



Darden & Company Uses UAV Mapping and Imagery to Manage the Demolition of an Atlanta Landmark

How Multivista Helped Transform the Georgia Dome into The Home Depot Backyard

Case Study

The team at Darden & Company has been managing large-scale construction projects in the Atlanta, Georgia area since 1999. Their portfolio includes the training facility of Major League Soccer team Atlanta United, the Arthur M. Blank Family Office Building, and several other large hotel, condominium, office, and mixed-use buildings.

Their biggest project to date was the construction of the Mercedes-Benz Stadium, the associated demolition of the Georgia Dome, and the construction of The Home Depot Backyard. That such an immense project was entrusted to a local firm is a testament to the confidence the Atlanta community has in Darden & Company.



PROJECT SUMMARY

After the completion of Mercedes-Benz stadium in Atlanta, Darden & Company was tasked with managing the implosion of the Georgia Dome — one of the largest covered stadiums ever built — and the subsequent construction of the recreation space that took its place. They discovered that UAV imagery and mapping services were just what they needed to keep the project on schedule and communicate with stakeholders from top to bottom.

THE BIGGER THEY COME...

The Georgia Dome was a 70,000-seat stadium in Atlanta, GA. When it was built, it was the largest covered stadium in the world. The Dome was the home of the NFL's Atlanta Falcons for 24 seasons, and in its time it hosted over 1,400 events attended by more than 37 million spectators. It was demolished in November 2017, after the completion of the Mercedes-Benz Stadium just 83 feet away.



The Home Depot Backyard is an 11-acre greenspace located on the former Georgia Dome site. It's the perfect spot to tailgate before a Falcons game, see an outdoor movie, or attend a community festival.

The story of how the Georgia Dome became The Home Depot Backyard is the story of 5,000 pounds of explosives, tons of debris, and nearly a year of hard work — and Multivista was there to document all of it.

BIG PROJECT, BIG DATA

 <p>33,085 Images Captured</p>	 <p>70 Aerial Flyover Videos Produced</p>	 <p>535 GIGABYTES Amount of Data Processed</p>
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CHALLENGE #1 | PROTECTING THE NEIGHBORS

The Georgia Dome was bordered by the Georgia World Congress center to the north and the new Mercedes-Benz Stadium to the south. One of the major considerations of the demolition was verifying these buildings weren't damaged by the implosion.

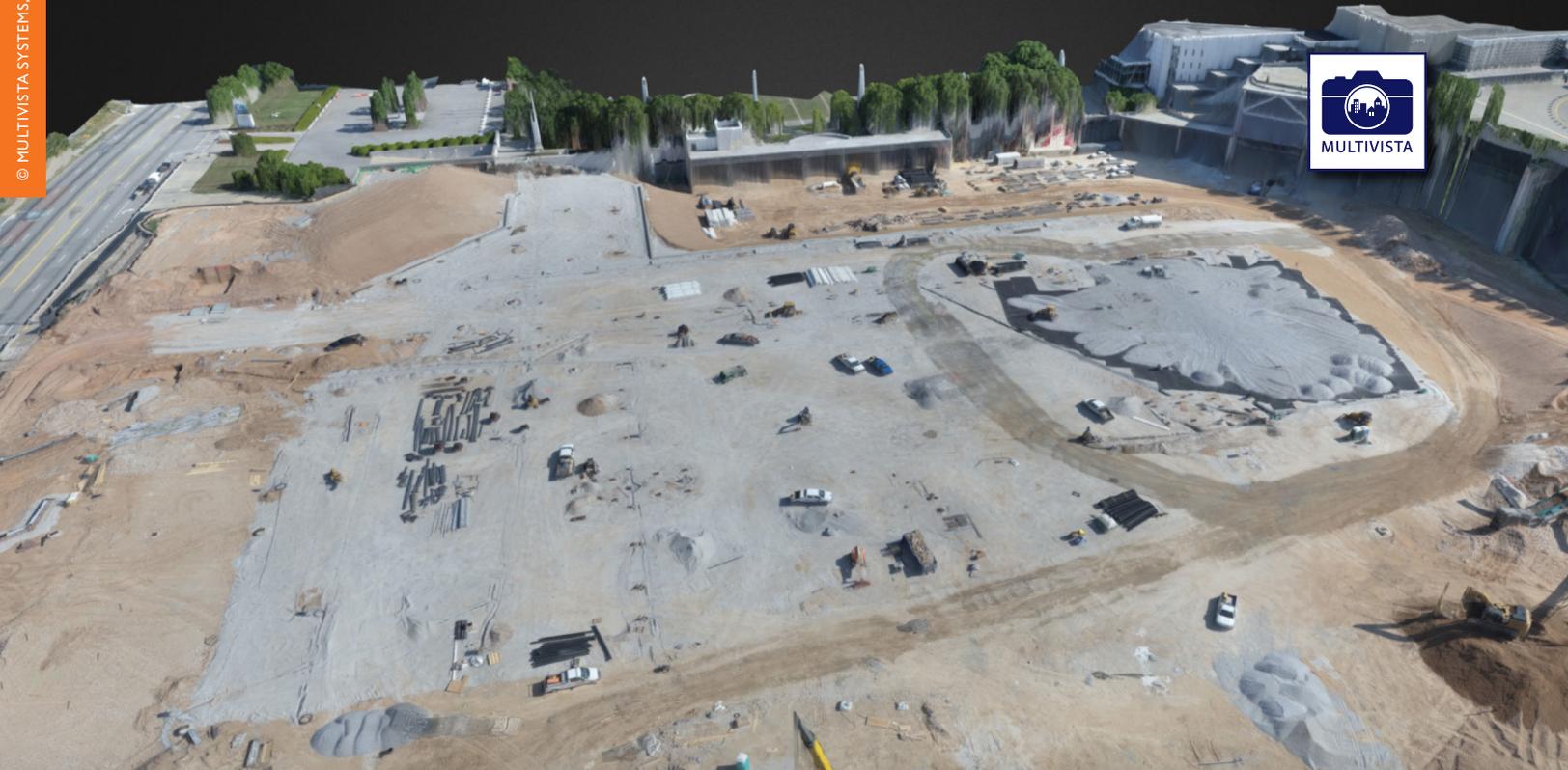
Project Management firm Darden & Company was contracted to coordinate and oversee the many players contributing to the demolition of the Georgia Dome and the construction of The Home Depot Backyard. The team at Darden & Company hired Multivista to capture detailed imagery of the neighboring structures and the Dome itself immediately before and after demolition.

“The implosion was meticulously planned to avoid damage, but we wanted to make sure we had a lot of images of the World Congress Center and the new stadium to use as a resource in case anything unexpected happened,” says Jason Hughes, Senior Vice President at Darden & Company.

Multivista used ground-based imagery and unmanned aerial vehicles (UAVs) to visually document all three buildings just before and immediately following the implosion. Darden & Company shared access to all captured visual documentation with five partner firms for review and verification.

BUILT FOR SHARING

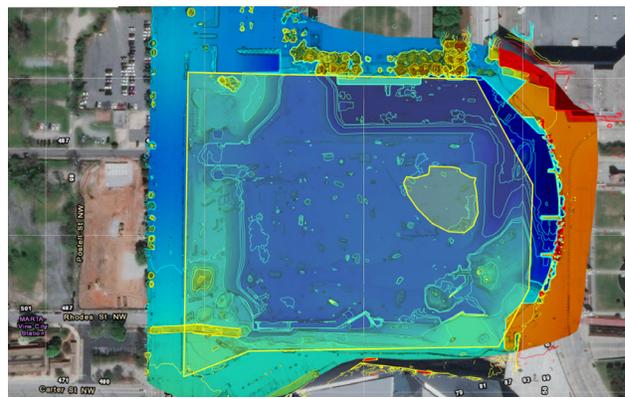
 <p>20+ Individual Project Stakeholders</p>	 <p>5 Unique Companies</p>
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CHALLENGE #2 | TRACKING MATERIAL REMOVAL

When you destroy a 70,000-seat stadium, you get a lot of debris. Removing all that rubble and bringing in new materials for The Home Depot Backyard was a monumental challenge — but Darden & Company, with their unparalleled large-scale project management experience, was more than ready.

Darden & Company used Multivista to document the project site using UAV mapping. Once a week, Multivista pilots would fly drones over the site, collecting visual data. That data was processed through an advanced photogrammetry engine to produce a map which could be accessed from within the Multivista Platform. Project stakeholders were able to annotate the map, use it to measure distance, volume, area, and elevation, and export the captured data to create three-dimensional models.



“We’d take last week’s aerial map, compare it to side-by-side to this week’s map so we could tell the volume, size, and scale of what had been removed in the past week,” says Hughes.

“In the past, we may have said ‘Wow, it doesn’t look like that rubble pile’s moving!’ But that’s a subjective opinion and this was not. We took that out of the equation which allowed us to be more proactive and knowledgeable about the project.”



CHALLENGE #3 | COMMUNICATING WITH STAKEHOLDERS

Multivista's aerial images and orthomosaic maps were invaluable for communicating with project stakeholders who wanted to keep tabs on progress without having to visit the site.

Hughes describes weekly principal's meetings where project stakeholders would review the latest UAV map and discuss next steps. "We were able to communicate progress internally and externally using aerial data. 'Yes, we're on top of it', 'Yes we're managing it', 'Yes, they hit their dates - and here is how we can tell.'"

"Mr. Blank loved seeing the aerial pictures with our weekly updates," says Hughes. "We used them to communicate progress so he could ask questions. There's no better tool for communication than these aerial images."

In addition, the aerial imagery turned out to be a great way to send updates to Arthur Blank, Co-Founder of The Home Depot and owner of the Atlanta Falcons.

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CONCLUSION

Darden & Company used Multivista for a wide range of services on the Georgia Dome implosion and The Home Depot Backyard, as well as the construction and facilities management of Mercedes-Benz Stadium. These services spanned over four years and included site surveys, interior and exterior progressions, pre-slab, underground utilities, and MEP Exact-Built® documentation, owner training videos, and live-streaming webcams.

“Originally, we were talking about putting up a webcam for the Falcons to use on the PR side, just to give fans the latest and greatest,” says Hughes.

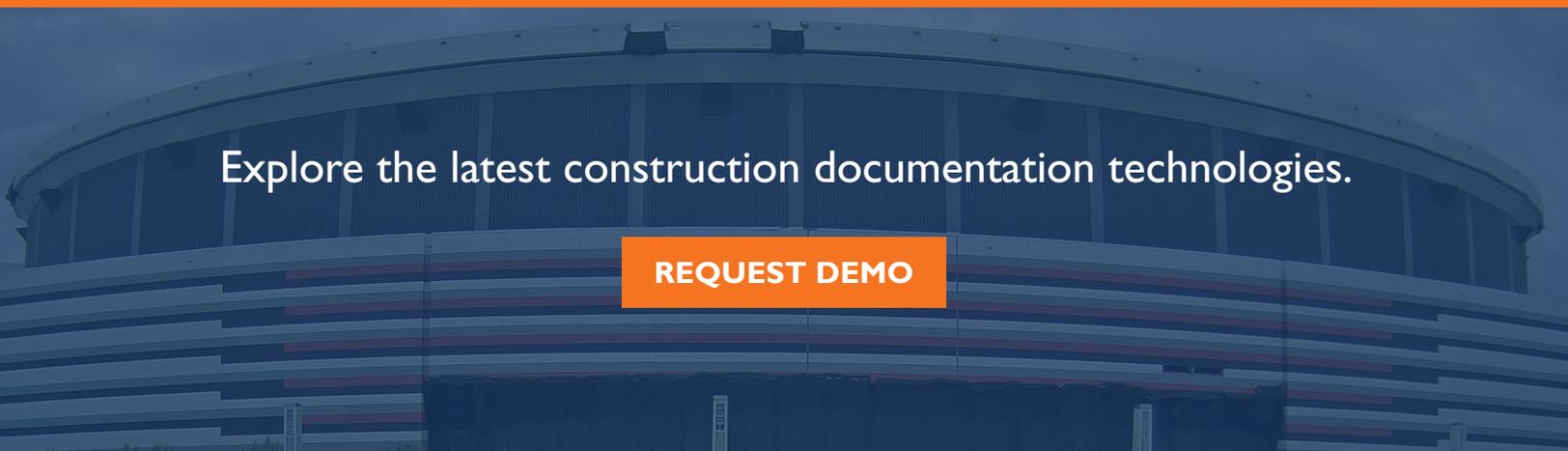
“But because we were working on multiple projects, we knew we could use Multivista to manage the day-to-day activities. It was a pretty easy decision on the front end and we’ve definitely gotten our value out of it.”

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The Home Depot Backyard opened to the public, on time, in September 2018.



- MULTIVISTA SERVICES USED**
- UAV Images
 - UAV Flyover Videos
 - Aerial Mapping
 - Photo
 - Video
 - Live-Stream Webcam
 - Webcam Timelapse



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