

Spartan Stadium North End Zone Addition

Michigan State University
East Lansing, MI

Based on an interview with Jason Vanzee, Michigan State University & Sean Hollister, Barton Malow Company

12 month schedule

54 user group / owner /
design / construction
team meetings

\$1M savings through value
engineering

INSIDE:

■ project information

■ successes

■ lessons learned

■ insights into:

value engineering

open door policy

developing solutions

■ interview excerpts



PROJECT INFORMATION

PROGRAM

- 52,000 SF scope
- Two-story addition to the existing stadium

TEAM/BUDGET

- \$24,500,000 total project cost
- Architect:
Integrated Design Solutions
- Construction Manager:
Barton Malow Company

CHALLENGES

- Aggressive 12-month schedule
- Restricted budget

SUCCESSSES

- ✓ Throughout the 12-month project, the user group, ownership team, design team and construction team participated in 54 meetings together. Putting people face-to-face helped the team to stay on top of issues.
- ✓ Team members respected one another, enjoyed working together and felt comfortable voicing their opinions.
- ✓ With an expedited schedule, sharing information allowed team members to provide input and move the project from design into the construction phase.
- ✓ Accomplishing the owner's desired result within a restricted budget was the biggest challenge. The collaboration process and Value Engineering items ensured the team reached the desired outcome.

LESSONS LEARNED

DOs

- ✓ Encourage face-to-face interaction with project team members to foster communication and collaboration.
- ✓ Ensure the owner has a clear vision of what they do or do not want.

DON'Ts

- ✗ Involve the construction manager too late. Value engineering items could be headed off sooner.



INSIGHTS INTO:

VALUE ENGINEERING

- Value Engineering accounted for over \$1,000,000 in cost savings:
 - Removed full height cavity drainage in masonry walls.
 - Changed dimension stone in tunnel to CMU.
 - Changed exterior limestone and granite to materials that looked equally expensive as what was designed, but cost \$300,000 less. Obtained 30 different material samples in an effort to achieve the client and architects' desired result.
 - The design team and construction team worked closely together to redesign the MEP systems. Changed HVAC system to a standalone system.
 - Changed flooring materials in back of house areas from tile to carpet as deemed appropriate.

OPEN DOOR POLICY

- All project information was shared among the group and all team members were cognizant of the same information.
- 100% of the project details were reviewed and coordinated with the owner, design and construction teams prior to implementation.
- Throughout the project, the team utilized Barton Malow's budget numbers and Michigan State University's budget numbers. Although not typical, this approach allowed for increase collaboration.

DEVELOPING SOLUTIONS

- When the team experienced problems or challenges, all project members reviewed the issues, evaluated their impact and provided input.
- Subsequently, the end user heard all options before making decisions.



“Across the board everything has been shared, everything has been communicated.”

“There is no way we would have gotten to the point that we are at now without that collaboration.”

“Everybody knew their place and could speak their voice.”

“They [problems] were all talked about. They were all brought to a head and resolved.”