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SEAGEN, *BOTHELL, WASHINGTON*

# ASSET REINDUCTION TO MAXIMO EAM, ENABLED BY REALITY CAPTURE

**CASE STUDY:** ASSET MANAGEMENT & RELIABILITY

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## WHY CAI?

We were enlisted due to a critical challenge faced by the client—a stringent timeline for an Asset Induction initiative, with the goal of mastering assets into Maximo EAM data loaders up to the System Level by July 31, 2023, aligning with commitments made by Facilities and Maintenance leadership to senior management. Our involvement stemmed from the significant rapport established by Nick Armstrong during initial discussions. Nick articulated his capability to assemble a diverse team of resources, encompassing local, remote, and offshore talent, to meet the client's timeline. CAI emerged as the preferred partner, instilling confidence in the client regarding our ability to meet deadlines and introduce new technologies for enhanced efficiency. What truly set us apart from competitors were the innovative technologies we proposed and the experienced team we assembled for the project, led by a senior project manager with extensive expertise in asset management and Maximo EAM integration.

## CLIENT CHALLENGES

The client had relied on a 3rd party facility management company to service this campus for 20+ years and desired to bring that support internally. They lacked the information and system maturity to enact this change and had been unsuccessful in the conversation on three separate internal projects.

**CLIENT:**
Seagen

**LOCATION:**
Canyon Park Campus,
Bothell, WA

**PROJECT DURATION:**
6 Months

**TOTAL PLANNED VALUE:**
$945,556.50 (Fixed Cost)

**TOTAL ACTUAL COST:**
$740,392.26

**FIXED PRICE GAIN:**
$205,164.24

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## PROJECT OVERVIEW

- Reality Capture Modeling
  - 8 Buildings (1,3,4,5,6 7,10,11 & 14) scanned with a NavVis VLX3 for a total of 750,000 square feet to create a Digital Twin
  - Modeling with overlay of room numbers performed by the team to build out the Digital Twin
- Drawing Verification and Asset Lists
  - Utilized an artificial intelligence program to contextualize the laser scans based on existing engineering drawings.
  - Field teams verify drawings in the field.
- System and Asset Master Data Development
  - Used a web-based application for equipment receipt verification to capture all field information for assets.
  - Used a combination of optical character recognition from pictures of name plates captured in the reality scan and field verification to create asset records.
  - Turn over all asset records the client in the desired format to be loaded into the Enterprise Asset Management (EAM) system.
- Maintenance and Calibration Plans
  - Built out maintenance and calibration job plan for the site for importation into Maximo EAM.
  - For utility systems, the job plans were developed with the detailed to a step-by-step instruction to eliminate the need for future paper-based SOPs.
  - All preventive maintenance and calibration plans were built for annual schedule that includes the job plan intervals and are level loaded across a calendar year to balance site labor requirements.
  - PM and Calibration job plan were loaded into Maximo EAM with the initial start date.
- Performed asset induction includes asset master data and asset criticality.
- Back-end data loaders created for the Maximo EAM application.
- Created a new Spare Parts Stocking Strategy for the site.

| Maximo EAM Enrollment by the Numbers | | | | | |
|---|---|---|---|---|---|
| | Location | Asset | Items | Job Plans | PM |
| **B1** | 362 | 410 | 238 | 167 | 167 |
| **B3** | 349 | 391 | 166 | 115 | 115 |
| **B4** | 107 | 120 | 105 | 24 | 24 |
| **B5** | 340 | 340 | 340 | 340 | 340 |
| **B6** | 444 | 454 | 248 | 183 | 183 |
| **B7** | 7 | 7 | 7 | 7 | 7 |
| **B10** | 134 | 141 | 129 | 21 | 21 |
| **B11** | 141 | 163 | 141 | 31 | 31 |
| **B14** | 20 | 39 | 0 | 2 | 28 |
| | **1,904** | **2,065** | **1,374** | **890** | **916** |

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## PROJECT SUCCESS

The project was successful in accomplishing the scope, schedule and budget and turned over the fully populated digital twin to the client. They continue to use that twin for facilities planning and management, saving 1.5 FTE annually in support. This project was presented at the 2024 ISPE Facilities of the Future conference and was the subject of an expert panel at the 2024 Interphex Show in New York.

## TESTIMONIAL

I met with Austin Brown on Thursday who was our client at Seagen when we delivered the asset induction with the digital twin over the summer. We met to discuss our upcoming presentations to ISPE Facilities of the Future and Interphex and we hadn't really talked since September when we handed over the project and I provided the team with an hour training to use the system. I am delighted to say Seagen is using this tool every day for facility planning, field verification, and orienting new employees and vendors. They've also been using the tool in most of their meetings with Pfizer to show capabilities and capacities. Their team has been tracking their time savings in the tool and it is saving them about 3,000 hours a year.

We discussed some additional features they would like, and they line up nicely with the investment plan outlined for 2024 and some new ideas that we'll prioritize. Austin believes the features we discussed would easily triple their time savings annually.

We intended to use the approach to deliver a project with a remote team and while I hoped Seagen would continue to use it; I wasn't terribly optimistic as new technologies like this can come in with a bang and then tail off. They've gone well above my expectations and have integrated into their daily workflows and providing some great insights for our R&D efforts in the area.

— Nick Armstrong, Project Head, CAI

**ARE YOU READY?**

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