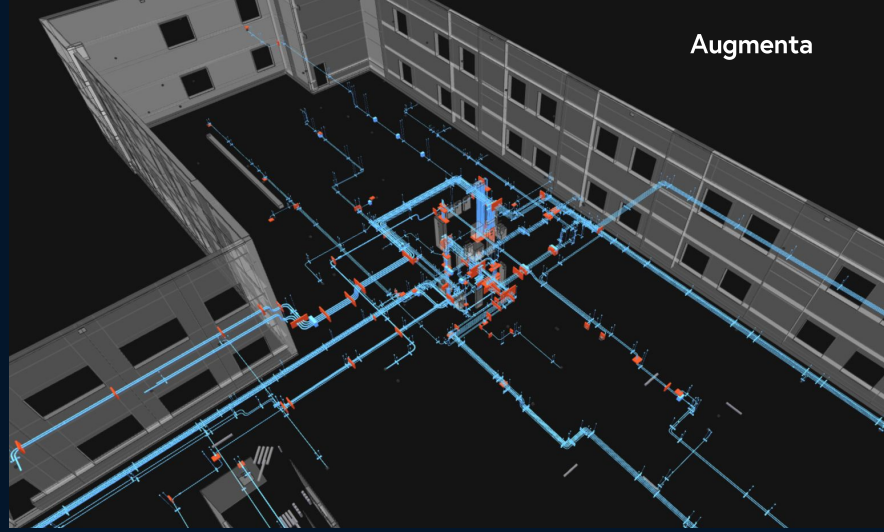
216hrs

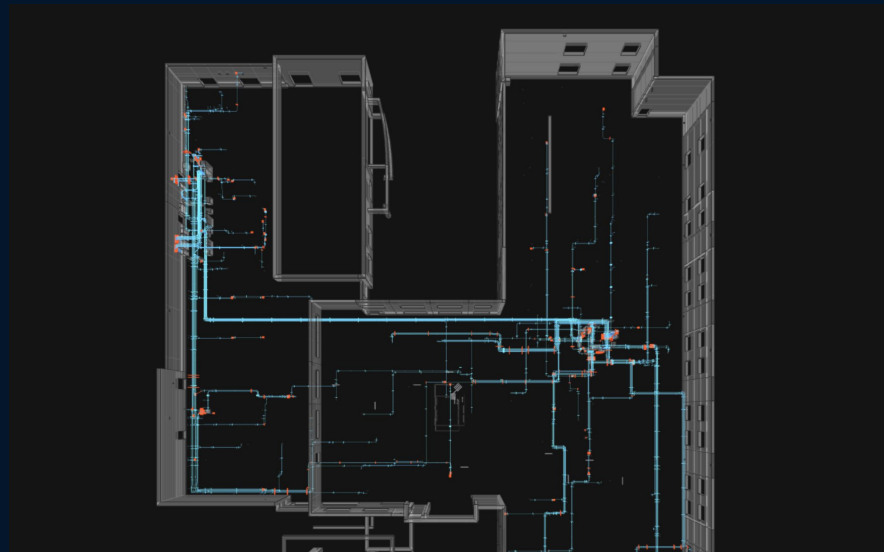
Active time with ACP:

103hrs

16,129’ (3 miles) of overhead conduit in a single generation

*modeling complete in 2024





CASE STUDY

Two-Story Data Center

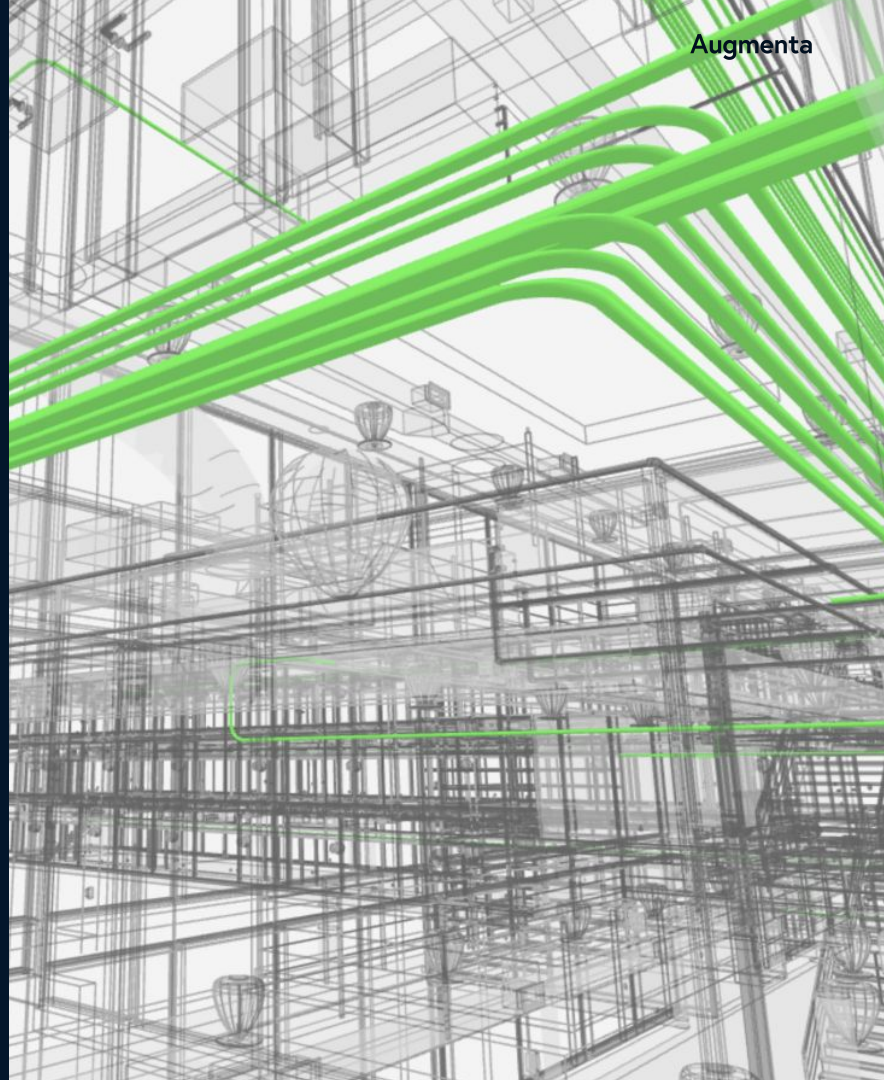
Manual Modelling Time:

320hrs

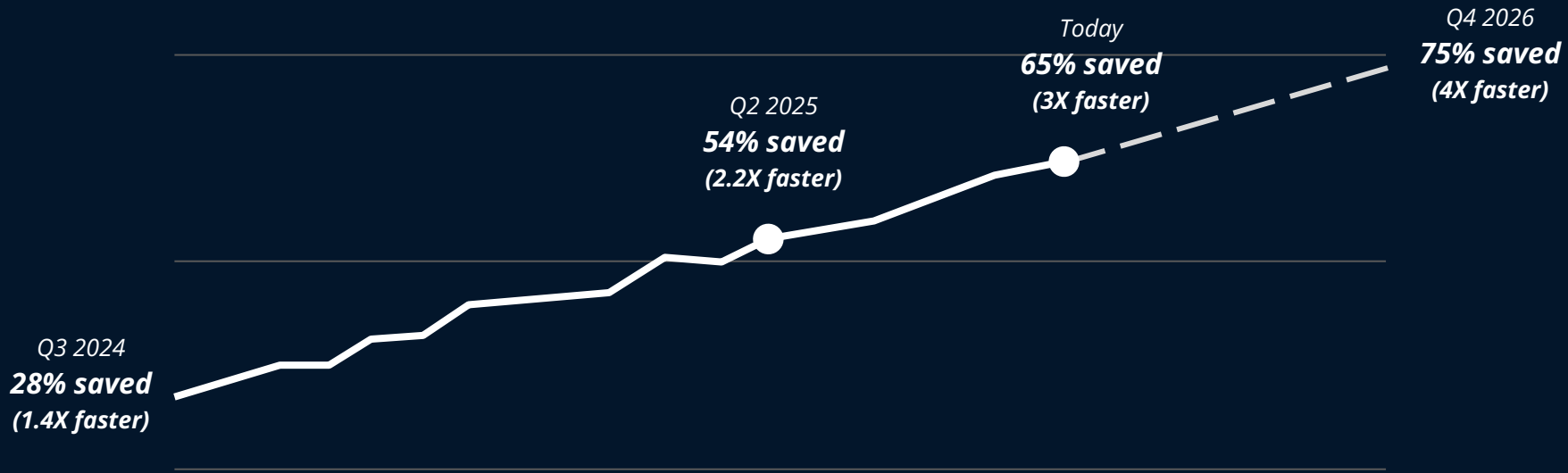
ACP Result:

96hrs

Feeders ~90k LF, Branch ~13k LF
703 Targets, 693 runs
Size: ~330,000 Sq Ft



Modeling 3X faster with Spatial AI



Faster every month, with constant improvements
that reduce setup and edit time.

Deep industry roots, unwavering commitment

Our support team brings extensive backgrounds in construction trades, project management, and technology implementation—grounding every partnership in real-world expertise and relentless dedication.

Don Rasmusson

Grew up in construction and has 20+ years experience with BIM workflows for construction.

Chris Summers

30+ yr electrical industry leader: Field/Project Mgmt, VDC leadership for complex industrial, healthcare, & data center projects.

Mike Meyers

Former electrical site superintendent turned BIM specialist with 20+ years of experience.

Sunny Watts

15+ years helping teams streamline BIM and prefab workflows through expert training and consulting.

Robert Martinko

Electrical Engineer, 10+ years starting up BIM teams for electrical contractors.

Alberto Lopez

20yr Electrical/Construction expert, transforming BIM projects through skill and innovation.

The design and construction platform of the future

Now

Next

Future

Electrical → Mechanical → Plumbing → Structural

Our long-term roadmap is ambitious - to deliver a new generation of design tools that fully automate the design of MEP/S systems.

Explore AI-driven routing and coordination, today.

Learn more at augmenta.ai

sales@augmenta.ai