



Leaning Into the Best Technology



These text excerpts are from a webcam interview recorded by Todd Danielson, the editorial director of *Informed Infrastructure*. You can watch the full interview by visiting bit.ly/38popd4 or scanning the accompanying QR code.



Todd Danielson: Can you briefly describe your career and education before WSB?

Jason Kreger: I've been in the civil engineering and construction industry for nearly 20 years. I've worked in materials testing, construction staking, design, construction observation and inspection, contract administration, and now in CAD management.

Danielson: What do you do now at WSB?

Kreger: My current role at WSB is the Civil 3D CAD manager. That means I'm here to configure and optimize our Civil 3D design environment. I'm here to help build skillsets for our end users and help them grow as designers. I'm here to also troubleshoot technical issues we come across during the design process.

Another part of my role is to optimize and document our CAD workflows and standards. And I'm here to work with our engineering managers and IT team to make sure deliverables are getting out the way they're supposed to be and our system configuration works well with our IT infrastructure.

Danielson: Can you briefly describe WSB?

Kreger: We're headquartered in the Twin Cities in Minnesota. We have between 500 and 550 employees. We have engineers and land surveyors and landscape architects, of course, but we also have some unique roles: environmental scientists, pipeline inspectors, visualization specialists and many more. As far as projects are concerned, we're often involved in street reconstruction design, construction inspection, land-surveying activities, master planning for parks, water-quality projects, traffic studies and many more. We're a full-service firm, and we strongly believe in forging relationships with our clients—partnerships really—as we work together to build what's next in infrastructure.

Danielson: What challenges did you face at WSB or in your projects, where you felt your firm needed to look at Autodesk and U.S. CAD solutions?

Kreger: As a firm, we truly believe in leaning into the best technology we can to support our clients and their

endeavors. Part of that solution is Autodesk and their products. In that journey with our clients, we are sometimes faced with new challenges. One of those challenges came in the form of a renewable-energy project we were part of recently—a solar project.

If you think about a solar farm and picture the solar panels, they're elevated above the ground. Those solar panels need to be placed at least 3 feet above the ground, but not more than 5 feet, so part of the design process is analyzing whether or not that condition is true, whether or not that tolerance has been met. And anybody can do that if they're using any kind of civil engineering software.

The tricky part is designing the corrective grading that helps fix the problem when it's *not* in tolerance. You can't really do that dynamically. So sitting in the office one day, thinking about this problem, I decided it might be worth a try to leverage computational design to solve this problem in a dynamic format. So I called U.S. CAD, and we had a conversation about computational design and some of the inputs from my project, some of the factors. They were able to help us develop a solution that took us through the computational design process and allowed us to dynamically build grading models that achieved the solution our client required.

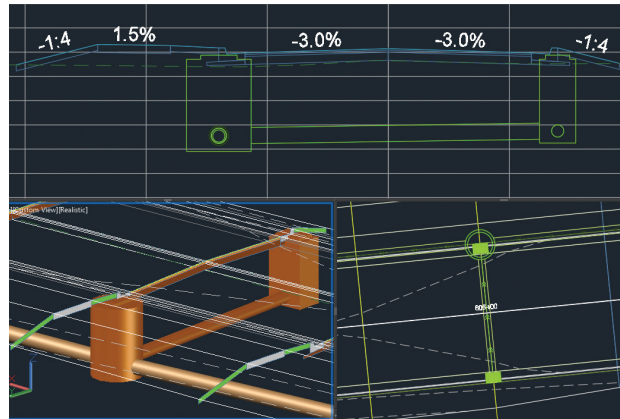
Danielson: Which Autodesk products do you use most and why?

Kreger: The backbone of our design program here at WSB—for our municipal and land development and landscape architecture teams—has been Civil 3D. We've been using that for a long time. But as we've continued to work with our clients, we've realized the need to enhance our abilities in the way of collaboration, visualization, stakeholder feedback, and more, so we've started to leverage additional components of the Autodesk AEC collection, things like BIM 360, Navisworks, Plant 3D and InRoads. Those tools have really helped us grow as a company, and they've helped us support our clients in some pretty incredible ways.



Danielson: What results have you seen since using Autodesk products?

Kreger: As we look back in time, month over month, project over project, year over year, we continue to grow in efficiency. We continue to grow in quality. We've increased our level of collaboration. We're able to communicate designs more effectively. We're able to mitigate risk more clearly and easily by developing robust models. We're able to take that information, and hand it off to experienced



field inspectors and senior engineers, and they're able to do "constructability" reviews on the designs and solutions we're putting together to ensure there aren't conflicts when we go into construction. I think that's really important.

Danielson: So how has U.S. CAD helped you? What services or solutions have been most beneficial?

Kreger: U.S. CAD has been really beneficial to us in a lot of ways, probably most importantly to me. They offer unparalleled technical support. In fact, I was just emailing back and forth with them this morning about a problem I was having with an installation. So their technical support is really fantastic. Additionally, they've got a wonderful customer-success program that helps us plan long range, and it helps us facilitate better conversations with U.S. CAD about potential solutions that we haven't looked at yet, and that's been really valuable.

Danielson: Why did you choose to work with U.S. CAD over the other vendors in this market?

Kreger: When it came time for us to renew our subscription, we wanted to do our due diligence. We wanted to make sure we had the support and resources we needed to support our clients and all their endeavors. So when we spoke with U.S. CAD about continuing to work with them, they assured us—and we believed them—that they were going to be there for us day after day, problem after problem, solution after solution. And we felt very comfortable with that arrangement, and they have lived up to it every single time.

II