

Innovation

# Mass Timber



Anyeley Hallová  
ADRE

Sidney Filippis  
SYNECDOCHE

Rose Boleen  
TIMBERLAB

Carol Ross Barney  
ROSS BARNEY ARCHITECTS

Renee Funston  
CAPITAL AREA DEVELOPMENT AUTHORITY

## 5 Women Leaders in Mass Timber

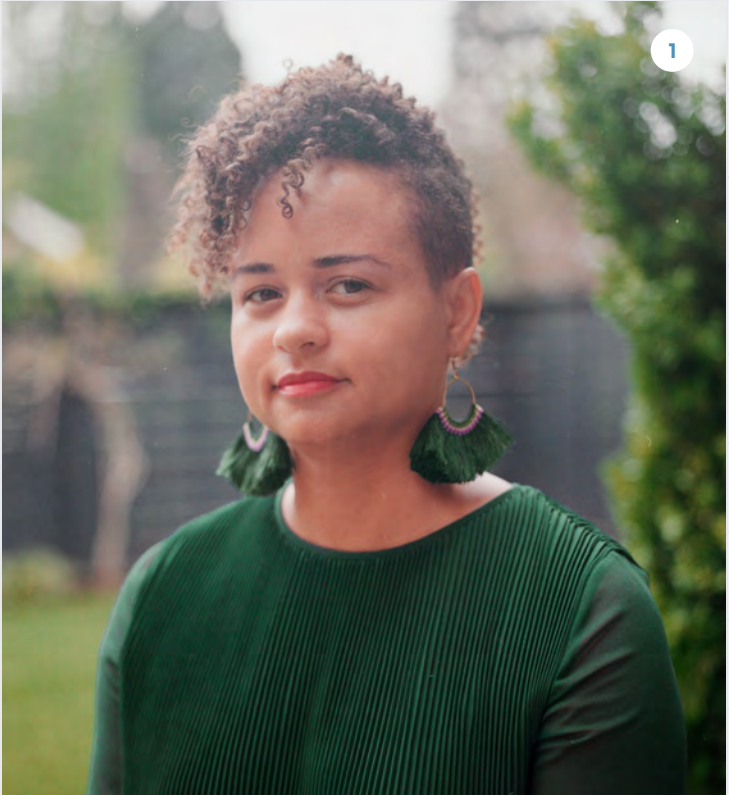
THINK  
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# Raising the bar for innovation.

The design and construction industry, like many others, bears the mark of historic gender inequity. Women architects, developers, and construction professionals have made countless incredible achievements to transform the built environment, yet women still constitute only 17% of architects nationwide—and that number is far smaller for women of color. Beyond scarcity of representation, women in AEC industries also face persistent challenges of lack of advancement as compared to their male colleagues, and a persistent lack of recognition for their contributions.

This imbalance makes it all the more important to celebrate women leaders in the field for their forward-thinking solutions and community-shaping accomplishments. And in many new-to-market, rapidly evolving fields in construction—like mass timber—women are leading the charge. More and more are using wood to make a material difference in advancing sustainability, equitability, and affordability in the communities they develop, design, and build.

Here are 5 of the women shaping the future of mass timber buildings.



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# 1 Anyeley Hallová

REAL ESTATE DEVELOPER AND FOUNDER OF ADRE

## Making development more equitable and sustainable.

Anyeley Hallová set her sights on a career in sustainable development as early as 1997. As a child, her family spent two years living in drought-affected northern Nigeria, helping to inspire her interest in the field. Her interest in sustainable development grew after studying abroad in Costa Rica, and Hallová would go on to work in urban design at AECOM, where she worked on major projects in the Bahamas, the U.S. Virgin Islands, and Europe, as well as the United States.

After moving into real estate development, she served as development manager for Gerding Edlen Development (now Edlen & Co.), where she worked on student housing, civic projects, and public-private partnerships, and then as a partner with project^ for 12 years, with a focus on shepherding development projects through entitlements and construction.

In 2020, Hallová launched her own firm, Adre, to focus on real estate projects that seek to create wealth for the Black community and for other underrepresented groups. She has also been very engaged with civic work. She is currently serving as Chair of the U.S Green Building Council, and she also serves as Chair for Oregon's Land Conservation and Development Commission, working to improve housing equity and climate-friendly planning. She holds a master's degree in landscape architecture from Harvard University and a master's degree in city planning from MIT. Think Wood spoke with Hallová about how developers can make their projects more eco-friendly and equitable while using mass timber.



**Your career pathway as a developer is unique. Can you tell us a little bit about yourself and how you got into sustainable real estate development?**

Yes, my journey to development is a long one. After completing an undergraduate degree in environmental systems technology, I went abroad to Costa Rica to study sustainable development in the 1990s. This experience inspired me to pursue a career that would involve working with the three pillars of sustainability—economic viability, social equity, and environmental stewardship. I eventually went into city planning and then got a degree in landscape architecture.

I participated in the ULI Hines Student Competition, which was my first exposure to development; I later began practicing as an urban designer and working with developers, but found that sustainability wasn't always part of the equation. This drove me to switch to development. I thought if I could become the client, I could dictate the terms of the engagement and focus on more sustainable development. After gaining experience working in the field and after completing the Meyer Memorial Trust Headquarters—a project that made equitable design a central focus—I could not help but want to incorporate social equity into all of my future projects. For that reason, I started my own company with the intention of focusing on social equity issues as rigorously as I do sustainability.

**You bring an important perspective that has been missing in real estate development. Can you talk a little more about that, and your firm's mission?**

The obvious thing that sets me apart is that I am a Black woman. Statistics show that less than 1% of developers are Black and/or Hispanic. So if you take Black and then if you take women, I don't even know that there's a stat that's that small. As a result, I bring something really unique to the table with my lived experience as a Black woman. Having lived through certain experiences and having a passion for community—when you have that at the top leading a development project, it can empower and change the dynamics of the team, allowing them to focus on and push the limits on issues related to equity and sustainability. We want to bring innovation in sustainability and innovation in social equity.

Meyer Memorial Trust



Photo Credit: Jeremy Bittenmann



Rendering Credit: projectX | LEVER Architecture

Framework

**You've also been an early adopter of mass timber construction. What got you started in tall timber and the idea of using more engineered wood in development projects?**

We got our start, essentially, with the U.S. Tallwood Building Prize. At my last development company, we had a client who really focused on sustainability and saw an opportunity to explore more sustainable materials—which led us to explore mass timber more. That project eventually became Framework. While the project was never built, the R&D resulted in the first permitted high-rise made from wood in the United States, and was instrumental in the changes to the International Building Code that allow for taller wood buildings throughout the entire United States. The same team members went on to do Oregon Conservation Center and some worked on the Meyer Memorial Trust Headquarters. Both of these projects incorporate mass timber in pretty innovative ways. And Adre is now working on The Killingsworth Project—a creative commercial building focused on seismic resilience and equitable outcomes.





Rendering Credit: Adre | LEVER Architecture

The Killingsworth Project

**Are there any future projects on Adre's horizon that you're really excited about?**

There's one project—the Williams & Russell Project—that is bringing it all together for us. Historically, the site once was part of a thriving Black community in Portland and the goal is to revive this urban space for that community once again. We responded to an RFP coordinated by Williams & Russell Community Development Corporation and we were successful in our proposal. This project includes three different components: The first is a Black Business Hub for organizations and companies vested in growing Black business in Oregon, which will use cross-laminated timber. Secondly, an Affordable Homeownership Project—20 homes—for Black residents, and we're currently thinking that it will be built using light-frame wood construction. And the third is an affordable apartment building, which will be supported and led by PCRI, a local community development corporation that focuses on Black-serving initiatives like this. It's an exciting project for us. It will help people who have been displaced due to gentrification come back to the neighborhood. It will increase home ownership and is in line with Adre's focus on intergenerational wealth creation for the Black community.

We also received a grant for the project from the Energy Trust of Oregon, as part of what they called a Net Zero Fellowship, to essentially understand the feasibility of making this a net-zero campus—net-zero energy, waste and water. It's exciting as this project is really comprehensive—it taps into all of the environmental, sustainability and equitable values we are working towards at Adre. ■

**Can you share more about The Killingsworth Project?**

The Killingsworth Project is a three-story creative workspace focused on seismic resilience. It's located within the historically Black community in Portland, Oregon. We received partial funding for it through the Softwood Lumber Board and the USDA Forest Service's 2022 Mass Timber Competition. It's designed with an innovative CLT rocking-wall technology to be seismically resilient with the ability to rock and recenter after a major earthquake with "little to no damage."

We just finished the schematic design and are now in design development. We're following a performance-based review process with the City of Portland, which we've just kicked off. Peer reviewers are reviewing our work. We've been permitted at the city level, and are looking for investors and applying for grants to support the innovation side of the project.

**Sounds like the project is gaining good traction, and has a growing number of supporters.**

Yes, we are getting good interest in the project. We are going to have tenants in the building that all have a passion for these issues and care deeply about diversity, equity, and social responsibility. And we've had interest from a regional bank in terms of providing more potential funding.

**What are some ways mass timber can help boost sustainability and, at the same time, help make development projects more equitable?**

I also believe it's important for us to ask: Who is this building for, and who is going to benefit from it? Are they included in a truly meaningful way? There are many biophilic and health benefits to being in a wood building. And with more equitable development, those benefits can be felt by all communities, not just those in typical class A spaces.



Rendering Credit: Adre | LEVER Architecture

Williams & Russell Project



# 2 Sidney Filippis

STUDIO DIRECTOR AND ARCHITECT AT SYNECDOCHE

## Advancing sustainability with Michigan's first tall mass timber building.

An eight-story mixed-use mass timber development called SouthTown in downtown Ann Arbor, Michigan, is projected to be the first tall mass timber building in the state when completed, targeted in summer 2026. Locally based Synecoche studio director and architect Sidney Filippis is part of the team behind the design.

Synecoche brings previous experience developing their own projects to the table, making the firm invaluable to clients in helping pro formas pencil out. The firm's CEO and principal, Lisa Sauvé, serves on Ann Arbor's Planning Commission, making the firm especially in tune with zoning ordinances and project approvals.

That experience navigating project approvals proved to be crucial as Synecoche designed its groundbreaking mass timber project in Michigan, where advocates such as Sandra Lupien, director of MassTimber@MSU, a program at Michigan State University, have pushed legislators to update the state building code to adopt 2021 IBC provisions accommodating mass timber.

Beyond SouthTown, Filippis has worked on projects as small as furniture design and as large as 1 million square feet, and she sees her role as an architect as encompassing not only a project's drawings, but also its branding, furniture, graphics, and even social impact. Filippis spoke with Think Wood about the SouthTown project, pushing sustainability forward, and advice for practitioners starting their first mass timber project.





Southtown | Exterior

### What sets Synecdoche apart?

We do a really good job of zooming out and looking at the big picture, but because we also have a fabrication studio [that manufactures custom furniture and objects for projects], we are invested in diving into the small details. We understand the constraints and it helps us have a better relationship with manufacturers and contractors. We're very into sharing what we're learning because we want to help others learn too.

### How did you get started in mass timber?

The SouthTown project kickstarted it in our office, but we are always working to do more than the minimum. Understanding that sustainability is a goal for our firm and for this community, we are always asking how can we make buildings more sustainable? CLT is a no-brainer. Now the question is, how do we get it into more projects and how do we keep making those projects more sustainable?

It's a little bit of educating your clients: What is this? And why should you be excited?  
It's a beautiful product and we are excited to continue to work with it.

### Is sustainable design internally driven at your firm or are the clients coming to you for sustainable solutions?

We're pushing that. I think clients appreciate it. Our SouthTown clients are definitely on the same page as us. We're always asking, how can we make an impact on the greater environment?

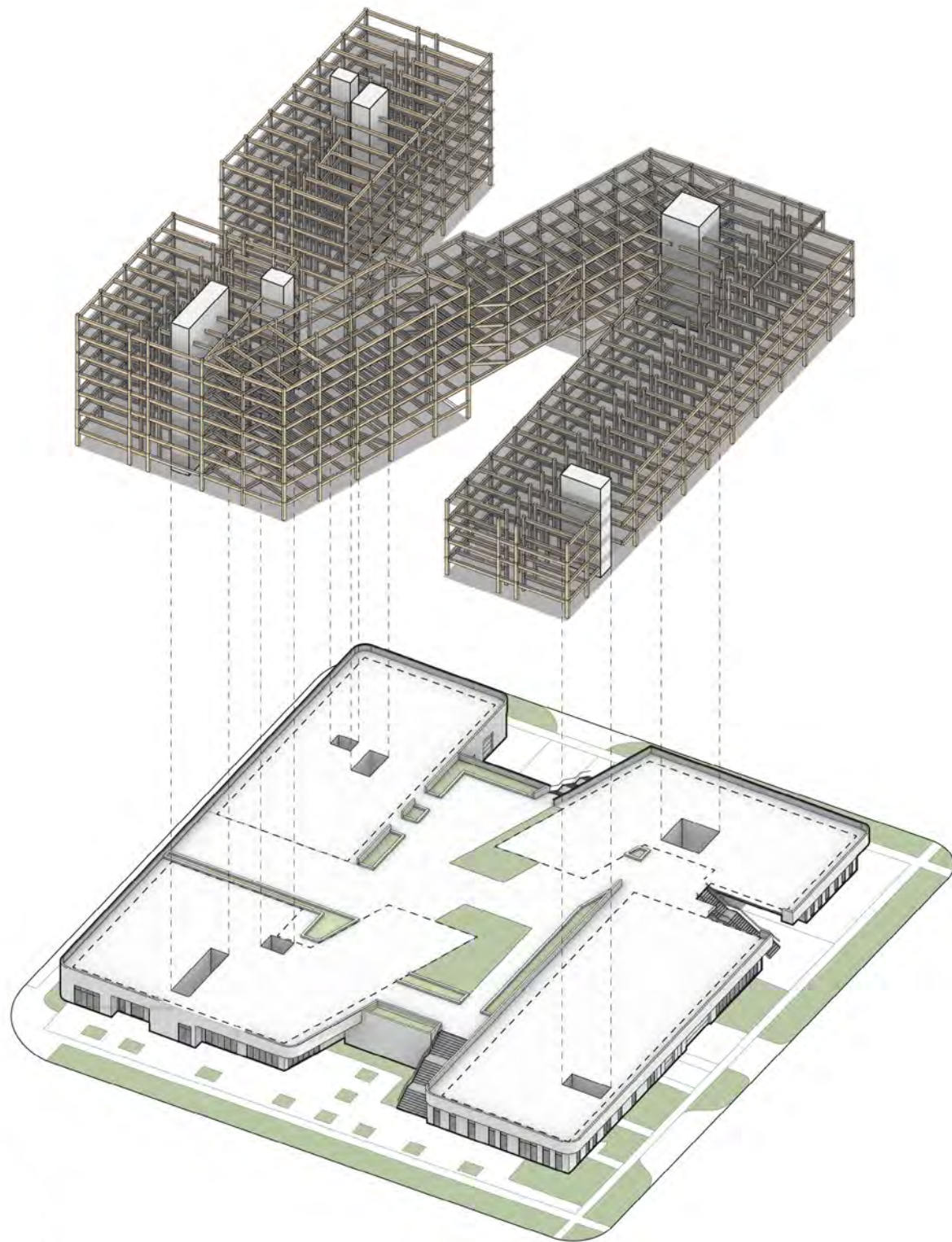
### What are some of the things that you find exciting about mass timber today?

A lot of manufacturers and maybe engineers will think that architects don't like things that are standardized, but I love standardized things. I think if you can make that interesting and beautiful, that's a really great creative challenge.

### What are some of the obstacles to wider adoption of mass timber?

Definitely in Michigan, our building code. We're super fortunate to have Sandra at MSU. She's working with our legislators, and I know basically everyone that's here from Michigan has written a letter to ask them to adopt the 2021 IBC. The most recently completed mass timber project is in Lansing, Michigan, and we went and did a tour with our client and with one of the contractors we were working with so they could see it. I think it's getting everyone aware that it's already built, you just need to make it happen more.





Southtown | Axonometric



Southtown | Courtyard

### What do you think should be some of the common goals that the industry has around the development of technology?

Work collaboratively with your contractor, owner, and engineering team to make the most efficient use of the space so the money can go to the things that they'll see. And then make it more affordable.

### How are you pushing sustainability forward?

Ann Arbor has a really robust sustainability plan for a small Midwestern town. One way we are pushing sustainability forward is the embodied carbon, but two, we're looking at sustainability in terms of making a sustainable community. And that's really where we broadened our goal: We're making a nice place for people to live. So, the way we shaped SouthTown is because of a desire to create a view cutting through it. The raised garden [at the center of the complex] will bring the community in; we're thinking that it is more sustainable by including the neighbors. We're leveraging the whole building as a sustainable building and the CLT as a component.

### Does mass timber help achieve those sustainability goals?

We've pointed out to our contractor, the owner, and the planning commission, it goes up quicker. It's a cleaner construction site that's more sustainable. Those are really big components. We're leveraging the whole building as a sustainable building and the CLT as a component.

### What advice would you give to other practitioners who are maybe where you were a couple years ago, starting their first project or wanting to get into the industry?

Reach out to organizations like Think Wood and WoodWorks. They've been so helpful. We've had a regional director from WoodWorks come in to talk about our floor assembly—how we were going to acoustically separate things, and some of our concerns on fire ratings early in the project. Getting into some of those really detail-oriented things before you're even working on a project, so you can kind of wrap your head around it was really helpful for us. And then making sure you're also getting experienced people. If it's your first project in mass timber, find a structural engineer who's worked on a mass timber project, because then they're going to bring that knowledge, instead of it being the first for everyone on the team. There's a huge learning curve, so lean on other people.

### There is a growing community of people who have that expertise. Everyone seems eager to spread the knowledge and bring more people into the circle.

Yes. No one's gatekeeping or hiding these things. It feels like open communication. ■

# 3 Rose Boleen

PROJECT MANAGER AT TIMBERLAB

## How a Timberlab project manager developed her mass timber expertise.

Rose Boleen is a project manager at Timberlab—a design-build fabrication company founded by the 135-year-old San Francisco-based company Swinerton. The construction juggernaut's sister company is taking on timber construction with the spirit of a start-up, offering full-service turnkey design-build timber installs, custom fabrication and supply of mass timber solutions, procurement, and digital construction, as well as acting as a research and development partner doing hands-on testing. Boleen has been with the firm since the beginning, taking on some of the most notable mass timber projects in the country. Those projects range from an undulating mass plywood and glulam canopy roof at Oregon's largest airport to an impressive 35,000-square-foot CLT and glulam-built academic hub among Santa Cruz's giant redwoods.

She has played a key role in Swinerton's launch of its rapidly successful mass timber division and was recently recognized as one of Constructive Dive's Construction Champions. Think Wood sat down with Boleen to talk about her rapid rise as a mass timber expert over the past six years and what makes Timberlab unique.

**"The curiosity and earthly reward that comes from being part of the 'how' is why I choose construction. How do days, months, even years of discussions, setbacks, handshakes, personalities, frustrations, builders, materials, budgets and phone calls...how do I take these puzzle pieces and strategically assemble them into something groundbreaking?"**

—Rose Boleen, Project Manager | Timberlab



### So what makes Timberlab unique?

When you think of construction, you think of a general contractor or a subcontractor. And what makes Timberlab unique is that we have a general contractor background, but our mindset is really in innovating specifically mass timber, pre-construction, early design phase connections, and then fabricating these pieces to precise tolerances to then eventually install them. And so we're a part of every single aspect of the mass timber building itself. By bringing together both the visionary and the technical, the engineering and the fabrication, Timberlab is putting more and more mass timber projects on the map—and it's very exciting to be part of it.

### How did you end up in the world of mass timber and what was your first mass timber project?

I joined Swinteron—the founder of Timberlab—through an internship and I moved out to Oregon for the summer. It was there that I got my first experience working on mass timber projects—the First Tech Federal Credit Union, the largest mass timber building in the U.S. at the time of being built. And that was Swinteron's first stab at turnkey mass timber installation. And I was very eager in my career early on and I said, "I want to be in the field, I want to be rigging panels, I want to be hands-on labeling them and installing them." So I was out there putting eye hooks into CLT panels and getting them rigged for the crane to set them into place. So that was my first experience with mass timber.

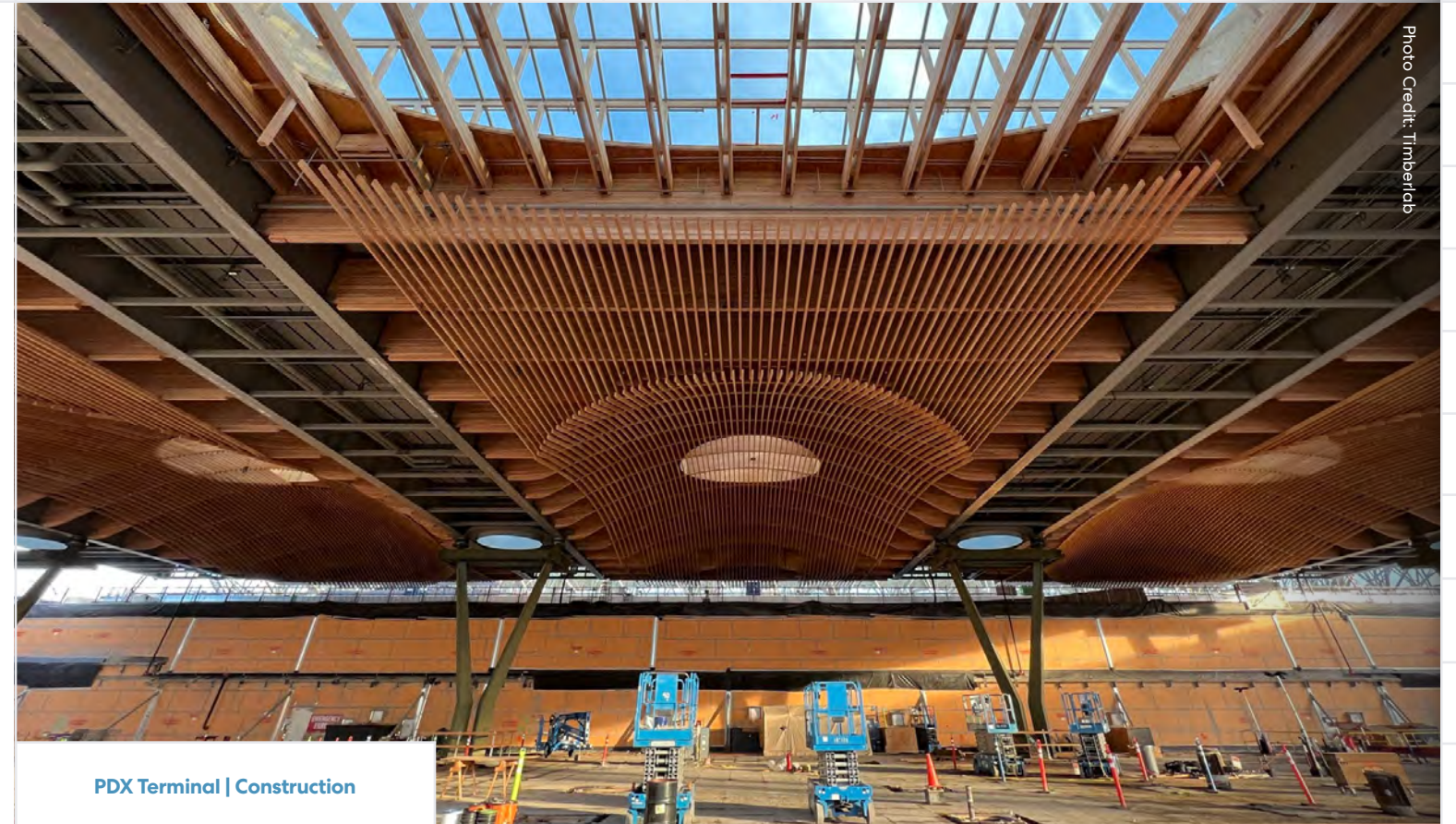
It's impressive to think how far Swinteron has come in the last six years, eventually forming a whole new division [Timberlab] of our company. And being one of the first 10 people to be a part of this group has been really special. I had no idea that's where this would take me.

### What does Timberlab offer as a distinct group of specialized timber excerpts?

We have a dedicated engineering department, virtual design department, and manufacturing department—and experts in each one of those areas for support that is specific to mass timber construction and design. I can reach out to get input on design details that may not have been fully engineered yet or if I need to do a different fabrication on it, I can troubleshoot and collaborate early in the process. This input is really helpful on projects, and I think having the right people embedded internally in our company really gives us an advantage when presenting the solutions to architects and clients. It's very powerful to have all the knowledge we have in-house.

### Sounds like you have a passion for mass timber—what drives that?

I love the positive impact mass timber can have on the tenants and occupants. I heard a really beautiful story that someone's daughter worked in an office that was made out of mass timber—and this is post-pandemic, so they're all going back to the office. She found that she actually loved going to the office more because it was a mass timber building and she felt excited to be in an environment that was welcoming and made her feel good. I think it's exciting to hear, after people have been working from home for so long, that mass timber can help bring people back together in a beautiful space. I'm hoping to see more offices, public spaces, and even apartments incorporate the bright, welcoming environment that mass timber can provide. I like to hear that we're truly making a positive impact on people's everyday lives.



PDX Terminal | Construction

Photo Credit: Timberlab

### What are some challenges when it comes to mass timber construction and design, in your first-hand experience?

Weatherproofing and keeping the product dry are things that design teams need to keep in mind. Eventually, it would be great to see a lower-cost, fully weatherproof fastener that I can install in the rain and not have to worry about it getting wet and corroding. Availability, supply, and timelines can be a challenge, although those are improving. In the future, I think we'll see more and more suppliers come onto the market and prices will be competitive.

When it comes to sustainability, I think we still need to dive into how we can reduce emissions, especially in transporting mass timber products. Having more facilities across the country, closer to projects, could help with that. Training is also a gap. For the PDX Terminal Core Redevelopment, we have trained up to 40 different people on how to use these products. It helps increase the adoption of mass timber as more and more folks share their knowledge.

PDX Terminal | Exterior



Render Credit: Timberlab



**Can you share a little bit more about the PDX Terminal Core Redevelopment and its impressive mass timber roof design?**

The mass timber roof design is impressive and many are in awe that we could do an 80-foot long-span with glulam beams. We are frequently asked, why isn't this steel? Why would you choose wood? I love the response from KPFF, the engineer of record: We looked at the correlation and the strength property of steel versus wood, and these glulam beams actually perform better than steel in this particular case. It's also a great story from a local perspective. All the mass timber was sourced from a diverse array of local landowners and Pacific Northwest tribes across the region within a 600-mile radius. It really pays homage to Oregon's rich natural beauty while also highlighting the growing innovation in the sector.

**Is there anything you touched or installed on that project? Did you go and try to screw in an eye hook or anything?**

I may have not necessarily installed anything, but I did write my name on top of a lot of beams!



PDX Terminal | Interior



Photo Credit: Timberlab

**Over your past six years working in mass timber construction, what has been one of your proudest moments?**

I'm really proud of being able to educate others about this innovative sustainable building product. As a product, mass timber itself is pretty young, and I'm also pretty young—but I've had the incredible opportunity to gain a lot of knowledge. And it's kind of a rare situation to be in at my age and a privilege—especially in construction, a field that's so rooted in specialized knowledge. I have a seat at the table as a mass timber expert, and that's exciting. ■



# 4 Carol Ross Barney

ROSS BARNEY ARCHITECTS

## In almost half a century of professional practice, Chicago-based Ross Barney has built an extraordinarily wide range of structures and urban spaces.

Carol Ross Barney is the winner of the 2023 Gold Medal from the American Institute of Architects (AIA), an annual honor that recognizes “individuals whose work has had a lasting influence on the theory and practice of architecture,” according to the Institute. Established in 1907, the award is one of the oldest and most prestigious that can be conferred on architects. Previous winners include Frank Gehry, Renzo Piano, Mies van der Rohe, Le Corbusier, Frank Lloyd Wright, and Thomas Jefferson.

With no specific style that defines her work, she develops multiple solutions to every project and works with her client to choose which direction to pursue together. “I paid for that for a long time,” she says. “They’d say, ‘Carol’s a good architect, but she has no signature.’” But over the course of her career, this method of practice has been recognized for its ability to create a rich dialogue between architect and client that encourages multiple voices to contribute to a decidedly democratic process. This results in more nuanced and successful projects that better serve the communities that interact with them—and that are diverse in their design approach.

Barney’s breakthrough project was the masonry-and-glass Oklahoma City Federal Building which replaced the Alfred P. Murrah Building that had been destroyed in a 1995 domestic terrorist attack. Other projects are as varied as a brightly colored masonry post office in the Chicago suburbs whose colors and façade patterns invoked the American flag and her reimagining of the Chicago Riverwalk, which has redefined the city’s relationship to the Chicago river and new public spaces throughout downtown.

More recently, Ross Barney’s designs have embraced more timber alongside other building materials, including in several McDonalds’ restaurants (not a building type that has been frequently associated with wood). Think Wood spoke with her in her office, a timber-framed loft that previously housed Chicago legend Harry Weese’s offices in Chicago’s River North neighborhood.



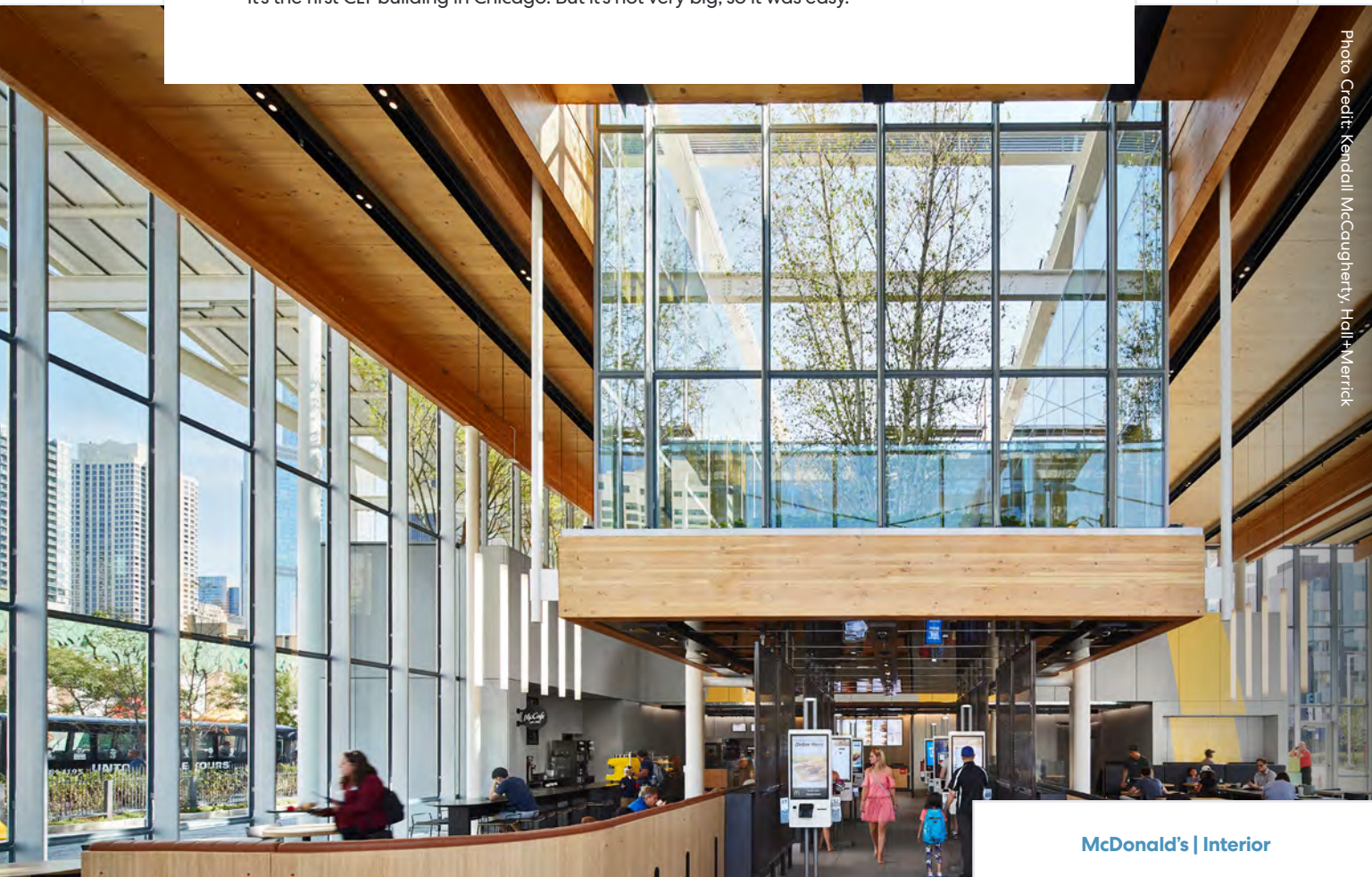
### What do you see as the role of wood in architecture today?

The idea of making CLT or engineered timbers is a new thing for Americans, but we are using it. The codes are being amended, and people want it. It's a human material; it was living at one time. There is some sort of comfort with it; it's psychological and emotional.

By its nature, architecture and design are trying to find a material or an assembly of materials that use the least amount of resources in the best way. This is the challenge for this generation—not just of architects, but of world citizens. If we don't solve this, it's over.

**Let's talk about some of your recent wood projects. Your design for the McDonald's Chicago flagship that opened in 2018 creates a series of public spaces beneath a monumental canopy. The restaurant itself is a much smaller structure that sits beneath the trellis and features a steel and engineered wood frame and a CLT roof slab. How did you convince them to incorporate wood?**

McDonald's didn't have any mandate. We told them we wanted to do a [LEED] Platinum building. I don't like to talk about LEED because it's about counting points and I'm more interested in concepts, but counting points helped us to do that building with timber. It's the first CLT building in Chicago. But it's not very big, so it was easy.



McDonald's | Interior

Photo Credit: Kendall McCaugherty, Hall+Merrick



Photo Credit: Kendall McCaugherty, Hall+Merrick

**The Searle Visitor Center, also completed in 2018 in Chicago's Lincoln Park, provides a striking wood canopy that protects the main entrance for the city's zoo. How did this design evolve in wood?**

We told [structural engineer Bob Magruder] we wanted to create tree-like shade. We wanted do a really lightweight canopy and he suggested stressed panels. They look like they're floating. We wanted to make the transition from building to garden, since it's a zoological garden. When you walk through there, it looks like it's magic.

**Are you using wood construction in upcoming projects?**

We have one building now that we're designing in New York, a public building for the Hamptons. It's a community center. The town of East Hampton has passed an ordinance requiring that their buildings be net zero [energy]. We encouraged them to look at net zero carbon, as well. If you're going to do that, there are only a few products. Everybody naturally looks at wood because it's basically carbon capture.







Photo Credit: Kendall McCaugherty, Hall+Merrick

The Searle Visitor Center | Exterior

You also took part in the recent ‘Come Home Chicago: Missing Middle Infill Housing Competition,’ sponsored by the Chicago Architecture Center, which asked architects to reimagine the city’s single-family home, two- and three-flat, rowhouse and six-flat typologies for today. While your design wasn’t chosen as a finalist, why did you decide to explore the use of CLT in your concept?

Since we’ve built in CLT, our entry was entirely about timber and the idea that you could standardize a panel. We standardized the design on a 13-foot panel, which is half the width of a city lot in Chicago. We proposed to use it both in bearing and for the floor. And we purposely made it the simplest building that you could possibly think about. We did the townhouse so that we could standardize it and build it inexpensively. This material has so many admirable and desirable qualities.

**What challenges do you still see for broader wood and timber adoption in the building industry?**

I’m really frustrated that you can’t use wood as an exterior material here [in Chicago].

But it seems like a lot of the technical challenges about wood in general—whether you’re talking about engineered wood or timber or CLT—they seem to be solved. The regulatory obstacles are not gone, but they are being addressed.

When we suggest using it, the biggest challenge is finding manufacturing and production. The US hasn’t really developed that capacity yet and I don’t know how fast you can do it. But I hope they develop fast. I have clients that want wood buildings.

**What are some of the things that influence how you think about the material?**

I bought a house in New Mexico during COVID, so I had a place to go in the winter. There are all these forts that were built between the Civil War and the turn of the century. When residents abandoned them, they took the few pieces of timber—the window frames, the roof beams—with them. They bothered to disassemble it. That’s how precious wood was and how valuable it is in the Southwest. Wow. ■

# 5 Renee Funston

DEVELOPMENT MANAGER, CAPITAL AREA DEVELOPMENT AUTHORITY

**Renee Funston is a development manager for Sacramento's Capitol Area Development Authority (CADA), a unique self-sustaining public agency with a mission to build safe, affordable and environmentally sustainable urban neighborhoods.**

Think Wood sat down with Renee to talk about the evolving role of the near half-century-old organization and how mass timber might play an important part in more affordable, biophilic, eco-friendly housing design for urban centers like Sacramento.

### **Can you tell us a little bit about yourself and the mission of the Capital Area Development Authority (CADA)?**

I'm a development manager with Sacramento's CADA—it's a joint powers authority between the state of California and the city of Sacramento and is specifically here to implement the housing and support the retail goals of the Capitol Area Plan. We were founded in 1978 to essentially be the state property manager for residential and commercial properties around the capitol. CADA is a pretty unique public agency—we still get tax increment financing, and so that's a portion of the tax dollars within our actual redevelopment area. We then reinvest that back into the surrounding neighborhoods.

A big part of our mission is to help create a neighborhood for all, including all household types and incomes. CADA is mandated to preserve a quarter of its housing stock (units that CADA manages or builds) as affordable units.



### We understand a recent CADA-supported affordable housing project used mass timber. Can you tell us about that project?

Yes, one of our most recent projects, Sonrisa (1322 O Street), is a five-story mass timber building using cross-laminated timber (CLT). It consists of 58 micro-unit apartments with 1,300 square feet of ground-floor community space. All of the units are affordable at low- and very low-income levels. It is the first to be completed under Governor Newsom's Executive Order N-06-19 for Affordable Housing Development. That order specifically calls for increased use of renewable sustainable construction methods such as modular mass timber construction.

### What are some of the benefits you found from using mass timber?

It will provide beautiful, warm environments and will help boost the ceiling height to over nine feet in the units and 12 feet on the ground floor. That is a real plus, especially when building micro suites, as it gives more light and a greater sense of openness, contributing to a sense of well-being. We will also be able to take advantage of modular prefab construction, so we can frame and get the structure up a lot quicker. It's well-suited to smaller urban infills. And then of course the sustainable properties associated with mass timber make it a no-brainer.

**"I definitely recommend reaching out to the growing community of mass timber experts in the field. Developing a close collaborative, trusting, working relationship between the owner, architect, and contractor can really make a difference when it comes to mass timber projects."**

—Renee Funston, Development Manager | CADA

Sonrisa | Exterior



Photo Credit: Kurtis Ostrom Photography

### Why is it important to consider sustainability, biophilic design and using materials like exposed wood, in an affordable housing project?

I think with any project, not just affordable housing, it is important to consider these things. At the same time, our organization is long-term mission-driven, maybe more than a traditional developer. So we go above and beyond for a lot of these types of things, knowing that we are building affordable housing as part of a long-term sustainable development strategy. With mass timber, we can sequester carbon into this solid form and as a building material it's going to have a lot more longevity—you could potentially even use those CLT panels for another project in the future if we think in terms of design for disassembly and re-use. That's something that we should all be striving for. Beyond this, we are doing things like not including parking but instead making sure there's excellent walkability and access to transit.



Sonrisa | Interior

Photo Credit: John Swain Photography

**As a public agency, do you see CADA as needing to take a leadership role to showcase innovations to the wider industry, such as the case of using mass timber?**

Absolutely. And I think that's certainly already happening in Sacramento. The Sonrisa is a great example and so we're happy to share our findings and knowledge. We're sharing everything from design details and pro forma to acoustical studies. These projects can help everyone in the industry as we learn together and fine-tune our best practices.

**What are some of the learnings you can share when it comes to mass timber and affordable housing?**

I think generally working together really closely early on a mass timber project is important. There are many things that are happening at once and you don't always identify what pieces are missing from the drawings until you are actually working with your sub-consultants. As much as possible, you want to have that really close upfront coordination, checking everything out, that everyone is on the same page and has thought through what things potentially could go wrong. Giving close attention to delivery schedules of mass timber panels is also key. For the Sonrisa project, it took three days for the truckload deliveries to arrive and we had to figure things out between the delivery schedule and when people are working, factoring in weekends and holidays.

**Any last words or advice to other industry professionals or public agencies looking to take on a mass timber project?**

Innovation can be overwhelming and a little scary. It's understandable that developers are looking for certainty. I definitely recommend reaching out to the growing community of mass timber experts in the field. Developing a close collaborative, trusting, working relationship between the owner, architect, and contractor can really make a difference when it comes to mass timber projects. You can never go wrong reaching out to other successful design teams. I would certainly recommend connecting with others in your region who have successfully completed mass timber projects. ■



Photo Credit: John Swain Photography

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