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Ascend Amphitheater

A new outdoor concert destination in Nashville

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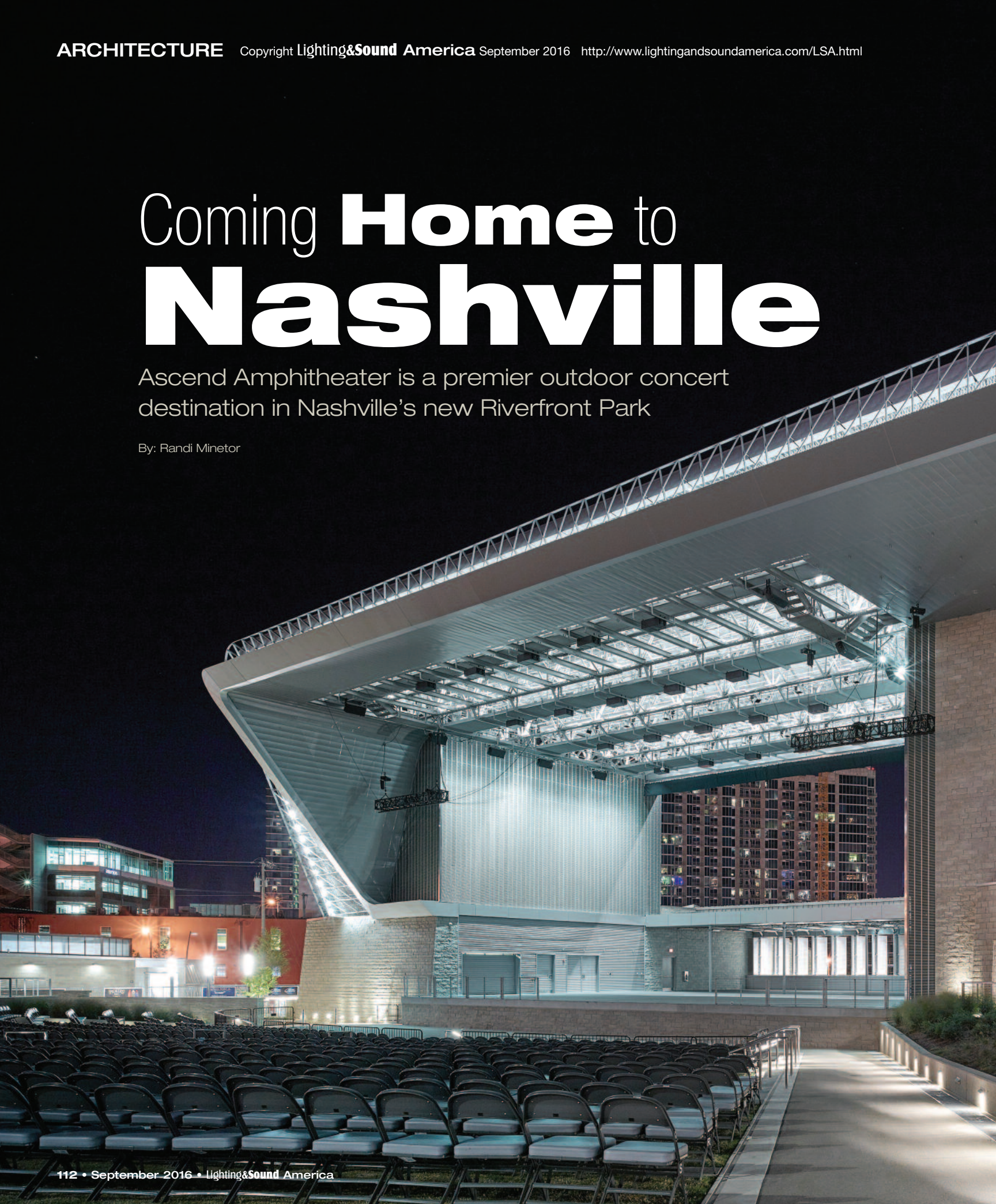
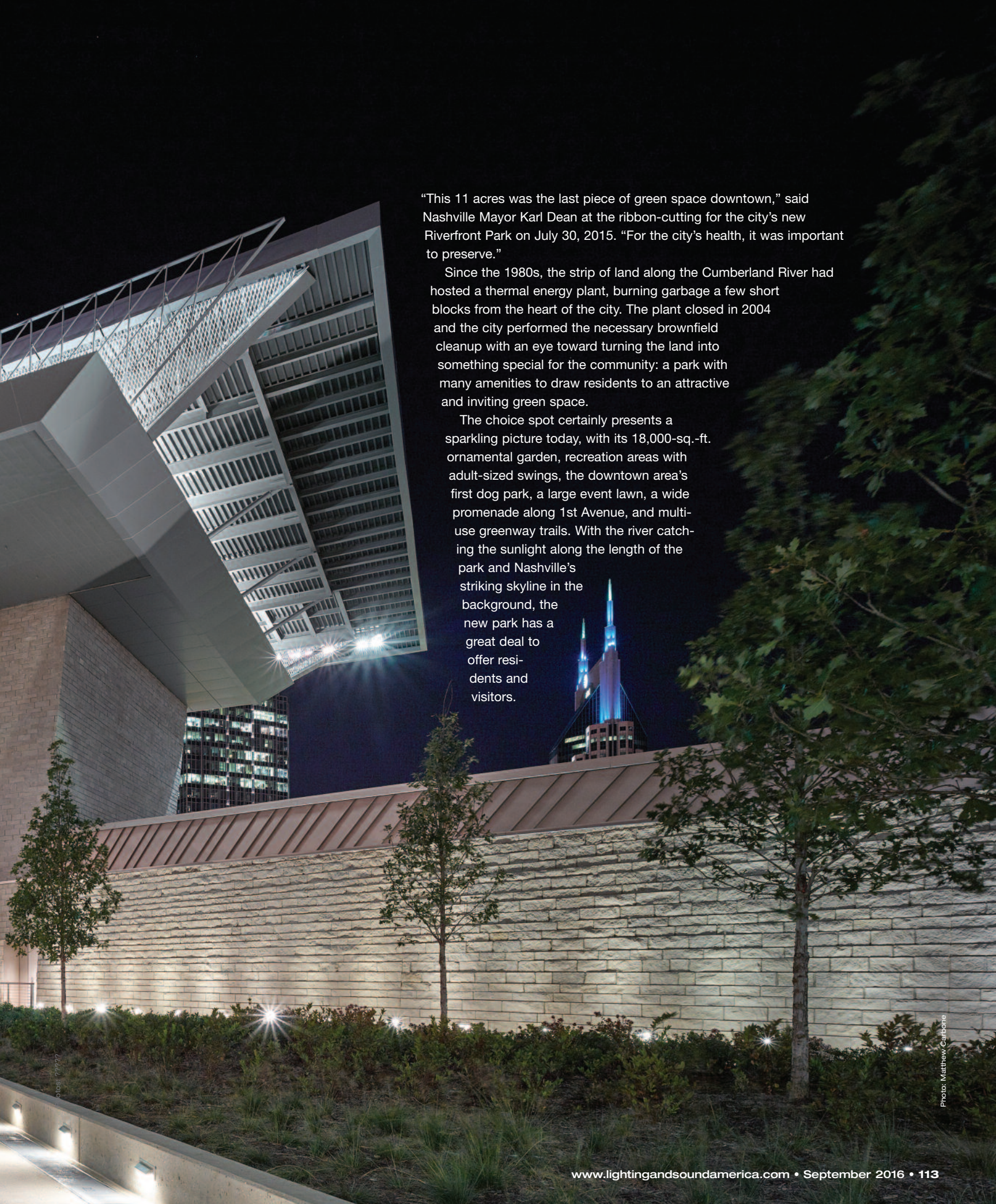
Coming **Home** to **Nashville**

Ascend Amphitheater is a premier outdoor concert destination in Nashville's new Riverfront Park

By: Randi Minetor





"This 11 acres was the last piece of green space downtown," said Nashville Mayor Karl Dean at the ribbon-cutting for the city's new Riverfront Park on July 30, 2015. "For the city's health, it was important to preserve."

Since the 1980s, the strip of land along the Cumberland River had hosted a thermal energy plant, burning garbage a few short blocks from the heart of the city. The plant closed in 2004 and the city performed the necessary brownfield cleanup with an eye toward turning the land into something special for the community: a park with many amenities to draw residents to an attractive and inviting green space.

The choice spot certainly presents a sparkling picture today, with its 18,000-sq.-ft. ornamental garden, recreation areas with adult-sized swings, the downtown area's first dog park, a large event lawn, a wide promenade along 1st Avenue, and multi-use greenway trails. With the river catching the sunlight along the length of the park and Nashville's striking skyline in the background, the new park has a great deal to offer residents and visitors.

Photo: Matthew Carbone

The architectural lighting, using instruments from Acclaim Lighting, allows the amphitheater to change color for special reasons or to match a show's lighting design.

Dean's vision did not end with an outdoor oasis, however. He also imagined an amphitheater that would bring Nashville's legendary support of country music to the fore, making Riverfront Park a central gathering place where the entire city could enjoy top music acts from a wide range of genres. In addition, this performance stage would be an equally comfortable venue for orchestral music, giving the Nashville Symphony an acoustically excellent summer home.

These requirements were challenging enough, but the mayor wanted even more from this amphitheater.

"At the outset of this project, we had the mandate from the city that it would be a park first," says Brian Phelps, a designer and associate at Hawkins Partners, Inc., the landscape architecture firm that led the project. "This idea of a commercial amphitheater needed to work within a park setting, and it needed to be accessible when not in use."

This meant that the venue would be open to anyone at any time, whether visitors spread out a picnic on the benches in front of it or held a yoga class on the stage floor. "It needed to be a focal element within the park, and it needed to be activated on all sides," says Phelps.

The biggest and most challenging mandate set the concept of a traditional amphitheater on its ear. "One of the big design features was that the back of the proscenium was open, allowing for views of the skyline and the park," Phelps continues. So there would be no acoustical shell at the upstage end of the performance space.

How, then, could the design team create a space that met the high standards for acoustics that artists expect from Nashville, while also meeting the requirement that it blend seamlessly with the rest of the park?

The answer is twofold: First, a structural design that draws from elements found both in Nashville's present-day architecture and in its manufacturing history; and, second, the choice of a groundbreaking electronic acoustical system that does not require a traditional hard shell to produce exquisite sound.

Blending with the environment

A master plan for the city of Nashville had been underway for some time when the amphitheater project began, notes

The amphitheater was designed to provide basic lighting for local performers and to lift touring lighting and sound rigs for world-class shows.

Photos: Bob Schatz

Hunter Gee, of Smith Gee Studio, LLC, the architect of record on the project. “Nashville’s downtown renaissance started 15 years prior,” he says. Thanks to more than two decades of strong mayoral leadership involving three consecutive mayors, Nashville’s downtown had blossomed. “A lot of people were moving downtown and there was a lot of development downtown. Mayor Dean says that, like only a few cities in the country, Nashville has a truly unique brand. He engaged the music industry here, building affordable housing for artists downtown, and he saw that we need a world-class outdoor venue.”

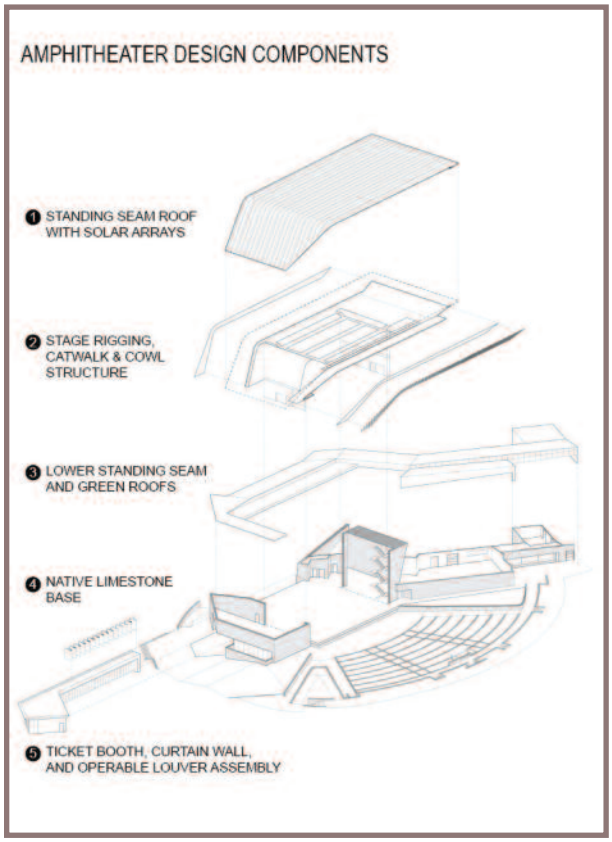
The team engaged theatre planners Schuler Shook, led by partner-in-charge Jack Hagler, ASTC, to determine what kinds of capabilities Ascend Amphitheater would need. “Jack was really instrumental in establishing the appropriate program, understanding the industry and what kind of venue we needed,” says Gee. “He taught us a lot of the technical and programmatic aspects of what would make a successful venue here. He says that you have to take care of the artist, and you have to understand how they might use the back-of-house spaces, and understand what is typically in their riders and how they want the show to be run.”

“We visited the Country Music Awards organization [CMA] and talked with them about what their needs might be as a potential user of the building,” says Hagler. “We also talked with the Nashville Symphony about the possibility of a summer home.”

Talks with CMA steered Ascend Amphitheater potential uses in a very specific direction. “It became clear that it had to have a way to control access during performances,” Hagler says. “It had to lift touring concert lighting and sound rigs, and have substantial power. And it had to be stagehand-labor friendly.”

The team at Hawkins Partners, Inc., led by founding principal Kim Hawkins, conceived of an amphitheater that would become a sculptural piece of the park. “What you really see throughout the park are the bluffs and the river morphology,” says Phelps. The ideal structure would mirror the sense of the river and the elements carving away at the landscape—a sweeping, curving building that broke from the traditional bowl-shaped outdoor concert setting.

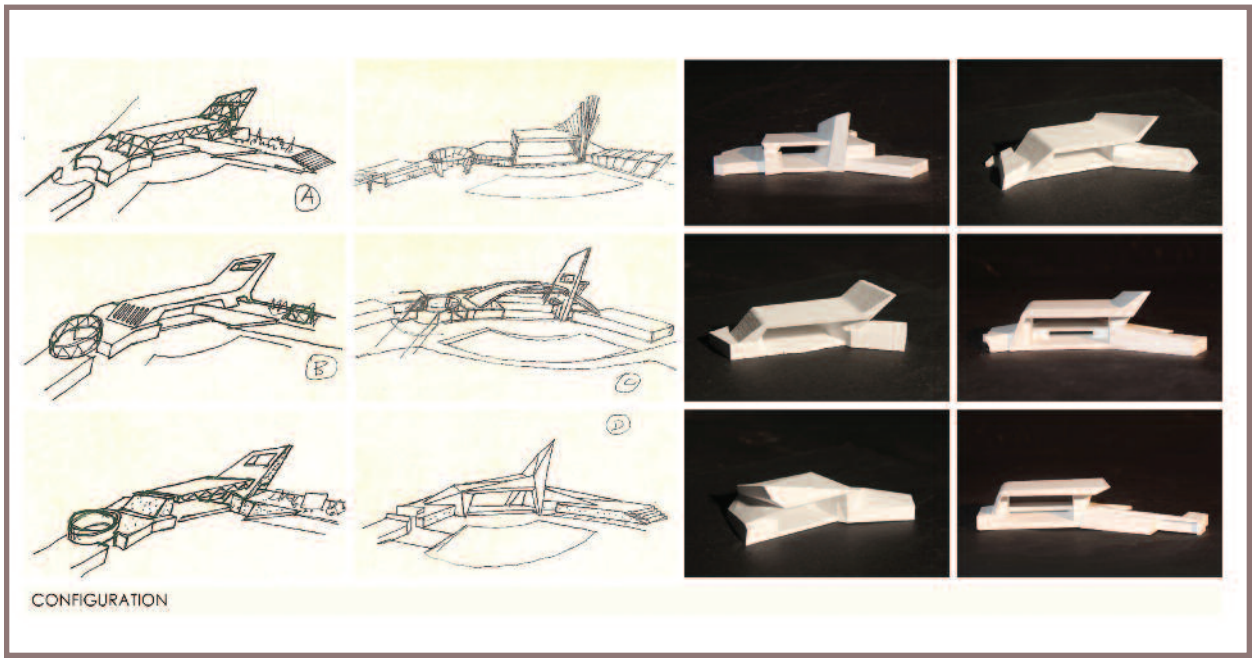
To achieve this goal, Smith Gee selected Hodgetts + Fung in Culver City, California, the architecture firm that designed the new shell structure and acoustic halo for the Hollywood Bowl.



"When we came aboard, the rough contours of the seating and many of the outbuildings had already been established," says Craig Hodgetts, the facility designer. "There were some preliminary concepts that had explored the appearance of it as sort of an iconic structure. It was very important to the mayor that it represent the character of Nashville, its relationship to country music, and its relationship historically to the city's heritage of the bridges across the river—limestone abutments throughout the city." All this, coupled with the criterion that there be no back wall on the amphitheater, made the design process particularly cloudy for some time.

"One of our avenues of research was to understand the apparatus for country music," Hodgetts says. "Maybe there was some inspiration with the keyboards and the

> "In the '50s and '60s, at the emergence of the amplification of guitars, there was one company called Gretsch that made these amplifiers right in Nashville. We found a number of them that had the ability to inspire a kind of design motif for the shell. Everyone was excited about it and jumped on the bandwagon. We began developing the shell with the inspiration of this guitar amplifier in mind." — Hodgetts



Landscape architect Kim Hawkins pushed for the amphitheater to feel as though it extends toward the river. "Make it longer!" she said to the mayor.

Once the design finally reached completion, the team had just 20 months to build the amphitheater.

lighting systems and so forth. We found that back in the '50s and '60s, at the emergence of the amplification of guitars, there was a company called Gretsch that made these amplifiers right in Nashville. We found a number of them that had the ability to inspire a kind of design motif for the shell."

Finally, the idea took hold. "Everyone was excited about it and jumped on the bandwagon," Hodgetts says. "We began developing the shell with the inspiration of this guitar amplifier in mind."

Hodgetts and his team examined the intricate elements of the speakers' designs to determine which might translate to the amphitheater: the grille, the carrying handle, the covering over the cabinet. "The idea that the shell would be there for the casual visitor to the park meant that this vast interior of the stage was like a big public room," he says. "Normally, the interior of a typical amphitheater shell is just black, sound-absorbent fiberglass material, and the only time you're there is when the gates are open and the show is on. But with people coming and sitting on the lip of the stage any time, day or night—we had to come up with unique ways to create a lining that is also attractive to the eye."

The architects chose a perforated steel product called tread grating to line the stage interior, packing it with fiberglass to create a sound-absorbing surface. They carried this covering all the way up to the ceiling. "From an interior perspective, that environment is highly controlled both acoustically and visually," says Hodgetts.

Asymmetry carved in stone

With the city on one side and the river on the other, the design teams agreed that the amphitheater should not be symmetrical. "To relate to these contextual environments, it should feel that it's extending toward the river," says Hodgetts. "Kim Hawkins was one of the strongest proponents for the asymmetrical design. She kept saying to the mayor, 'It's not long enough! Make it longer!'"

Equally important, the designers agreed that Nashville's many bridges and structures built from limestone should be reflected in the park and the amphitheater as well. Hawkins Partners worked closely with Hodgetts to use the same materials for the risers and the retaining walls, making limestone the most prevalent building material in the park.

"We used the limestone for the walls and the bases of the buildings," says Hodgetts. "Then we created a podium, a higher base for the shell, also out of that same limestone. We configured it with big, sloping lines that, in our minds, are landscape elements rather than building elements."

Photo: Smith Gee Studio

The designers had a mandate from Nashville's mayor: "This will be a park first." The stage and seating area are open to the public 24 hours a day as part of Riverfront Park.

The effect is like a retaining wall built into the landscape, rather than a building sitting on top of the park. "Then we put this very technical and referential shell on top of all that, so it really grows out of the landscape and merges with it."

Even with the intention of making the amphitheater appear part of the natural surroundings, it needed to pop as well—and a number of practical considerations directed the architects to specify a dynamic architectural lighting design. For this they turned to Domingo Gonzalez Associates in New York City, the company already involved in the Riverfront Park project as well as the lighting of the adjacent Korean War Veterans Memorial Bridge (and, in 2003, the Shelby Street Bridge) spanning the Cumberland River.

Designers Nancy Lok and Phat Quach developed the lighting around three key areas of the amphitheater—the outline of the cowl (the outer shell and roof), the ceiling, and the walls—and allowed them to act independently to create different effects. Each area can be lit in a different color to correspond with an act onstage, highlight a holiday concert, or present a vibrant point of color on the Nashville skyline. When Ascend lights up for concerts and holidays, the Acclaim RGBW LED lights provide a wide spectrum of colors. (Acclaim's Dyna Graze HO Exterior DMX and Dyna Drum HO are the products used.) "There were important protocols we had to work into the design," says Lok. "None of the lights could change too quickly—the city didn't want it to look like a disco."

When there's no event, the facility remains lit in carefully targeted shades of white light. "We wanted to highlight the

Photo: Matthew Carbone

Photo: Rachel Paul

material in the façade—limestone, cold steel, and metal," says Quach. "We lit all of the stone with warmer white, and the steel with a default cooler white." This mix of shades is echoed throughout the park along its paved walkways, and it continues out onto the bridge as it crosses the river.

White light became particularly important because the amphitheater is open all the time. "Like any other city in America, Nashville has it concerns with 'unplanned' uses, so you can't have the stage just go black," says Gonzales. "Having even a modest amount of light onstage all the time is useful for any security forces patrolling the park. You want them to be able to tell the difference between people rehearsing onstage and people engaged in some kind of mischief. The lighting encourages positive behavior."

Tiered seating areas provide space for about 2,200 people, using temporary seating that can be set up using individual seats or tables and chairs for cabaret-style events and banquets. Another 300 people can sit in a paved cross-aisle or in a covered VIP pavilion at the rear of the seating area. Immediately in front of the stage, a wide, flat area can accommodate seats or tables and chairs, as well as standing room for audience members. Beyond the tiered seating, the lawn can provide room for another 4,000 people.

Onstage at the Ascend

The Ascend stage is 100' wide x 50' deep. Five extra-wide catwalks allow riggers to get to any point under the canopy, and the superstructure can easily hold any lighting and sound rig the performers bring with them—even a total load of more than 75,000lb. The rigging strong points are spaced 10' on center, and can support about 2,000lb each. "The riggers can wrap a beam and still reach that from the catwalks," says Hagler. In addition, there are 3,000lb strong points downstage left and right to handle speaker clusters and video components.

The installed stage lighting provides basic 1,000W Altman PAR 64 fixtures for area or full-stage illumination, making it possible for any group to come in and use the house lighting system if they don't have a rig of their own. A total of 48 dimmed lighting circuits and lighting control network from Electronic Theatre Controls are distributed throughout the stage, as well as in the house at the mix position and at the followspot towers. In the audience areas, two spotlight towers are permanently installed and have multiple power connectors, so they can accommodate a wide variety of followspots, including Ascend's own Strong Gladiator units. Two additional towers are mounted with delay speakers.

The team created appealing common areas for use by talent and their families.

"There's also the ability to rig off the back of the canopy," says Hagler. "And on the green lawn off the back of the amphitheater, they can hang screens so people can sit there for a sold-out show and still see the show while it's happening."

Schuler Shook specified a four-bay truck dock with parking for eight buses, and a direct path from the loading dock to the stage on stage left.

Right from the start, Hagler and his team recognized that this was no ordinary "shed" amphitheater. "Many of these sheds are about getting the artist in and doing a show for as little as possible," he says. "This one has something really special about it. It was all about the audience and the artist—it wasn't a gear project."

Home sweet home

It surprised no one in Nashville that country music bands are in a class by themselves, but it came as something of a revelation to the designers of the Ascend Amphitheater—because much of their experience came from rock and roll. "We are all aware that rock bands are an unruly bunch, and you never know what will happen to the interior of your building," says Hodgetts. "But country music is a different breed. They travel with their families. They cook dinner for their crew."

For many of the artists, a return to Nashville would be a homecoming, says Hagler. "Many of these artists are locals," he says. "They're coming off the road, and they want to bring their whole families from Nashville over while they do the show. We want them all to enjoy themselves."

This meant that the backstage facilities had to be fully equipped to accommodate spouses, children, and other family members and friends. Designer Kara Babin Gee created a homelike community room that can serve 250 people, where families and crews can gather for meals before or after a performance. The room features pine accents, a large kitchen, an outdoor patio, and felt pendant fixtures hanging from the ceiling to provide the kind of light families would enjoy at home.

"Managers visit the venues before the events and identify which space that artist might want to use for their dressing room," says Hunter Gee. "Kara had the idea of creating a slightly different look for each one, each with views to the river or to the dramatic roof form above. It was a lot of fun thinking about the experience of each space. The artist wing turned out to be sort of 'Nashville swank'—contemporary, with a Nashville flair."

Beyond the common cooking and dining area, families find play courts, a patio lounge, dressing rooms with all the modern amenities, and fine views of the river and the city. "These areas are all way above the other venues we've seen in the United States," says Hagler. "It feels good—it's a really, really nice backstage."

All of these facilities create a second, lower story to the amphitheater, with access from behind the building. "The two-story nature of the building itself helped minimize the

Photos: Rachel Paul

Opposite: Two permanently installed towers provide positions for followspots and speakers. Above: The service areas, backstage facilities, and building access points all received the same level of thoughtful design.

footprint," says Phelps. "Having the stage at one level and sliding the rest of the uses underneath was important."

Even the service area, where the performers' buses and trucks park and unload, received the same level of careful thought and design as the rest of the facility. Murals are painted on the service doors to make them attractive when not in use, and the loading areas double as public basketball courts when large vehicles are not parked there.

Groundbreaking sound technology

The impetus for acoustical design innovation arose when the team from Jaffe Holden learned of the project's seemingly conflicting requirements. "The Nashville Symphony was very interested in doing a number of their performances there," says Mark Holden, Jaffe Holden chairman and lead designer. "However, they were very concerned that acoustically it would not be supportive and friendly."

While country and pop music acts would bring their own amplification systems and other sound equipment, the symphony would rely on the acoustics of the stage enclosure, both to entertain the audience and to hear themselves play as an ensemble. An orchestra conductor must hear each instrument in relation to the others, to create the most successful interpretation of the music and maximize its quality for the audience.

The acoustical consultant could have recommended a removable shell specifically for orchestral concerts, but a wood shell "has all kinds of problems outdoors," Holden says. "It's heavy, it's a maintenance issue, and where do you put it when it's not being used? It didn't make a lot of sense in this application, with the back of the stage open."

Instead, Jaffe Holden chose an electronic acoustical system, one of the first of its kind in the world. Supplied by E-Coustic Systems, it includes a sophisticated digital processing component that creates a series of sound reflections and reverberation. An array of microphones is suspended in the stage area and transmits the sound to ceiling speakers, which, in turn, project the sound back to the musicians. The effect emulates a physical shell.

"With a big opening in the rear of the stage, you would

With no back wall, acousticians chose an electronic shell to achieve the sound quality required for a world-class amphitheater.

think all the sound might leak out the back," says Holden. "The electronic shell solves the problem. I don't know of another amphitheater that has that level of openness and still provides the acoustical quality. The musicians onstage can hear themselves better, and they can communicate between the instruments clearly. The conductor hears a blend that is much more like a concert hall than an outdoor stage. The electronic shell provides the aural equivalent of what a physical sound shell would provide for the musicians."

Jaffe Holden treated every surface in the seating bowl area to eliminate any negative sound reflection back to the musicians, whether they played orchestral or popular music. "One of the things that can happen in an outdoor amphitheater is that the walls you build within a seating area can be a very negative thing," says Holden. "They can send destructive sound reflections back to the stage. If you're playing a drum and you get a whack back at you half a second later, it makes a very difficult environment. We created an environment with no negative reflections, no spurious sound."

When touring groups come into the venue, they have the benefit of the amphitheater's acoustic quality as well. "One of the things that we really worked hard on was creating an extensive audio network, with both digital and analog networking," says Holden. "So when touring groups come in, they can use these systems in a very simple way. Central rack, patchbays—everything is very accessible, so you're not running snakes on the floor." This allows roadies with touring acts to set up their shows quickly and easily. "The technical guys come in and say, 'I can't believe this.'" Holden continues. "They get to the catwalks by stairway, and hang everything from them. It's a no-problem load-in and load-out."

Finally, Jaffe Holden made each element of the amphitheater part of the overall acoustic package. "It's an urban, downtown amphitheater, so that brings in the issues of traffic noise, motorcycles, and trucks," says Holden. "We laid out the support and concession buildings very carefully, so they would block out sound from the street. Earth berms block the noise from truck tires."

The goal, Holden says, was to create a space where musicians loved to play. "Today's top-level musicians have a choice—they can play or not play wherever they want," he says. "We wanted to build a place with a fantastic reputation among musicians as well as audiences."

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A year later

Today, Ascend maintains an aggressive schedule of concerts and events, balancing major artists and local performers with private events onstage and in the VIP Club at ground level. With tens of thousands of people enjoying entertainment there on a weekly basis, the amphitheater has proved to be a major success.

Hunter Gee has focused much of his career on building a great city in Nashville, and he sees much to be proud of in the Riverfront Park project. "This is my home," he says. "This project has been completely transformative for our downtown. When I see people using the park, using the amphitheater, and I hear people talk about what an incredible thing it is to see an event there, to be able to see through the structure to the skyline beyond—people I know, people I meet, and people online talk about what an incredible experience this has brought to Nashvillians. That's what I'm most proud of."

Randi Minetor is an author and freelance writer based in upstate New York.

Photos: Rachel Paul

The electronic shell provides a level of acoustical quality expected from a physical shell in a concert hall.