PAGE Performance by Design

PAGE turned to SWAPP to transform a preliminary sketch into a fully detailed SD documentation set—delivering speed, accuracy, and flexibility under pressure

Results

270,000 Sq. ft
Student Housing Designed in 3 Weeks

40%
Team Optimization Achieved

80%
Reduction in Manual Workflows

Page/

From Concept to Schematic Design in 3 Weeks — How PAGE Freed Up 40% of Their Team While Delivering a 270,000 sq ft

Industry
Architecture (Education, Residential)

Region
Across the United States - From New York to California

Design Platform
Revit, ACC

Challenge
PAGE needed to deliver a 270,000 sq ft student housing project from concept to schematic design in just 21 days. The fast pace, frequent client changes, and repetitive production tasks stretched internal resources and risked slowing progress.

Purpose-Built Student Accommodation (PBSA) with SWAPP's AI-Driven Automation.

With a large-scale Student Housing Project for 1,000 students and only three weeks on the clock, PAGE turned to SWAPP to transform a preliminary sketch into a fully detailed SD documentation set—delivering speed, accuracy, and flexibility under pressure.

About PAGE

PAGE is a multidisciplinary design, architecture, and engineering firm with 1,300+ talented staff and offices across the U.S. and abroad. With over 125 years of experience, PAGE is known for delivering innovative, high-performance solutions that balance creativity, precision, and purpose.

The firm specializes in complex projects that benefit from its integrated disciplines — including architecture, engineering, planning, and consulting — and that make a significant impact on the communities they serve. PAGE leads projects in healthcare, higher education, government, and commercial sectors, always with a focus on excellence, sustainability, and long-term value.

Project Overview

The project involved the development of a **270,000 square foot PBSA**, designed to support a wide range of on-campus student housing functions — including residential units for 1,000 students, study areas, lounges, fitness facilities, shared kitchens, and outdoor community spaces. The facility's size and operational complexity along with strict site requirements demanded an extremely high level of accuracy in modeling and documentation.

At project kickoff, PAGE had only a **basic concept 2D sketch**. But the deadline was firm: deliver a full set of Schematic Design — including plans, sections, and elevations — **within three weeks**. To meet this goal without sacrificing quality, PAGE brought in **SWAPP**, a specialist in AI-powered building modeling and documentation.

Challenge

The PBSA project presented a unique blend of architectural, operational, and logistical hurdles. PAGE needed to deliver quickly — while staying responsive to ongoing design input and maintaining their exacting quality standards.

Key challenges included:

- **Resource constraints:** PAGE's internal team was already operating at capacity. Scaling with additional resources or outsourcing documentation would have added cost, risk, and time.
- **Intense timeline pressure:** The required turnaround — from concept to full Schematic Design in just **21 days** — was significantly shorter than industry norms, especially for a project of this magnitude.
- **Tedious, repetitive workflows:** A significant portion of the work involved manual, time-consuming tasks — such as repetitive modeling re-modeling, plan updates, and documentation formatting — that are essential but divert skilled architects from higher-value design work. These processes are often repeated multiple times during a project, especially when client input is evolving. Without automation, this type of production work can slow momentum and create unnecessary bottlenecks.

Ongoing client-driven changes: During the SD development period, the client provided frequent updates and revisions to the layout and spatial configurations, which had to be reflected in near-real time.

Solution

To meet the ambitious deadline and manage the project's complexity, PAGE turned to **SWAPP** to lead the modeling and documentation process from end to end. SWAPP's solution combined **AI-driven automation**, **close collaboration over an ACC hosted Revit model**, and a robust **quality assurance (QA) layer** that ensured speed did not come at the expense of accuracy.

Here's how the process unfolded:

1. **AI-Powered Modeling from Concept**
   SWAPP's advanced automation technology rapidly generated a detailed building model based on PAGE's initial sketch. The system handled everything from built elements

modeling to furniture and equipment population, allowing PAGE to skip weeks of manual drafting.

2. **Real-Time Iteration and Change Management**
   Throughout the project, client feedback and design changes were integrated directly into the evolving model. SWAPP's control over the full modeling environment enabled **agile, same-day updates**, ensuring that the Revit model remained aligned with the client's evolving vision without delay.
3. **Automated Documentation Generation**
   Using the finalized model, SWAPP automatically produced a complete set of Schematic Design drawings, including floor plans, sections, and elevations. This seamless generation process eliminated versioning issues and reduced the time needed for formatting and reviews.

End-to-End Quality Assurance
Every output went through SWAPP's built-in QA process, which cross-checked for dimensional accuracy and internal consistency. These automated and manual checks provided PAGE with peace of mind — knowing the deliverables were not only fast, but also precise and detailed according to PAGE standards.

The Impact: 40% Reduction of Architectural Staffing

Thanks to the combination of SWAPP's technology and PAGE's design leadership, the teams were able to achieve outstanding results across multiple fronts:

- **Timely delivery, under pressure**: The entire 270,000 sq ft Purpose-Built Student Accommodation — from initial concept to documentation handoff — was completed within the challenging three-week window.
- **Operational efficiency at scale**: Automation reduced the number of manual touchpoints and repetitive workflows, freeing PAGE's architects to focus on oversight and decision-making.
- **Full flexibility in real time**
  Frequent client-driven changes were integrated immediately, enabling continuous alignment with evolving project goals.

Smarter staffing and team utilization

The original staffing plan was reduced by 40% with the help of SWAPP. This allowed PAGE to reallocate architectural resources to other active projects, optimizing project delivery and improving overall team utilization across the firm.

Wayne Craig

Principal, Director of Design Technology , Page

“SWAPP allowed us to rethink how we deliver large-scale projects. By automating the most time-consuming parts of our workflow, we accelerated delivery, reduced staffing needs, and maintained the high standards our clients expect.”

Previ... (https://swapp.ai/success-stories/moregroup/) ://swapp.ai/success-stories/aha-i-s-mixed-use-complex/)

FAQ(https://swapp.ai/faq/)

Who We Are

About(/who-we-are/#about)
Leadership(/who-we-are/#leadership)
Careers(/careers/)

Resources

News(/news/)
Blog(/blog/)
Community(https://swapp.ai/community/)

Contact Us (/lets-talk/)

© 2025 SWAPP.AI