



 **AUTODESK** Construction Cloud



# How Miller-Davis Company Leverages Autodesk Construction Cloud to Drive Efficiencies on a Complex Montessori School Project

Headquartered in Kalamazoo, Michigan, Miller-Davis Company (Miller-Davis) is a full-service construction company that provides general contracting and construction management services across the commercial, higher education, K-12, government, healthcare, industrial, and nonprofit sectors. With more than 100 years of experience, Miller-Davis prides itself on adopting cutting-edge technology and partnering with leading specialty contractors to deliver high-quality services to their customers.

As users of Autodesk AEC Collection and BuildingConnected within Autodesk Construction Cloud™, Miller-Davis wanted to expand their use of the unified platform, deploying Autodesk Build and Pype AutoSpecs to meet tight timelines and coordinate with multidisciplinary teams on a high-end Montessori School Project. The 85,000 sq ft project based in Traverse City, Michigan, features a gymnasium, two classroom wings, and an administration wing and has many high-end features and detail.



### Customer Snapshot

FIRM SIZE: <500  
FIRM TYPE: GENERAL CONTRACTOR  
REVENUE: \$80 MILLION  
FOCUS AREA: COMMERCIAL,  
INSTITUTIONAL  
HQ: KALAMAZOO, MI, US

### PHASE:



### CAPABILITIES:

- Project Management
- Field Collaboration

### OUTCOME:



## Implementing New Construction Management Tools to Foster Greater Collaboration

With any construction company, evaluating and implementing new technology can be a challenge. But for Miller-Davis, the team takes an unique approach by aligning people, process, and technology to ensure successful adoption. The company has a technology committee that evaluates different construction management tools on the market to see which will best support and augment their existing workflows.

Ariel Castillo, Strategic Process & VDC Specialist at Miller-Davis Company, and Pete Hill, Project Executive at Miller-Davis Company, are an integral part of this committee, driving digital transformation and technology innovation at Miller-Davis.

“It’s about understanding our pain points and then evaluating technology solutions to choose the best construction management tool that will alleviate those challenges to optimize our workflows and improve project outcomes,” says Castillo.

Previously, the team noticed gaps in their workflows and processes with the construction management solution they were using. Miller-Davis’ leadership team challenged Castillo and Hill to find a state-of-the-art solution that would help their company grow, attract new talent, and build relationships with subcontractors. That’s what led them towards partnering with Autodesk to adopt Autodesk Build and Pype AutoSpecs on the Montessori School project.







“Autodesk is investing heavily to create a one-stop-shop platform that connects data and has interoperability between solutions. With the availability of Autodesk Construction Cloud, we started thinking about the possibilities of having a common data environment and more seamless integration between the solutions we use,” says Castillo. “The Montessori School project was selected as the pilot due to its size, scope, and schedule, which would allow us to test the full capabilities of Autodesk Build.”

### **Why It’s Important to Choose a Technology Partner**

In undergoing its digital transformation and changing the way they work, Miller-Davis wanted to invest in a technology partnership.

“We wanted to align ourselves with a technology partner that is invested in our long-term growth strategy and works closely with our team to create pathways to success when adopting new solutions,” says Hill.

With a dedicated account team at Autodesk, Miller-Davis created a custom onboarding plan to understand how to best implement Autodesk Build and define which workflows to optimize. “It’s about taking a systematic approach to implementation, without boiling the ocean,” says Hill. “It’s about understanding where you are, where you want to be, and the path to get there.”

By working hand-in-hand with Autodesk, Miller-Davis has access to beta features and can provide real-time feedback on the product’s functionality. “It’s important for our team to understand features and product roadmaps to better plan our adoption and rollout strategy across the organization. Having that visibility and ability to push for modules will help us grow and is one of the main reasons we chose Autodesk as a partner,” says Castillo.

### **Taking the Right Approach to the Project from the Start**

Even at a company like Miller-Davis, with a culture built around innovation, change can be challenging. Convincing their people and partners to adopt a single solution and change their processes required a deliberate and thoughtful adoption strategy.

“It’s important to have the right people to create a standardized program that drives consistency across the company. That’s the first step. You can’t just throw technology over the fence and expect it to be adopted,” says Castillo. “It’s about customizing the solution to fit your workflows, creating standardized operating procedures, and holding training sessions to ensure that teams are comfortable using the tool and using it correctly to ensure project success.”

The Miller-Davis team partnered closely with Autodesk



to ensure a successful rollout of Autodesk Build to contractors in the field. “We had virtual meetings where we reviewed the capabilities and process for RFIs and submittals using our newly defined workflows,” says Hill. “So far, the team has been able to easily migrate to the new system as it’s very intuitive and easy to use.”

To ensure consistency across the organization as they scale the use of the products, Miller-Davis created a digital strategy that could be accessible company-wide. Having standards in data capture across their projects will result in higher-quality builds for their clients while helping Miller-Davis refine and optimize technology use across their projects.

### **How a Common Data Environment Provides Greater Collaboration across Project Teams**

With project information stored and accessible on a unified platform, it removes confusion and adds another level of transparency across teams. Over 80 people have access to Autodesk Build on the Montessori School project. And with so many moving parts on the project, having access to information anytime, anywhere, and from any device eliminates the risk of teams not having the most up-to-date information, which can cause rework, schedule delays, and cost overruns.

“Autodesk Build empowers our teams to work more efficiently and have a higher level of coordination and communication. As construction projects become more complex, having one common data environment where we can get all project information and not waste time juggling with multiple platforms will benefit all project members,” says Castillo.

With RFIs and submittals in Autodesk Build, project teams have one platform to get all information. This means teams can easily manage the process and quickly see the status of an RFI or submittal, next steps, assignee, and track progress. Additionally, by managing RFIs and submittals within Autodesk Build, teams can easily reference other project information, including Files, Photos, Sheets, and Issues within the RFI or submittal, providing full context to all team members which helps to streamline the overall process.

“Our previous construction management solution did not have these capabilities and served more as a file storage system. With the flexibility of Autodesk Build, we can seamlessly manage RFIs and gain more visibility into the process, drive accountability across teams, and get to the resolution faster. This removes the risk of working from outdated information that can cause unnecessary rework if materials are not installed correctly,” says Hill.



In addition to a more streamlined and transparent RFI and submittals process, centralizing meetings in Autodesk Build creates more organized and actionable meetings for Miller-Davis. With the Meeting tool, the project executive creates the meeting agenda right in Autodesk Build. During the meeting, notes are recorded, action items are assigned, and due dates are set. The team can also include project references, such as specific Issues, RFIs, and submittals that need to be discussed, making it easier to find information in real-time to enable faster resolution. This process centralizes all information eliminating the cumbersome and inefficient process and provides a deeper level of accountability across teams.

“Now teams don’t have to upload the log ahead of meetings and can come more prepared. This equates to more value-added conversations around specific issues during meetings,” says Hill. “With RFIs, submittals and meetings centralized in Autodesk Build, we can focus on issues that matter most, rather than administrative tasks.”

### **Automating the Submittals Log Process to Streamline Project Delivery**

Miller-Davis uses Pype AutoSpecs to modernize the tedious, manual workflows traditionally required with submittal log creation, such as copying and pasting data from specs to create a submittal log. Pype AutoSpecs provides immediate access to all project requirements and product data, automating a critical workflow with incredible accuracy by scanning specification documents and creating a comprehensive draft submittal log. By automating this process, Miller-Davis reduces risk and human error and can spend more time reviewing and understanding the project’s requirements.

“Pype AutoSpecs helps get our projects started faster by leveraging machine learning and AI to automate submittal log creation. What used to take us a week now takes two days,” says Hill. “We have a tight timeline for the Montessori School project. By streamlining this process, we can get requirements to the subcontractors sooner, allowing us to move the project forward quicker and transfer the submittal log directly into Autodesk Build.”

Miller-Davis also uses Pype AutoSpecs to filter specifications by subcontractor, allowing them to create customized “mini-logs” specific to what each subcontractor needs to provide. And since the process

is automated, they can deliver the mini-logs to their subcontractors sooner than their previous process would have allowed.

“Our goal is to develop positive relationships with our subcontractors to foster a cohesive team that provides consistently high-quality work,” says Castillo. “Using AutoSpecs to provide subcontractors with submittal logs tailored to their scope of work helps improve communication upfront, setting everyone up for success.”

In addition to streamlining the submittal log generation process, Miller-Davis is also using Pype to improve project closeout with document collection and digital turnover package generation. With these features, subcontractors can upload and submit documents as their scope of work is completed, helping Miller-Davis keep the needle moving during the closeout process.

“These systems help enhance the digital handover process that we provide to the owner,” says Hill. “This methodology helps us be more competitive when competing for future jobs as we can present more project details to ease operational costs for the owner.”

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**-Pete Hill**  
Project Executive,  
Miller-Davis





## The Value of Construction Technology Beyond the Jobsite

With Kalamazoo being a smaller city, word of mouth is how general contractors get invitations to bid on contracts.

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Aside from creating better relationships with subcontractors and owners, innovative and collaborative tools will help attract new talent.

“There are many exciting opportunities across the architecture, engineering, and construction industry. Adopting cutting-edge technology removes manual processes and helps optimize the way we work. And we use this as a selling point to help retain, attract, and onboard new talent in the industry. Connected solutions will differentiate our team from the competition and help us achieve our goals by providing high-quality deliverables to our clients,” says Castillo.

## Moving Towards a Future of Continued Innovation

With a connected construction management tool in place, project executives can increase the number of jobs they’re on while ensuring that teams stay on schedule and under budget to meet their goals. The only way that this is possible is by using a unified solution that makes their teams more efficient with access to real-time data to reduce risk, improve communication, and better document site issues.

“The Montessori School Project is just the start. With Autodesk Build and Pype, the automated systems allow us to have more time to focus on the important activities at hand instead of repetitive tasks that these software can perform. These tools will ensure that Miller-Davis continues to excel every day in providing high-quality deliverables to our clients,” says Hill.

Miller-Davis is on a path to continuous improvement by adopting technology to grow the company, attract new talent, and win more work. With its unique approach to aligning people, process, and technology, Miller-Davis can achieve its goals and continue adopting technology to improve its workflows.