

## SITEOPS® GRADING OPTIMIZATION

**Project Description:** Supercenter store location for Fortune 50 consumer retailer

**Civil Engineering Firm:** BFA

**Site Location:** Central Iowa

**Site Size:** 35 acres

**Building Size:** 254,000 square feet

**Number of Parking Spaces:** 900

Civil engineers at BFA faced demanding terrain when planning a new supercenter store for a leading consumer retail chain.

“The property presented several challenges, due to over 40 feet of relief across the site, existing utilities, and other constraints,” says BFA project manager Rick Rohlfing. “We were initially anticipating a large amount of haul-in fill material. We had previously prepared a rough grading and site plan. From our first grading plan, we knew we could lower the finished floor elevation. However, to determine the appropriate Finished Floor Elevation (FFE) for a site balance, we would have had to rework the grading plan.”

BFA decided to run SITEOPS on the project. **Using SITEOPS grading optimization, the team at BFA was able to generate multiple grading scenarios in only two days.**

After a week, engineers had confirmed the early results. **The new plan would save hundreds of thousands of dollars on the grading estimate.** Before SITEOPS, arriving at that same design alternative would require far more time.



## MEANS BIG CLIENT SAVINGS

“We were able to utilize SITEOPS software to generate and analyze multiple grading scenarios to quickly find a cost-effective grading solution for this particular site,” explains Rick.

Changing the FFE was essential to achieving this savings. Because SITEOPS’ advanced optimization engine examines billions of potential solutions to find the best grading plan, it can determine the most efficient, cost-effective FFE. Previously, even the most experienced civil engineers relied on some degree of guesswork.

**“We feel that this software can provide a strong competitive advantage for our large retail clients and their consultants.”**

**— Rick Rohlfing, BFA Project Manager**

The engineers at BFA have built a reputation as innovators who are dedicated to the client’s bottom line. SITEOPS optimization technology is a key market differentiator for them. This is especially important given that the large retail client for whom this site was designed is famous for its emphasis on cost savings.

“The process of determining the optimal finished floor elevation and grading plan is expedited by allowing us to look at many design scenarios in less time,” says Rick. “We feel that this software can provide a strong competitive advantage for both our large retail clients and their consultants.”

This is game-changing technology. BFA is now part of the beta program for SITEOPS Multi Pad, which adds support for properties with multiple building footprints. By embracing the power of SITEOPS optimization, BFA demonstrates how it has emerged as a leader in its field.

