

## MEMO

Date: July 25, 2019

To: Eric Dill, Chief Business Official

From: Larry Adams, Director School Bond Projects

Subject: Replacement Options for Autodesk Constructware as the Bond Projects Program Project Management Information System.

### Background:

In 2005 the District approved a multiyear agreement for Constructware to replace a previous project management information system in use since 1998. At that time Constructware was the industry leader in web based applications focused on design and construction. Some of Constructware's advantages were: it operated in a web browser, it could be access from any location with web access, it integrated communication, cost management and document management, and it could be configured from an owner's perspective. It was an ideal application for use on multi-prime contract projects, enabling close collaboration with Architects, their consultants, inspectors and construction managers. Also, it required no support from the ITG department.

We currently use about 20 modules generally focused on managing projects, files, budgets, bids, contracts, purchase orders, invoices, applications for payment change orders, submittals, RFI's, CCDs, communications, etc.

In 2006 Constructware was acquired by Autodesk, Inc. which has now discontinued product development. We have been advised that licenses may not be extended beyond our current license expiration in December, 2020.

### Search:

Over the last few years, we developed a needs assessment and gap analysis of our current systems.

Weakness in the current Constructware application included:

- No native capability to work with building information models or 3D drawing files.
- No direct integration with email.
- Limited access to certain data, no page customization and a closed report writing system.
- Limited options to align documents and reports to facilitate processes with the Business Office, the County and the Oversight Committee.

One result of the gap analysis was a license in early 2018 for Autodesk BIM 360 to enable 3D building information modeling capability. We successfully migrated drawing and specification file management and design review from Constructware to BIM 360 for the Agnews projects. We are working now to transition the Peterson Middle School Pool and Locker Building Project drawings to BIM 360.

For other needs we conducted a survey of the software systems and platforms that may replace Constructware. We focused on products that adapt to owner needs for program and project management, design and construction. We looked at the following companies and products.

- Autodesk (BIM 360 modules in development)
- CMiC (used by Swinerton Inc.)
- Procore (used by Strawn)
- Newforma (used by LPA)
- Bentley Systems (Project Wise, EADOC)
- Trimble, Inc. (Spectrum, Viewpoint, e-builder)
- Oracle (Unifier)
- Kahua

We used the following evaluation criteria:

- Alignment with existing programs and processes
- Scale of solution to our program size
- Effort and time to assess, implement, deploy and train
- Module by module comparison of features
- Level of product development
- Ability to address the gaps in our needs assessment
- Cost

#### Recommendation:

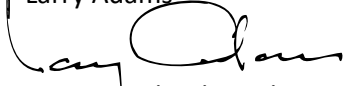
Based on our review we recommend proceeding with Kahua, Inc. We make this recommendation for the following reasons:

- The founders and many of the programmers on the Kahua team developed the original Constructware application. The user interface and structure of the application would be familiar to a Constructware user. The underlying technology, however is significantly different. The system is a platform. The platform supports the out-of-the-box core product modules. The platform also supports extensive customization by users using no-code or low-code tools or by professionals who can develop and deploy new applications (Apps) for use on the Kahua Platform. Another significant difference is that any company can license Kahua and then access the District's projects and data, subject to District permissions and controls. This reduces District administration effort and may reduce licensing costs.
- The scale of the product is in our range. The implementation we propose would not be a complete enterprise (ERP) system with financial accounting (such as CMiC used by Swinerton).
- Kahua has a standard framework and methodology for product integration. It is similar to the process used for Constructware. The process was very successful.
- Several product demonstration sessions were conducted. We think that all significant current use cases of our Constructware implementation can be accommodated in Kahua.
- Kahua has been actively developing the product. The support website shows between 5 to 8 product releases per year over the last 5 years. There have been 5 product releases in 2019.
- The most significant feature in addressing the needs in our gap assessment is access to data. The platform exposes District data in a manner that can be accessed directly or in reports. Reporting can be done within the Kahua report writer or by other report authoring applications. Reports

and forms that must conform to District standards are possible without numerous intermediate processes. Kahua also has up-to-date integration with e-mail and messaging applications. DocuSign is also integrated into document management.

- Finally, the annual subscription cost is similar to our current Constructware license cost. Fees are based on module use and can be matched to the features used. The proposed agreement is for one year with a limited number of users. If, for some reason, the product does not live up to expectations, we have options.
- <https://www.kahua.com/#>

Let me know if you have any questions

Larry Adams  
  
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