

Football Stadium to Rodeo Venue: The Process

A Case Study at Cal Poly

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This paper is a reflection of the construction process concerning Cal Poly's 77th Poly Royal Rodeo in Alex G. Spanos Stadium. The paper is an overview of how the project came about, the process of planning, new knowledge, deliverables, lessons learned, and how the experience applies to working in the construction industry. April 5-9, 2017 was the execution of a monumental process. 40,000SF of filter fabric, 2 semi loads (1500 sheets) of plywood, and 200 truckloads of dirt were laid on the live grass of Spanos Stadium to set the stage for a rodeo production unlike most people see in their lifetime. A full scale arena, concert stage, and VIP tent accompanied the grounds of a stadium to seat 11,000 people. Saturday night April 8, 11,000+ people rocked the event after being rained out Friday night. Cal Poly, the Rodeo Program, numerous professionals, and the San Luis Obispo community achieved history in hosting the largest collegiate rodeo to-date. All of this was accomplished in a 96 hour window.

Keywords: Poly Royal Rodeo, 40,000SF, 1500 sheets, 200 truckloads, 96 hour window

How Project Came About

The project of transforming Cal Poly's Spanos Stadium into a rodeo venue hosting the 77th Annual Poly Royal Rodeo began as many other processes do, from a vision and necessity.

Planning began shortly after the 76th Poly Royal ended in mid-April 2016. Coach Ben Londo and his Rodeo Team had sold out their venue at the rodeo grounds on campus with over 6,000 in attendance, and it became obvious a resolution was necessary to accommodate spectators for the next year.

The rodeo grounds at Cal Poly had experienced significant renovation over the past few years, yet the efforts were focused on the functionality of the grounds with respect to the livestock and team members. Renovating for spectators had been in the plan, requiring a great deal of work and larger budget. The grounds only hosts one major event annually that requires space for 5,000+ people. For Poly Royal 2017 the venue would not only require enough seating for spectators, but also the infrastructure in place to manage the production.

Spanos Stadium had the infrastructure necessary to host Poly Royal. These aspects included seating for 11,000, ticket sales and security, vendor space, a centralized location, and ability to transform into a rodeo venue. This is where my opportunity came in. To work on a project like this is not only fascinating because of its uniqueness, but also because of its learning potential as a construction management major senior project.

Process

Coach Londo had already started the process of understanding the construction project when I came on board. The first step was to understand our existing conditions and the potential solution to our end goal. The Stadium's field is live grass, meticulously maintained by the grounds crew. Obvious concerns were apparent in preserving the integrity of the field, as it would be used throughout the remainder of spring for other events. The greatest asset acquired in managing the construction process was Randy Spraggins and his men from Special T Tracks. They did this kind of work for a living; transforming venues into dirt arenas of one form or another.

As the process continued to evolve, more players became involved. From Cal Poly university groups to contractors and trucking companies. A great step in this process came in a meeting with President Armstrong, where the determination was made in not *if* this project would get underway but that it *would* be completed. This opened up several doors and a mindset focused on solutions, rather than restrictions. I want to note this point because I find it very important with any project and process people may find themselves in. Having a clearly defined statement and understanding that the project *will* happen is critical to the success and temperament of anyone involved.

Logistics are everything. This is where a bulk of the time was spent in filling out paperwork, organizing specs, ironing out details, and maintaining communication between several people. With the construction process we needed to define the process of covering a live grass field, the specs of what dirt we needed, the equipment necessary and feasible to use with the location and regulations in place, a timeline of construction, manage/mitigate foreseeable issues, acquire traffic control, and determine manpower of installation. Of course further issues arise as each component is worked on; details become important in some areas and minimized in others. For instance, feeding the truck drivers and labor crew became very important in the middle of the night, but the exact cycle time of trucks wasn't as necessary to have pinpointed; we knew how many trucks we could possibly use and let them run.



*Figure 1: The CAT equipment used for the project
Source: Cal Poly Rodeo Facebook page*

New Knowledge

The amount of knowledge I learned spreads across the board because of my involvement. I learned that a vision can become reality with tenacity and hard work; having the right people in your corner makes this much more possible. A project like this had a lot of moving parts and was a side job for many people, so making sure their efforts were appreciated and recognized is very important to maximize the level of effort they put forth.

I also learned there are vital safety nets to pay attention to and put in place, for worst case scenario situations. Coach Londo purchased rain insurance that paid out Friday evening after the rain threshold was passed, saving the potential losses of the performance that evening.

With the transformation of Spanos being the first run at a production like this, even in many regards for veterans like Randy who do this work for a living, many of the choices made were a best guess. Without benchmarks to go off, only so much knowledge can be acquired in ultimately making a decision. The important aspect of this is accepting that things may go differently and having a plan for several outcomes. The whole idea is to manage difficulties, the more pre-designed ideas of solutions, the less you are caught off guard and the better you can focus efforts on unforeseen obstacles.



*Figure 2: The entrance for all construction equipment and materials
Source: Google Maps*

Our largest obstacle was weather and time. Rain had been in the forecast, and would've canceled the entire production if not for the measures taken to preserve the construction process. Luckily we were able to complete the bulk of the project in good conditions and no equipment had to work in the rain. Straw waddling, sealing the arena, and tarping were the main focus in preserving the integrity and providing opportunity for the rodeo to take place Saturday evening. Rain insurance and canceling the event Friday night saved the monetary loss and potential physical loss of the arena.



Figure 3: Arena Tarped for Friday Rain
Source: Hunter Reaume

Other new knowledge I was exposed to regarded learning to manage people. This is a soft skill I believe to be innate or absent; some are natural, others struggle to become efficient. With this project, several different types of people are involved and each has their own input. Learning to listen yet take things with a grain of salt is necessary to stay focused and confident, while also being willing to incorporate any useful information others provide. Everyone has their strengths, pushing them to excel in their specific areas is a very useful tactic in managing a project.

Applying New Knowledge to the Industry

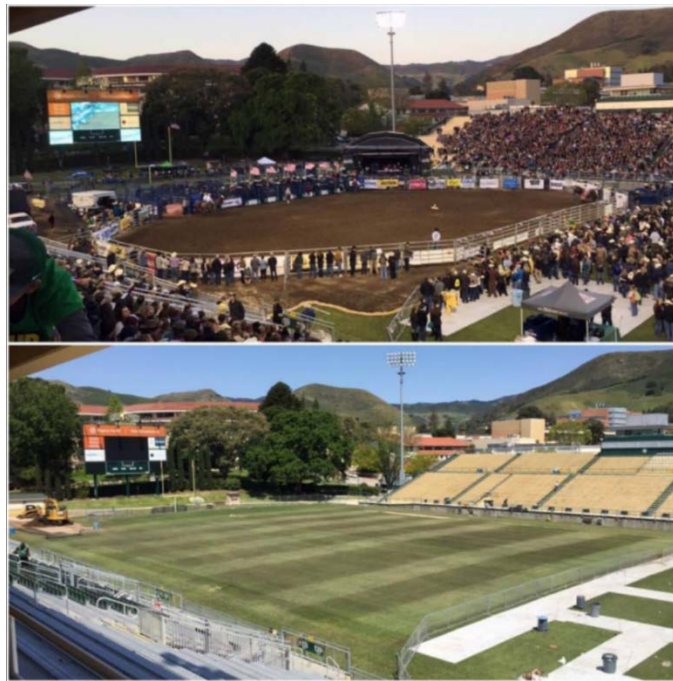
The knowledge from this project is useful in many ways. Specifically to the construction industry I would say I can apply the learned experience to be a better follower and leader. By this I mean you have to be willing to do both in order to good at either of them. Starting out I'll be learning and following more than anything, yet when given charge of a task I can lead with confidence and be able to ask realistic and specific things of those following me. Power is only useful in the hands of those who dont realize they have it or abuse it. Regardless of your level of seniority, the job needs to be completed and the more people feed off each other, working together, the better issues are managed, and the better the end result of a project will be.

Other tangible skills I can apply include developing a schedule in Project, creating and presenting presentations to varied audiences, and communicating with operators, loaders, and laborers. I believe communication is the most valuable skill to strengthen. Technology is useful in providing a platform to visualize ideas, yet clear communication and hard work is what creates the finished product. Being willing to jump in and become a part of the project physically also justifies the self-satisfaction of completing your task.

Deliverables

Throughout the life of the project, several documents were created in helping to convey information across parties. Numerous powerpoints, schematic drawings, schedules, and spec designs were drafted and recreated as the process evolved. The layout of the arena changed at least 3 times, along with the footprint, beginning time of construction, and other details of the production. Nonetheless, the fabric, plywood, dirt, and arena were installed in time for adjustments and ready to rock Saturday evening.

The project was based on a 96 hour window of grass coverage. Fabric went down Wednesday evening after sunset and the last piece was removed in time on Sunday. The field bounced back to its intended state. In the meantime we had accomplished history; spreading 40,000SF of fabric, 2 semis of plywood, 200 truckloads of dirt, selling out a stadium of 11,000 and creating the venue for the largest college rodeo to ever be produced.



*Figure 4: Top, during Saturday performance
Bottom, 10 hours after performance ended
Source: Cal Poly Rodeo Facebook page*

Lessons Learned

As with any process there is a learning curve and continuous room for improvement. Overall the construction process went well and we were able to manage the foreseen and unforeseen issues. Moving forward, there is opportunity to refine areas now that we have a benchmark to build from. Several different angles exist for added support. The campus wants to become more involved in the production of the event, so two advisory councils will be added providing individuals who will be much closer to full time with their involvement, at the very least Poly Royal will be their only concern.

Logistically, understanding the process from experience now, planning will involve better timing of crews, materials, number of trucks, scale of equipment, and crew size. The installation and removal of the fabric and plywood is the most labor intensive task and drives the front end as well as the tail end of the 96 hour window. By optimizing these processes and their timing, we can better control the timeframe of coverage.

Other information learned was from the advice of current rodeo venues and their committees. In contacting some of the most renowned individuals in the industry, we were able to put our best foot forward this year. In building these relationships, we will continue to build off their experience and expertise. Finding Randy Spraggins, rain insurance, scale of venue, and other details was largely influenced by the information provided from several professionals, our continued growth will be a sequential effect of their involvement. This support also included the numerous groups and individuals on campus who gave much of their time ironing out detail after detail. Getting this first production in Spanos under our belt was monumental in many regards, especially in the learning process for years to come.

Conclusion

Not only did this project pave the way for the Cal Poly Rodeo Team as a premiere program in the country, but for the University as a whole embodying the “Learn By Doing” philosophy. Other colleges, sporting venues, and committees can look at this example of what we did to produce an event of their own. The university, community, and outside professionals came together as one body in working on this project. For this concept to spread externally makes this project a success in more ways than completing a task, it creates an environment of cohesion.



*Figure 5: Aerial Photo of Saturday Performance.
Source: Cal Poly Rodeo Facebook page
Courtesy of twistaircinema*