

American Public Works Association

2015 Public Works Project of the Year

Tucson Convention Center

Division: 5-25M Category: Structures



Submitted By





2015 PUBLIC WORKS PROJECT OF THE YEAR Nomination Form

Deadline: January 30, 2015

Project Name

Project Completion Date

Must be substantially complete (90%) and available for public use as of December 31, 2014.

Public Agency

Project Category

- ☒ Structures
☐ Transportation
☐ Environment
☐ Historical Restoration/Preservation
☐ Disaster or Emergency Construction/Repair

Project Division

- ☐ Less than \$5 Million
☒ \$5 Million, but less than \$25 Million
Million ☐ \$25 Million to \$75 Million
☐ More than \$75 Million

Managing Agency

Name

Title

Agency/Organization

Address (if post office box, include street address)

City, State, Zip

Phone/Fax

Email

Primary Contractor

Name

Title

Agency/Organization

Address (if post office box, include street address)

City, State, Zip

Phone/Fax

Email

Primary Consultant

Name

Title

Agency/Organization

Address (if post office box, include street address)

City, State, Zip

Phone/Fax

Email

Continued...

Please address each of the following areas in your supporting documentation, adhering to the sequence below when possible.

- Completion date contained in contract. Any time extensions granted should be addressed in the submittal.
- Construction schedule, management, and control techniques used.
- Safety performance including number of lost-time injuries per 1,000 man-hour worked and overall safety program employed during the construction phase.
- Environmental considerations including special steps taken to preserve and protect the environment, endangered species, etc., during the construction phase.
- Community relations – a summary of the efforts by the agency, consultant, and contractor to protect public lives and property, minimize public inconvenience, and improve relations.
- Unusual accomplishments under adverse conditions, including but not limited to, adverse weather, soil, or site conditions, or other occurrences over which there was no control.
- Additional considerations you would like to bring to the attention of the project review panel, such as innovations in technology and/or management applications during the project.

Note: Supporting documentation is limited to 20 pages, exclusive of photographs and nomination form. Submit six hard copies and one electronic copy on CD or thumb drive. Please include high quality photos and the completed nomination form in the electronic copy. All submittals should include the nomination form and supporting documentation.

Include a separate description in less than 100 words, and in layman's terms, why this project is worthy of special recognition. Describe the key award criteria that this project satisfies. This description will provide the basis for the Awards Ceremony overview and any Arizona Chapter publicity.

Nominated by

(Can only be nominated by managing agency)

Name

Title

Agency/Organization

Address (if post office box, include street address)

City, State, Zip

Phone/Fax

Email

Key Team Contact Person *(provide contact information for team member who will coordinate attendance at the awards ceremony with the committee should this submittal be selected).*

Name

Title

Agency/Organization

Address (if post office box, include street address)

City, State, Zip

Phone/Fax

Email

These materials should be hand-carried to:

Jeanne Sapon, Awards Committee Chair
DBA Construction, Inc.

1833 South 59th Avenue
Phoenix, AZ 85043

jsapon@dbaconstruction.net

If using U.S. Postal Service, send to:
DBA Construction, Inc.

P.O. Box 63035, Phoenix, AZ 85082

January 16th, 2015

Steve Pageau, P.E.
URS Corporation
333 E. Wetmore Rd., Suite 400
Tucson, Arizona 85705



RE: American Public Works Association Project of the Year Award, Structures \$5 million - \$25 million

Awards Committee Chair and members of the selection committee:

We are proud to submit the Tucson Convention Center Renovation project for the APWA Arizona Chapter Project of the Year Award. This significant project provided a highly anticipated overhaul to the beloved downtown facility, transforming the community's perception of what's possible. The almost year-long effort included some of the most efficient and effective building solutions currently available, while keeping the experience of a visiting patron at the forefront of every detail's design.

The GOAL:



The goal of this project is to enhance our visitor's overall experience, from the patrons to the performers. Renovations included the following:

Breezeways & New Entry
Flooring & Fixed Seats
House & Event Lighting
Signage - Arena & Site
Concession Stands
Rigging Improvements
Dasher Mounting Bolts
Digital Displays

Ice Floor Expansion Joint
Restrooms
Scoreboards
New Ceiling Tiles
Overall Paint
Curtains
Audio Upgrades
Electrical Upgrades

Details of the project's completion and additional considerations are included in the narrative of our response. Rio Nuevo Multipurpose Facilities District is thrilled to submit this project and the entire agency is positive you'll agree...the Tucson Convention Center is the Arizona Chapter's shining star in 2015, and definitely deserving of Project of the Year!

Sincerely,

Fletcher McCusker - Chair and Mark Irvin - Secretary
Rio Nuevo Multipurpose Facilities District
400 West Congress, Suite 152
Tucson, AZ 85701

520-623-7336
fjmccusker@gmail.com

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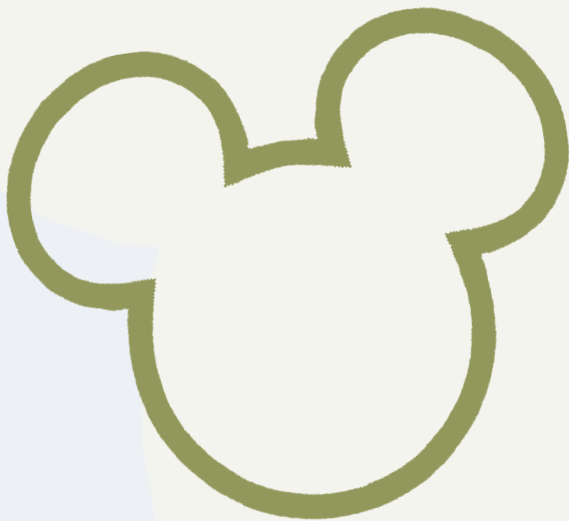
1	Construction Management Techniques
2	Safety & Awareness
3	Environmental Protection
4	Community Relations
5	Unusual Accomplishments
6	Special Conditions, Quality Control, Value Engineering & Construction Innovations

Appendix	Summary & Media Links
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The Show Must Go On!

This was not a typical project with an owner, architect, and contractor. This project was funded through a collaborative effort between the City of Tucson and Rio Nuevo Downtown Redevelopment and Revitalization District. Additionally, the staffs of the Tucson Convention Center, SMG (TCC Management), Swaim Associates (Architect), and GLHN (Engineer), and Concord General Contracting (Contractor) were all part of a highly collaborative team who worked diligently to meet the design criteria, demanding schedule and high level of quality required for a highly visible, public project.

The owner's representative was Elaine Becherer, with the City of Tucson. Elaine worked closely with Rio Nuevo to update them on construction progress. Concord and Swaim coordinated with TCC Staff and SMG to ensure all information was accurate accounted for when updating the owner on project status.



With Disney entering the facility for their production this added a new level of collaboration during the week they were in the facility. Concord had to ensure the concession stands were in working order for the event, health inspections were taking place, and fire inspectors were on site to guarantee the Certificate of Occupancy for the event.

Disney on Ice is the largest single production that takes place at the Tucson Convention Center each year.

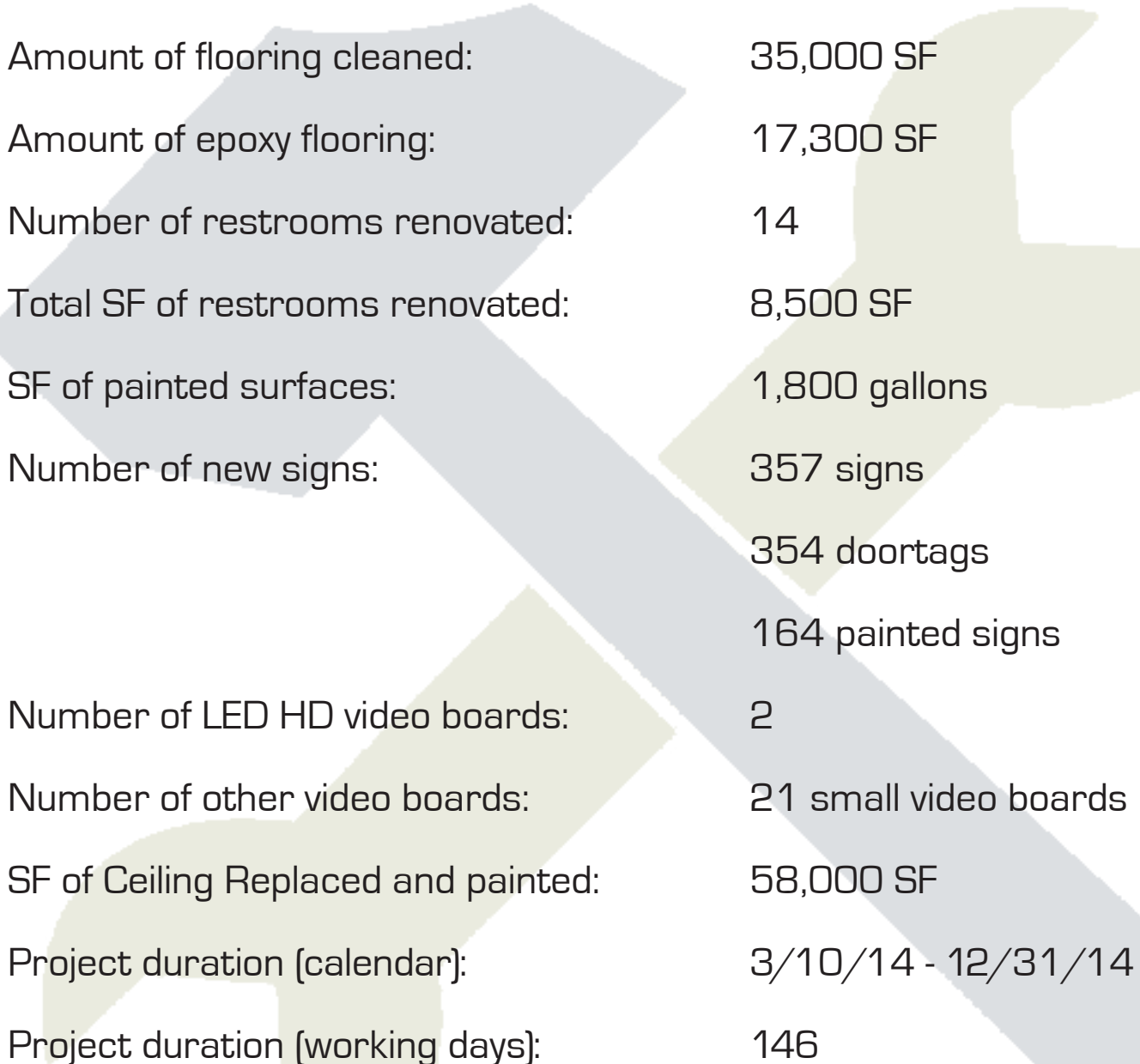
The Disney on Ice production started on October 6th with the new TCC Management, SMG, taking over on October 1st, 2014. This added a new level of involvement during a critical time in the project schedule. We successfully received the Certificate of Occupancy for the event and the show went on!

Effective construction management was necessary to ensure the city continued business as usual and that events scheduled far in advance were honored and held without issue.

Managing Construction - By The Numbers

Contracted Completion Date: December 31, 2014

Actual Completion Date: December 31, 2014



Number of lights replaced:	990
Amount of flooring cleaned:	35,000 SF
Amount of epoxy flooring:	17,300 SF
Number of restrooms renovated:	14
Total SF of restrooms renovated:	8,500 SF
SF of painted surfaces:	1,800 gallons
Number of new signs:	357 signs
	354 doortags
	164 painted signs
Number of LED HD video boards:	2
Number of other video boards:	21 small video boards
SF of Ceiling Replaced and painted:	58,000 SF
Project duration (calendar):	3/10/14 - 12/31/14
Project duration (working days):	146

Master Schedule: Concord created a master schedule during preconstruction that helped steer the overall budget and phasing of the project. Every event that was held within the Tucson Convention Center was considered a non-working day; therefore Concord continuously completed construction while events were not taking place.



The biggest challenge to the schedule was the need to keep the entire facility occupied. This meant that the team was limited to three days a week that construction activities could occur within the facility. Concord General Contracting had to communicate to the subcontractors that this would require 13-hour day in order to complete the project on time. During the bidding process the schedule commitment was one of the highest priorities in selection. Subcontractor bids were based around working three days a week, while meeting a 40-hour workweek. Originally, it was discussed that the contractors would double shift, but it was discovered half way through the schedule that the subcontractors were performing well on a normal schedule, due to their expertise and Concord's project management processes and follow through.

Each performance, each week, brought new requirements from TCC Management. This required the team to meet each week to determine what needed to happen for the events and how to keep construction on track. Because every performance was unique in its requirements, there was a constantly moving target, which Concord had to coordinate the schedule to meet.

Major Challenges Highlights:

- Only able to perform construction activities Monday, Tuesday, and Wednesday (most weeks)
- Maintaining subcontractor performance and quality, while requiring them work at maximum capacity.
- Every Wednesday required a total and thorough site cleanup in order to prepare for the weekend performances. This meant that the contractors essentially had to start over every Monday morning.

The Facts...

March 10, 2014 -
December 31, 2014



296 Total Calendar Days

M-F
No Activities



211 Standard Working Days

40 Days with the
Arena Floor Not
Available

No TCC Events
With Access
to Full
Construction



146 Working Days

Longest Stretch of Time
with No Events



40 Days

(just under 6 weeks)



Restrooms &
Concessions Were
Completed One Set
at a Time

While construction on an occupied campus is not unusual in itself, this project had some special, specific considerations to take in account. The City of Tucson and the Tucson Convention Center employees and vendors occupy the building during construction hours, creating daily potential hazards. In addition, There are non-work days due to the City of Tucson events; all work areas, stairways, and walkways were to be barricaded or flagged to prevent public access. The only people that were allowed in the facility during construction were required TCC staff, which the team kept to a minimum in order to push forward with construction.



Concord's Safety Manager built a Site Specific Safety Plan taking into account the occupied facility, emergency evacuation routes, location of the project site trailer, and construction parking. As construction progress the plan was updated half way through the project to account for changes within the project site. Each foreman and sub was trained on our site-specific plan. Since this was a large project site, there were specific safety requirements depending on the area of the facility.

Due to City of Tucson events, during non-work days all subcontractors protected their work areas and unfinished work from public access. Any and all stairways or walkways were barricaded or flagged with danger tape and signage to protect against public access.

Pictures were taken to document safety measures in place for project/owner records. During events, the City of Tucson and the Tucson Convention Center were responsible for these protected areas during the work shut downs for events until construction work resumed.

This building/arena is occupied/operational during construction hours, due primarily to the administrative offices being located on the Upper Concourse Level and the west side of the Arena floor. Having City of Tucson and Tucson Convention Center employees and their vendors inside the arena during construction hours created a daily hazard.

All City of Tucson and Tucson Convention Center employees are required to wear hard hats, safety vests, and safety glasses while inside the Arena in any and all construction areas. City of Tucson and Tucson Convention Center Managers and Supervisors were given Owner welcome kits by Concord General Contracting, which contained a hard hat, safety vest, and safety glasses.



Due to the public nature of this project, it was required that everyone and anyone onsite (including daily employees) were fully badged. In addition, the project underwent extremely thorough, unannounced OSHA inspection, which resulted in zero issues. With a facility and project this size, with 60 subcontractor firms, and a construction scope that touched every nook and cranny of the facility, this is a huge success. We had Zero lost time injuries.

Site-Specific Environmental, Health and Safety Plan



Concord General Contracting implemented a Site-Specific Environmental, Health and Safety Plan to prevent incidents on Tucson Convention Center (TCC) Renovations project. The effectiveness of the Plan depended on the active participation and personal cooperation between Concord and its Subcontractors. General health and safety responsibilities were summarized in the Plan for Concord and its Subcontractors.

The success of this Plan and the overall success of the project depended on everyone understanding their responsibilities and ensuring all workers under their control work safely and do their part to achieve a controlled, safe site. Because this Project consists of renovation to the existing arena, while occupied, close coordination with the TCC on scheduling was mandatory, therefore contractor and subcontractor attendance at foreman's meetings was mandatory, and close attention to 4-week look ahead schedules were critical. **Sample Sections of Plan:**



Tucson Convention Center Renovations
Site-Specific Environmental, Health & Safety Plan

Concord General Contracting, Inc.
 ROC # 072403
 Job # 1406
 Date 9/24/14

The information in this Plan does not relieve Subcontractors and Tier Subcontractors from their responsibility for properly training their workers in general jobsite safety and job-specific safety requirements, and from enforcing their own safety policies and procedures.

All Subcontractors and Tier Subcontractors are responsible for following the OSHA Standard requirements at all times.

Tier Subcontractors are bound by all requirements of this Plan.

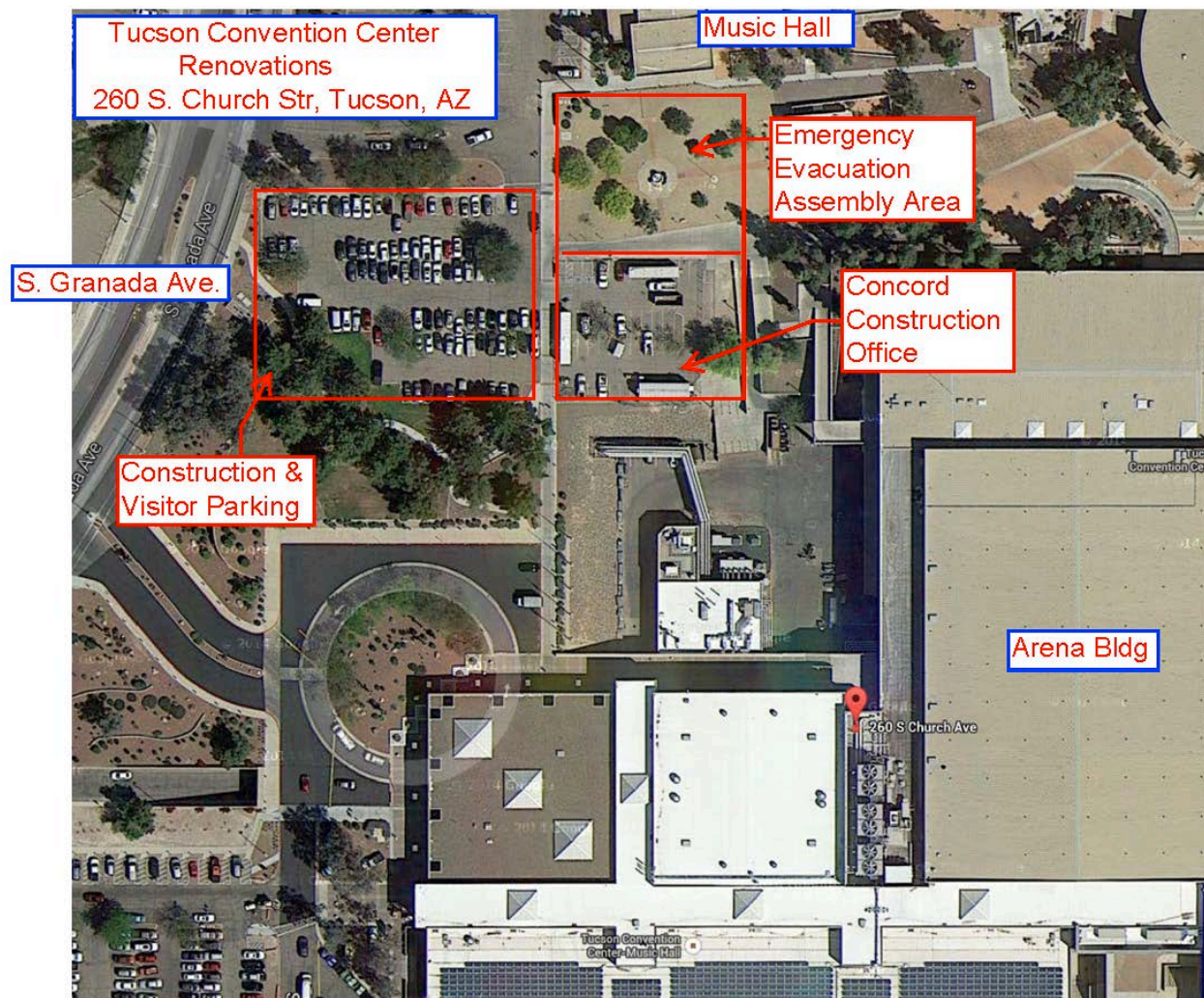
Tucson Convention Center Renovations 2014			
Required Documentation <small>The following chart breaks out the various documents that are required to be submitted by Subcontractors to the Concord Superintendent (in some cases, to the Concord Project Coordinator). Take note of when the document is to be submitted.</small>			
TYPE OF DOCUMENT	NAME/DESCRIPTION OF DOCUMENT	FREQUENCY OF SUBMITTAL	SUBMIT DOCUMENT TO
Daily Reports And Logs	<ul style="list-style-type: none"> Pre-Task Safety Analysis Crane Inspection Motorized Equipment Inspection Logs 	Daily, before shift begins Daily Daily	Concord Superintendent
Daily Sign-In Logs	<ul style="list-style-type: none"> Competent Person Sign-In Log Security Badge Sign-In/Sign-Out Log 	Daily, before shift begins Daily, before shift begins, and at end of shift	Concord Superintendent
Weekly Reports	<ul style="list-style-type: none"> Minutes of Subcontractor Safety Meeting with Workers 	Weekly, after meeting has been held	Concord Superintendent
Certifications	<ul style="list-style-type: none"> Annual Crane Certification/Inspection Motorized Equipment Certificates (Forklift, Scissors Lift, Backhoe, Loader, etc.) Welder's Certification Steel Erector's Certification Equipment Operator's Certification (all motorized equipment) Powder-Actuated Tools Certification Fall-Protection Training Certificate Respirator Fit Testing Certification 	Before scope of work/task begins	Concord Superintendent
Certification Cards	<ul style="list-style-type: none"> Equipment Operator's Certification Card (all motorized equipment) Powder-actuated tools 	Operator to keep with them at all times	NA
Certificates of Insurance Liability	<ul style="list-style-type: none"> Subcontractor's General Liability Subcontractor's Auto Liability Umbrella and/or Excess Liability Workers Compensation and Subcontractor's Liability Rented and Leased Equipment Tier subcontractors must provide an proof of coverage 	Prior to first day on jobsite	Concord Project Coordinator
Other Required Documents	<ul style="list-style-type: none"> Proof of Medical Clearance Exam for wearing a respirator 	Before task begins	Concord Superintendent
Recommended Certifications	<ul style="list-style-type: none"> Annual Proof of Fire Extinguisher Training for welders 	Prior to first day on jobsite	Concord Superintendent
Required Written Safety Plans, as applicable	<ul style="list-style-type: none"> Subcontractor's Safety Plan Fall Protection Plan Safety Net System Shed Pre-Erection Plan Respiratory Protection Plan "Hot Work" Fire Prevention Plan 	Two weeks prior to first day on jobsite for review	Concord Project Coordinator, copy to Concord Superintendent
SDS/MSDS	<ul style="list-style-type: none"> Safety Data Sheets / Material Safety Data Sheets of all hazardous or potentially hazardous materials to be used during scope of work 	Two weeks prior to first day on jobsite for review	Concord Project Coordinator, copy to Concord Superintendent

Project Description

POST THIS PLAN INSIDE THE CONSTRUCTION OFFICE
EMERGENCY EVACUATION EGRESS MAP

Below is a site map indicating the emergency egress route(s) and
the location of the Evacuation Assembly Area.

Tucson Convention Center Arena Renovations



POST THIS PLAN INSIDE THE CONSTRUCTION OFFICE

EMERGENCY ACTION and EVACUATION PLAN

PROJECT: Tucson Convention Center Renovations

JOB SITE ADDRESS: 260 S. Church St., Tucson, AZ 85701

I. EMERGENCY EVACUATION PLAN (Emergency Egress Map attached)

Description of Jobsite with Existing Structures and Construction Activities: The project scope is the renovation of the existing Arena. There are non-work days due to COT events; all work areas, stairways and walkways are to be barricaded or flagged to prevent public access. COT and Convention Center employees employees and vendors occupy the building during construction hours, creating daily potential hazards. The jobsite is entered off S. Granada, designed parking is in Lot C. The Concord construction office/trailer is east of Lot C and the Music Hall is north of the construction office.

SAFE ASSEMBLY AREA Location: The Emergency Evacuation Assembly Area is located north of the Concord construction trailer, east of construction parking Lot C, and south of the Music Hall.

HEAD COUNT: ALL Subcontractors, their employees, suppliers, inspectors, Concord employees, Owner representatives, and other visitors to the jobsite at the time of the emergency are to meet at the designated Evacuation Assembly Area so that they can be accounted for. Emergency Responders will be given the names and last known location within the site of any persons determined to be missing.

II. CRITICAL OPERATIONS

If an emergency occurs on a project where **flammable or combustible materials, propane, combustion engine equipment, or electrical tools are being used**, Concord General Contracting designated employees will ensure that sources have been shut off at the cylinders and that all equipment has been turned off before evacuating, provided employee safety is not jeopardized by doing so. **The Fire Department will be notified of any remaining potential hazards**, including the locations of tanks of flammable liquids or gases.

CRITICAL OPERATIONS CHECKLIST	YES	NO
Does this project involve the use of propane? Where?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does this project involve flammable or combustible liquids? Where?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does this project involve the use of combustion engine equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does this project involve the use of electrical tools or other ignition sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
What other potentially hazardous materials are on the jobsite and where are they located? Combustion engine equip: Boom lift. Hazardous materials: See MSDS in construction office. Combustible material: Sawdust.		



Because this is a renovation to an existing facility, much of the environmental protection work was seen in the removal and re-use of materials within the building. All materials that we used were a low VOC paint, which makes the facility more environmentally conscious.

Asbestos

Upon initial project construction, it was discovered that within the breezeway of the facility, there was fire proofing which contained asbestos. The team had to work quickly to ensure that the removal did not impact the established master schedule. Because of the cost of removal, the project team worked with the asbestos contractor to contain the asbestos by installing a drop ceiling that would protect from future maintenance.

The lighting was installed in the drop ceiling as well so there was no threat of future access or disturbance. This design solutions improved look of space, but additionally, it provided for future access & maintenance of lighting/electrical without exposure to asbestos.



Recycled Materials

Prior to beginning work at the Tucson Convention Center, the escalators were replaced within the facility. The previous escalator treads were salvaged from the old escalators and were cleaned up for future use in the facility. The escalator treads can now be found in the restrooms as a unique decorative piece.



The Tucson Convention Center was a highly occupied construction site throughout the course of construction:

This was a high profile project that the public took much interest in throughout the lifetime of the project. It was important to constantly educate the community about where the money was going and how it was benefitting the City. To communicate, the developed display boards with current photos of the Convention Center and the after renderings of the same shot to generate excitement. Additionally, throughout construction we hung banners and signs alerting the patrons that the facility was still under construction and the new arena was coming soon. Great care of given to always maintain a presentable site throughout each phase of renovation. Because we were renovating every portion of the Tucson Convention Center, the contractor crew wiped down every part of the project from floor to ceiling (seats, concessions stands, restrooms, etc.) in order for the public to enjoy the updated amenities of the facility.

The community gets excited for the new look & feel:

“Renovations of TCC arena marks new era for Rio Nuevo, Tucson”

Inside Tucson Business, [Click Here to view online](#)

“TCC Arena to receive major renovations”

DowntownTucson.org, [Click Here to view online](#)

TCC Arena Renovations only 2 months from completion”

Channel 4 News KVOA, [Click Here to view online](#)

A timelapse video was created during construction, to illustrate how every detail of the facility was completely transformed to create an unforgettable visitor experience.

The City, funding partners, architect and builder co-hosted a ribbon cutting ceremony on site upon completion, and invited the community to participate in celebrating the newly revitalized facility.

The timelapse video was a highlight of the ceremony and an excellent illustration of the work completed.

View the video on YouTube [here](#)



Unusual Accomplishments Under Adverse Conditions

In the past seven years, the Convention Center lacked proper maintenance. It was in such poor condition that the City expected to demolish and rebuild a new facility. Due to creative architectural design and extensive value engineering, the team was able to develop a solution that required renovations rather than a completely new facility.



Some highlights of these challenges include:

- The entire air conditioning system was well past its life, which caused extensive leaking - creating numerous issues. This required the contractor to modify drains and repair insulation to the air conditioning units to prevent further water damage.
- The lighting was aged and old, therefore the contractor installed an all new lighting and added additional light to the once dark facility.
- As the signage was not up to code, new ADA signage, as well as LED backlit signage, was installed.
- The floors had not been cleaned in years, while it was not in the original scope, the team worked it into the contingency and power washed all of the floors prior to replacing the arena seats.
- The scoreboards in the arena were low quality. The team removed the existing scoreboards and updated with state-of-the-art scoreboards, making it easier for the City and TCC to bring in high quality performers.
- All of the concession stand lighting was upgraded to digital displays, now all of the menus are able to change with a click of a button.
- The hockey arena lacked proper safety netting at the end of the hockey boards, so we added nets at both ends for hockey games. This protects both the audience and the scoreboard, increasing longevity as well as the life of the arena.



Prior to this renovation, the Tucson Convention Center facility it had not been updated since 1970. This project turned the facility into a state-of-the-art venue where SMG (TCC Management) could bring in higher quality productions and performers for the City of Tucson - increasing revenue for the City.

Additional Conditions, Quality Control Value Engineering & Construction Innovations

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When Concord was awarded this contract, the initial estimate for the arena renovations was \$750,000 over the city's budget. The preconstruction team took the time to find practical solutions to the budget challenges that would both beautify the facility and reduce costs drastically.

Value engineering efforts outlined below made this project possible:

Painted Ceiling Tiles

Leaving the existing acoustical grid ceiling in place, and replacing the damaged tiles...as well as applying a special black stain resulting in a \$220,000 savings.

On Site Assembly

Purchasing the perforated acoustical metal panel system individually, and managing assembly on site saved an additional \$175,000.

Let There Be Light

In order to continuously conduct events in the facility, Concord had to install the new lightening beside the old lighting, and wait to switch over the lightening in the back-end because the systems were incompatible.

Brighten & Beautify

The new panels naturally made the ceiling height feel higher, and lightened the space. The goal of the panel was to "cover up the ugly stuff" while still keeping the systems accessible for future maintenance.

Something Old

Prior to beginning work at the Tucson Convention Center, the escalators were replaced. The previous treads were salvaged and cleaned up for future use. The treads can now be found in the restrooms as a unique decorative piece.

Hide The Skeletons

Concord value engineered both the lighting package and the perforated panels that were being used to disguise existing systems that could not be removed, but strategically hid them and left access for future maintenance.

Leave No Stone Unturned

On top of the time and effort taken to tackle some of the biggest budget issues with this project, Concord and the preconstruction team left no stone unturned. They value engineered the light fixture package, theatrical curtain, furniture, concession stand rolling shutters, and other miscellaneous changes to achieve additional savings of over \$350,000.



Additional Considerations, Value Engineering & Construction Innovations

Life cycle maintenance and cost were a major consideration when selecting the materials for this facility. Every material selection was high efficiency and/or required little to no maintenance. These higher-grade materials result in saving the City money with less need for maintenance fees and product cost. As an added benefit, all of these products make the venue more marketable to events, which result in more directly generated revenue for the City.

Some examples of these materials include:

- Overall acoustics were improved by using insulated perforated panels, these also work to conceal conduit, pipes and ducts.
- Upgraded perforated panels require zero maintenance (painting).
- The light fixtures have longer duration bulbs, reducing the need for maintenance.
- Obsolete hand dryers were replaced with high-efficiency hand dryers, eliminating the need for paper products - saving money and energy.

Concord General Contracting completed all of this work with no “overtime” work, which results in higher costs. Even working only three days a week at extended hours, the work was bid at “normal working hours” rates so the City did not pay an increase in costs in order for the team to meet their unique schedule.

From the agency's standpoint, the biggest challenge was simply the size of the team. Rio Nuevo Project Manager managed CM at Risk Contractor & three (3) separate bid contractors for Fixed Seating, Portable Chairs, and & Large LED video displays. (These three (3) Bid items were not included in CM at Risk's Scope in order to help lower overall construction costs.)







BEFORE
Breezeway



AFTER
Breezeway



BEFORE
Entry



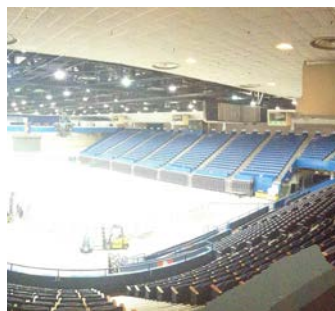
AFTER
Entry



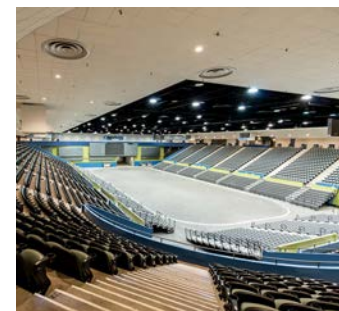
BEFORE
Breezeway



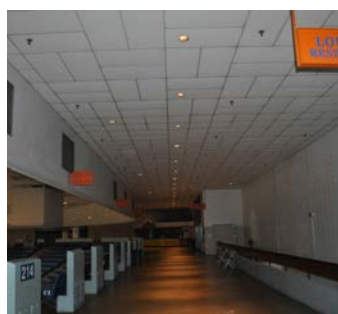
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Breezeway



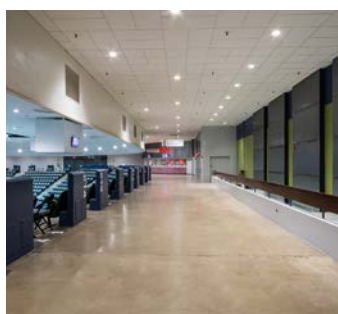
BEFORE
Floor & Mixed Seats



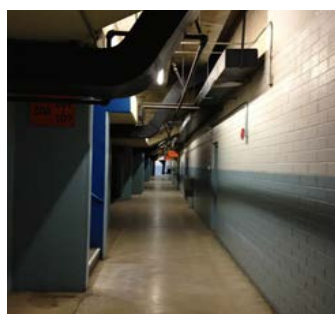
AFTER
Floor & Mixed Seats



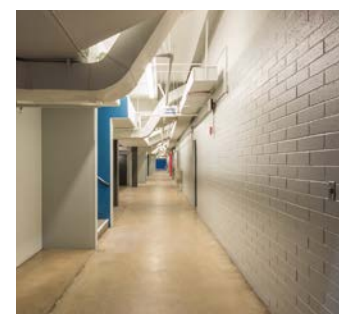
BEFORE
House Lighting



AFTER
House Lighting



BEFORE
House Lighting



AFTER
House Lighting



BEFORE
Event Lighting



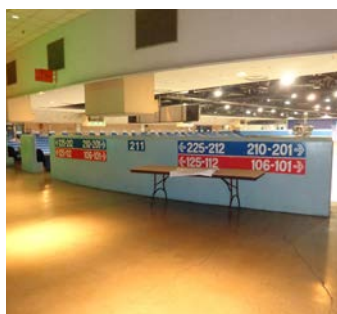
AFTER
Event Lighting



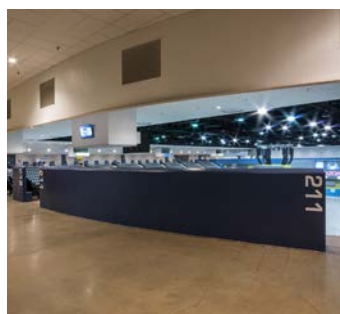
BEFORE
Event Lighting



BEFORE
Event Lighting



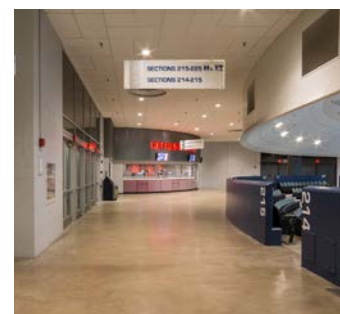
BEFORE
Signage



AFTER
Signage



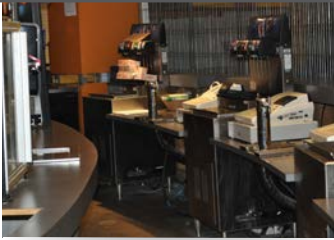
BEFORE
Event Lighting



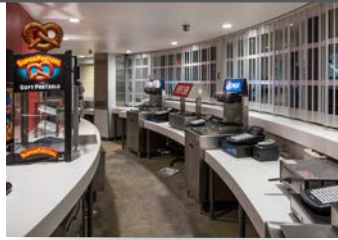
BEFORE
Event Lighting

SUMMARY AND MEDIA LINKS

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BEFORE
Concessions



AFTER
Concessions



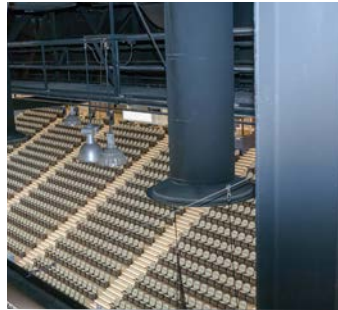
BEFORE
Entry



AFTER
Entry



BEFORE
Rigging



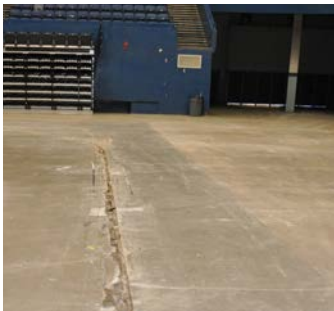
AFTER
Rigging



BEFORE
Rigging



AFTER
Rigging



BEFORE
Dasher



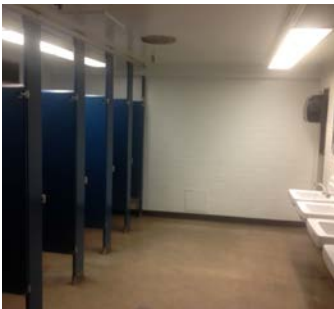
AFTER
Dasher



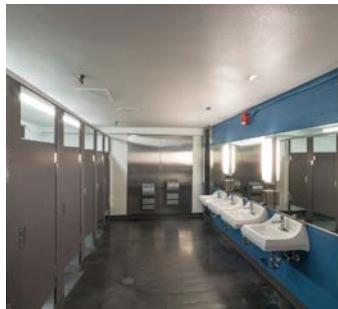
BEFORE
Ice Floor Expansions



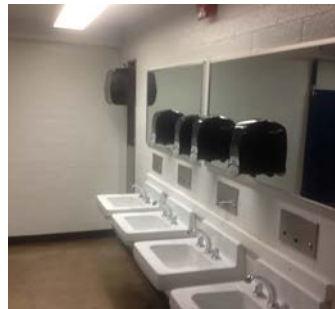
AFTER
Ice Floor Expansions



BEFORE
Restrooms



AFTER
Restrooms



BEFORE
Restrooms



BEFORE
Restrooms



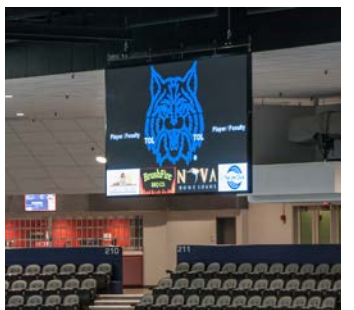
BEFORE
Restrooms



AFTER
Restrooms



BEFORE
Scoreboard



BEFORE
Scoreboard

SUMMARY AND MEDIA LINKS

page 17



BEFORE
Scoreboard



AFTER
Scoreboard



BEFORE
Ceiling Tiles



AFTER
Ceiling Tiles



BEFORE
Overall Paint



AFTER
Overall Paint



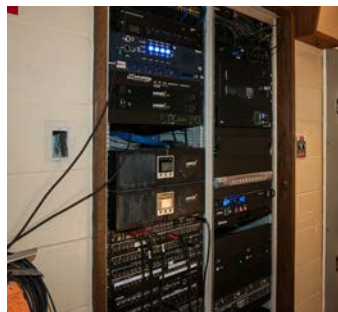
BEFORE
Audio Upgrades



AFTER
Audio Upgrades



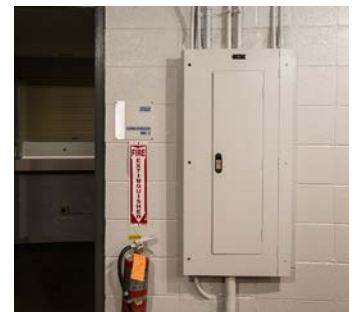
BEFORE
Audio Upgrades



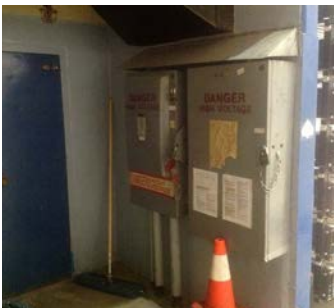
AFTER
Audio Upgrades



BEFORE
Electrical



AFTER
Electrical



BEFORE
Electrical



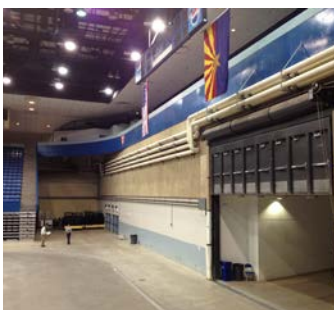
AFTER
Electrical



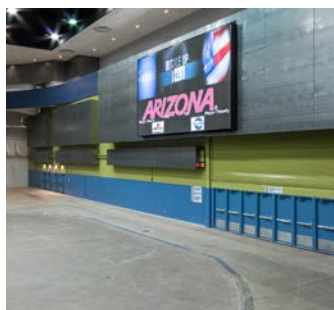
BEFORE
Ticket Booth



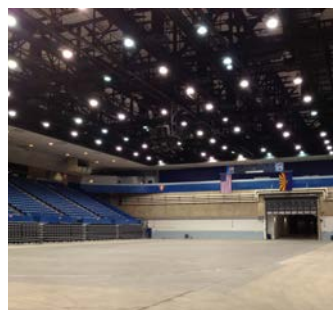
BEFORE
Ticket Booth



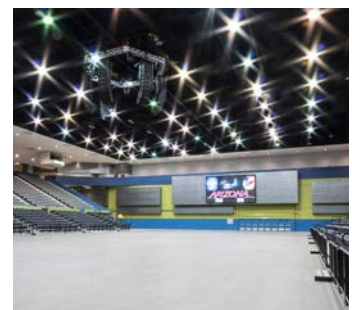
BEFORE
South Wall Arena



AFTER
South Wall Arena



BEFORE
South Wall Arena



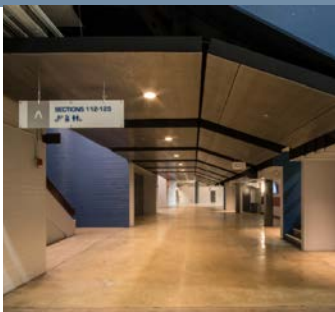
BEFORE
South Wall Arena

WHY IS TCC THE PROJECT OF THE YEAR?

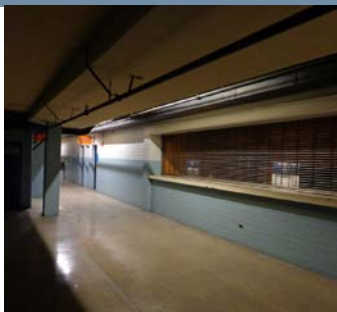
Simply put, the Tucson Convention Center was a capstone project for the revitalization of downtown Tucson. It's welcoming entrance, improved efficiencies and way finding, best-in-class staging and seating, as well as concessions have increased the visibility and revenue for the City as well as providing a shining example of how government agencies can work together achieve great things for a community.



BEFORE
Duct Conduit



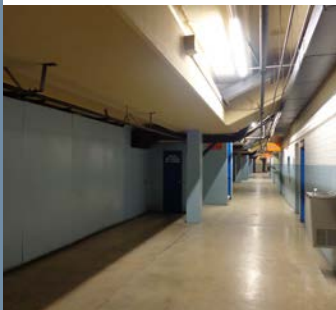
AFTER
Duct Conduit



BEFORE
Lower Concessions



AFTER
Lower Concessions



BEFORE
Lower Corridor



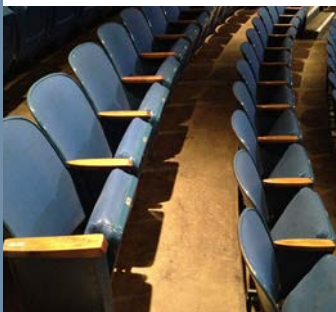
AFTER
Lower Corridor



BEFORE
Lower Corridor



AFTER
Audio Upgrades

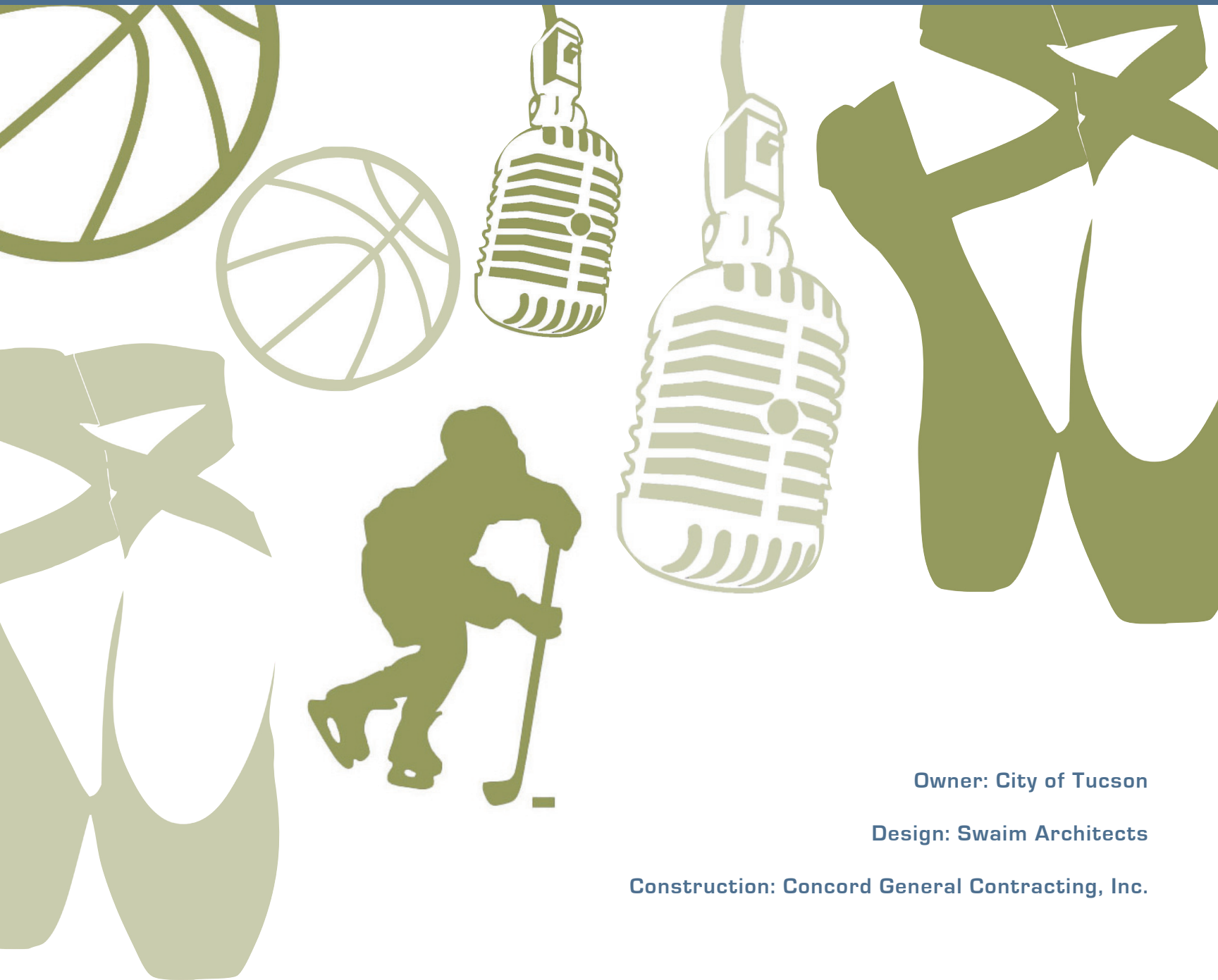


BEFORE
Seats



AFTER
Seats

Tucson Convention Center



Owner: City of Tucson

Design: Swaim Architects

Construction: Concord General Contracting, Inc.