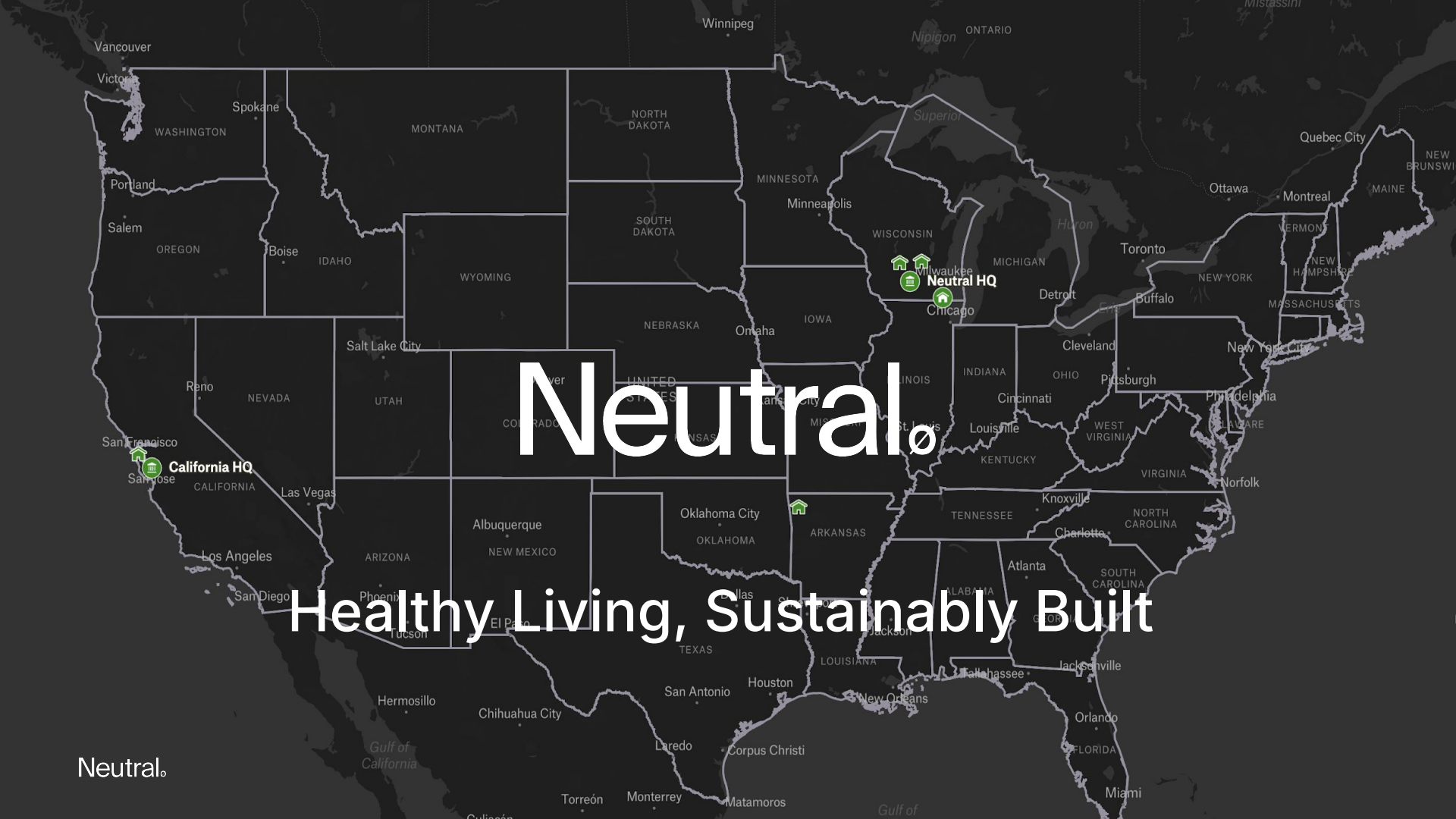


Digital In Action

Mass Timber — a U.S. Case Study
Nate Helbach, Co-Founder & CEO

Neutral.



Neutral.

Healthy Living, Sustainably Built

Neutral.

Neutral

Neutral is a real estate developer focused on sustainability, resident health, and well-being.

We're a vertically integrated firm, currently building ground-up multifamily projects in the Midwest region of the United States.



Neutral.



Neutral.

Development + Holding Company



Wholly Owned Subsidiaries

Neutral.Studio

Design + Architecture

Neutral.Invest

Tech-Enabled Investments

Neutral.Workshop

Carpentry + Specialty Fit Out

Neutral.Lab

Research + Development

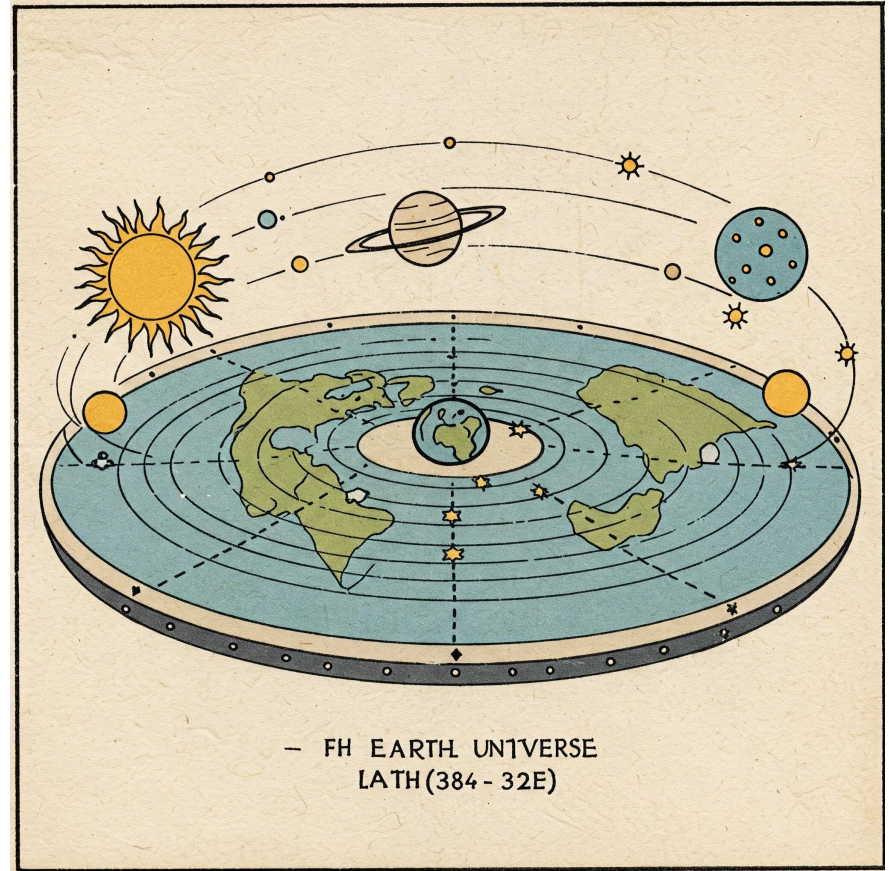
Neutral.Build

Construction Management

Flat Earthers?

Mass Timber is at the forefront of construction technology offering sustainability, strength, and efficiency. Its benefits are backed by extensive research, real-world applications, and proven performance in modern engineering.

Despite the data, some professionals in the industry resist the science behind Mass Timber.



What is Char?

Predictable Burn Rate for Reliable Performance

Wood has a unique fire resistance advantage due to nature's charring effect. When exposed to fire, the outer layer of the wood carbonizes, creating an insulating barrier that slows down further combustion. This predictable burn rate allows engineers to design structures with precisely calculated fire resistance, ensuring safety and stability over time.



What is Char?

Mass Timber is a Top Choice for Fire-Resistant Buildings

Unlike steel, which weakens rapidly at high temperatures, Mass Timber maintains its structural integrity even in extreme conditions. Its natural self-protecting char layer prevents rapid failure, making it one of the safest and most reliable materials for modern buildings. With proper design, these structures can exceed fire code requirements, proving that wood is not just sustainable but also a high-performance choice for safety and resilience. Roughly 3.25 centimeters of wood fiber burn per hour.

Neutral.



Proof of Concept

Bakers Place



Project details

Bakers Place	Madison, WI, USA
Stories	14
Units	206
Average Unit Size	77 m2
Total Retail	836 m2
Total Parking Stalls	110
Status	Pre-leasing

Neutral.





Challenges of mass timber in U.S.

Bakers Place was Neutral's first foray into mass timber in 2020, and the first project of its kind in Madison. We faced:

- Lack of experienced local architects
- Lack of debt lenders
- Lack of builders risk insurers
- High cost of local suppliers
- Outdated codes or interpretations

Neutral.



R&D: Mass Timber Steel Hybrid

Neutral partnered with USDA Forest Service Lab to provide a unique comparison of mass timber compared to conventional steel and concrete builds:

- Structural performance
- Cost
- Speed
- Life Cycle Assessment

Available for free download at
www.neutral.us

Neutral.



USDA WOOD INNOVATIONS GRANT PROGRAM | 2024



Bakers Place Case Study

A comparative exploration into mass timber and conventional construction methods



Opening May 2025



Neutral.



Lessons from Bakers Place

- It's possible to make mass timber pencil!
- Sometimes, shipping CLT across the ocean may be economically feasible and even sustainable.
- Need more standardization and productization in the approach to interior units and layouts.
- **We can aim even higher and push even "taller" on sustainability performance.**

Neutral.



Reaching new heights

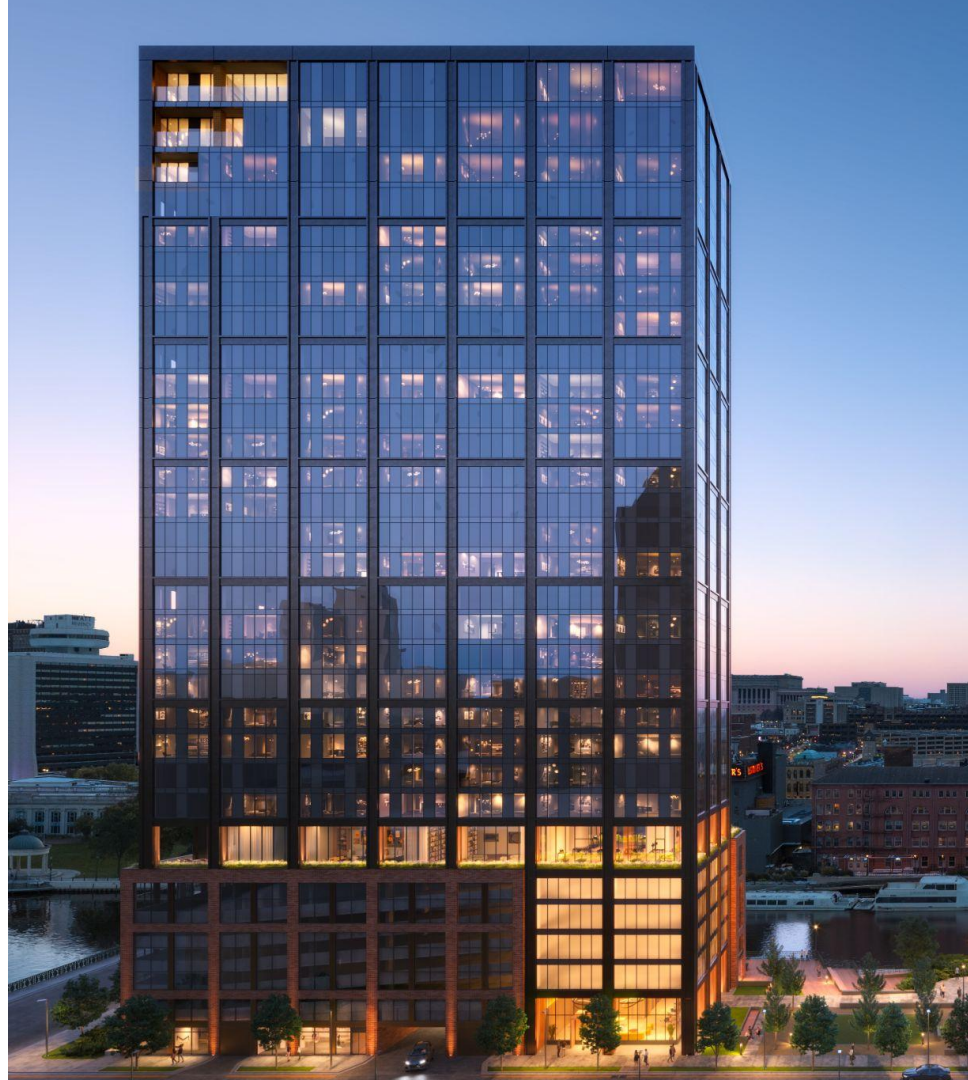
Neutral.Edison

Neutral.Edison

- Tallest Mass Timber Building in the Northern Hemisphere.
- Tallest Passive House residential building in the United States.
- One of the largest Living Building Challenges certified residential buildings in the world.



Neutral.



Project details

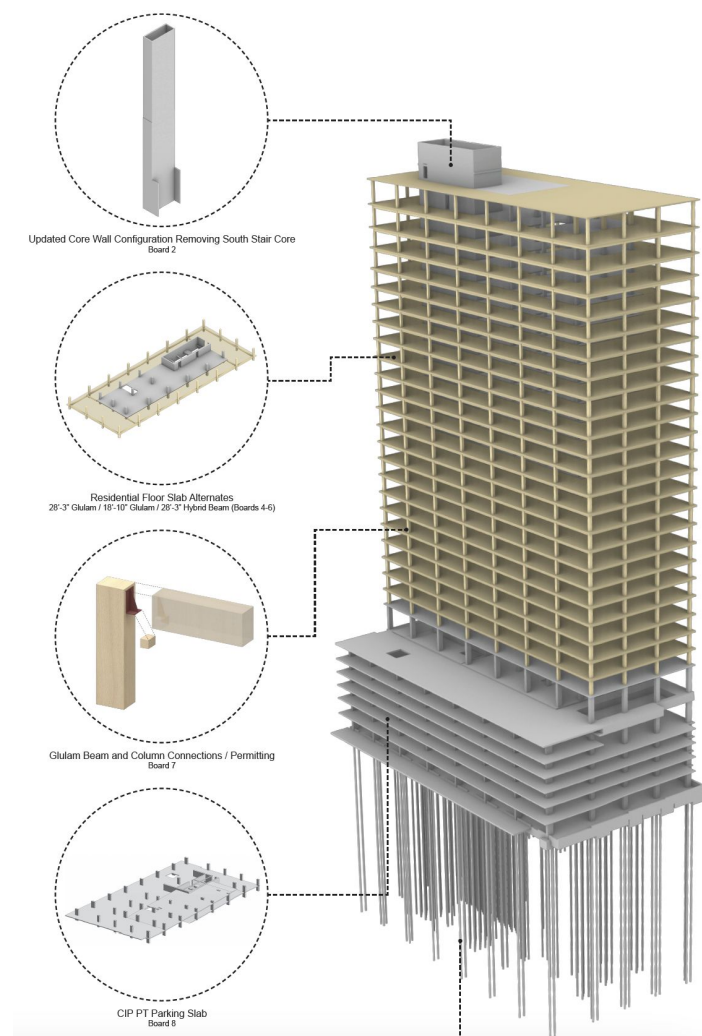
Neutral.Edison	Milwaukee, WI USA
Stories	31
Units	378
Average Unit Size	81 m2
Total Retail	718 m2
Total Parking Stalls	380
Status	Under Construction, Opening in 2027

Neutral.



Engineering

- Full mass-timber and glulam structure with concrete topping
- Tapping into Milwaukee River for geothermal cooling
- Tapping into district grid and using excess steam for heating
- Triple pane passive house facade
- Reducing energy intensity by 50% compared to similar buildings
- Hybrid geothermal system using river water for cooling and waste steam from a local power plant for heating. Designed to minimize environmental impact and reduce reliance on fossil fuels.



Top Amenities

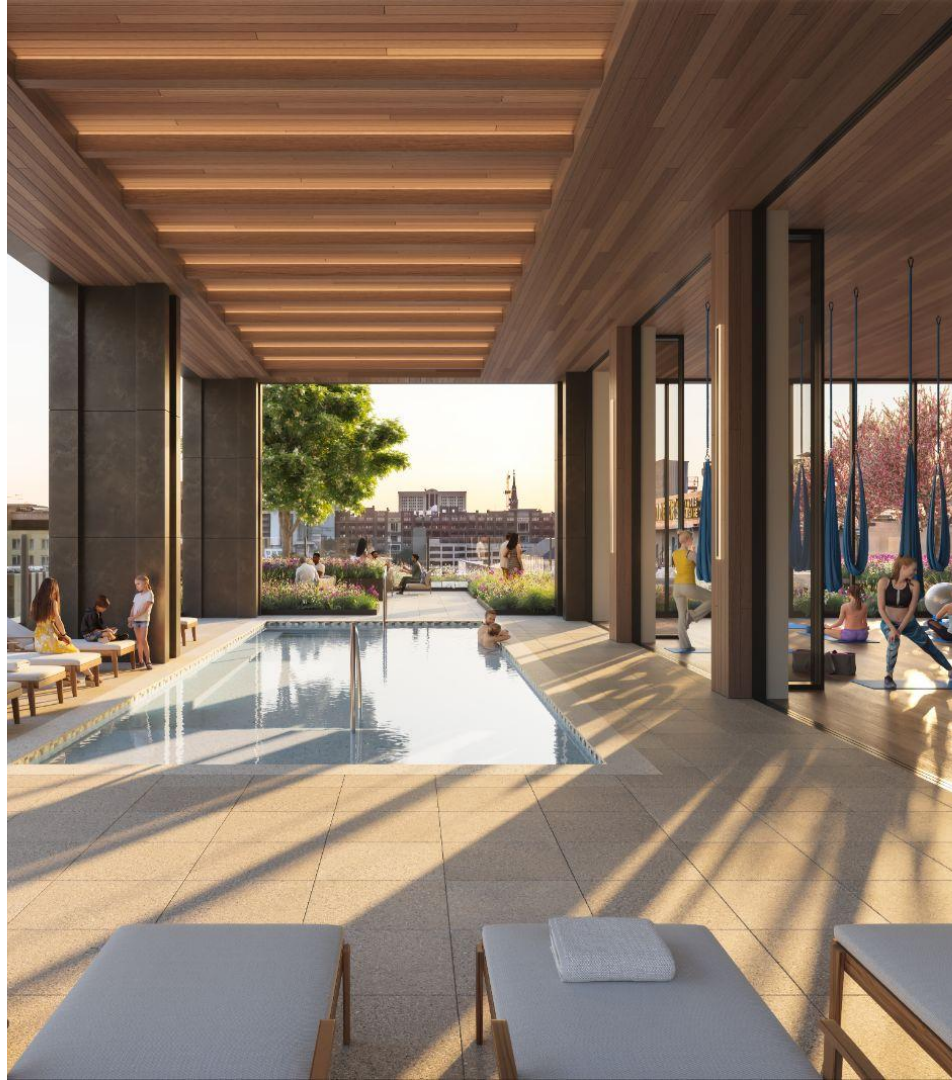
Wellness, Built In

- 24/7 wellness floor
- On-site health clinic
- Organic food program
- Biophilic design
- LBC Core 4.0
- Passive House (Phius 2021 4.0)

Work, Recharge, Host

- Chef restaurant on-site
- Roof garden with pool
- Large co-working on-site
- Communal garden
- Live plants throughout the building

Neutral.



Lessons from Neutral.Edison

- Organizations and municipalities increasingly welcome mass timber.
- Passive House and LBC possible even in high-rise context.
- Entitlement and funding cycles for large developments take awhile.
- **We need to productize development to optimize costs and speed up housing creation.**

Neutral.



Construction of Neutral.Edison in March

Scaling Middle Housing

517 W Main St by Neutral



Project details

Address	517 W Main St
Stories	4
Units	33
Average Unit Size	781 sf
Total Retail	832 sf
Total Parking Stalls	19

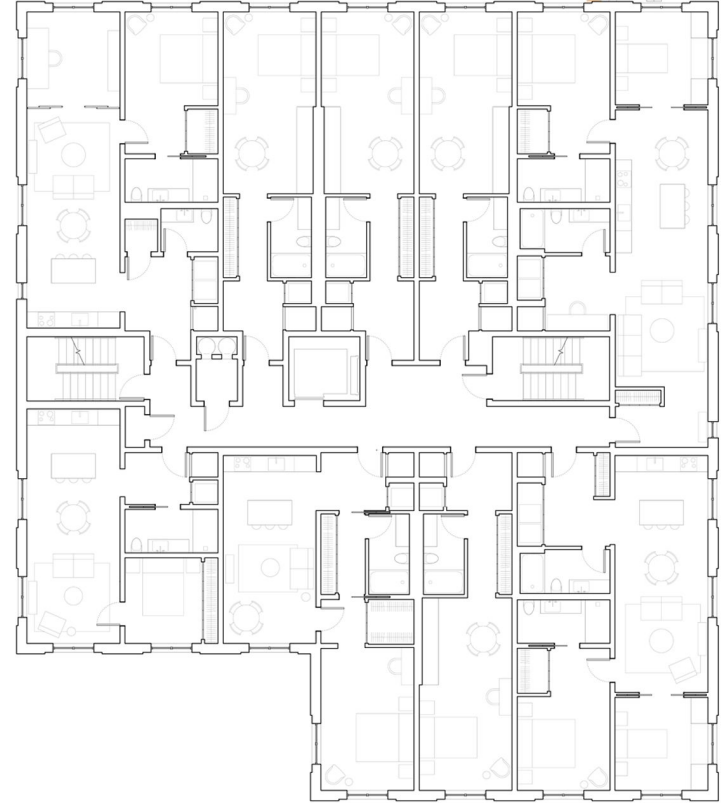
Neutral.





Engineering for High Performance

- Uniform 12' x 12' Grid: Simplifies design and construction.
- CLT Decks: Durable, sustainable, and efficient structural system.
- Cold-Formed Steel Walls: Prefabricated for speed and precision.
- Triple-Pane Windows: Superior insulation and energy efficiency.
- Passive House Inspired: Designed to meet Passive House standards but not certified, balancing performance with cost-effectiveness.



Scalable, Smart, and Systematic Development

- Unified Planning Grid: A flexible framework that scales seamlessly—from a single room to an entire neighborhood, ensuring efficiency and cohesion at every level.
- Componentized Building System: After implementing the base planning grid, we break projects into standardized components that can be manufactured off-site, improving speed and consistency.
- The U.S. building industry is regional and fragmented, rather than focusing solely on scaling modular manufacturing, we prioritize standardized design and componentization, allowing for flexibility in market conditions by integrating off-site manufacturing when feasible and defaulting to traditional construction when needed.



Vanilla 301

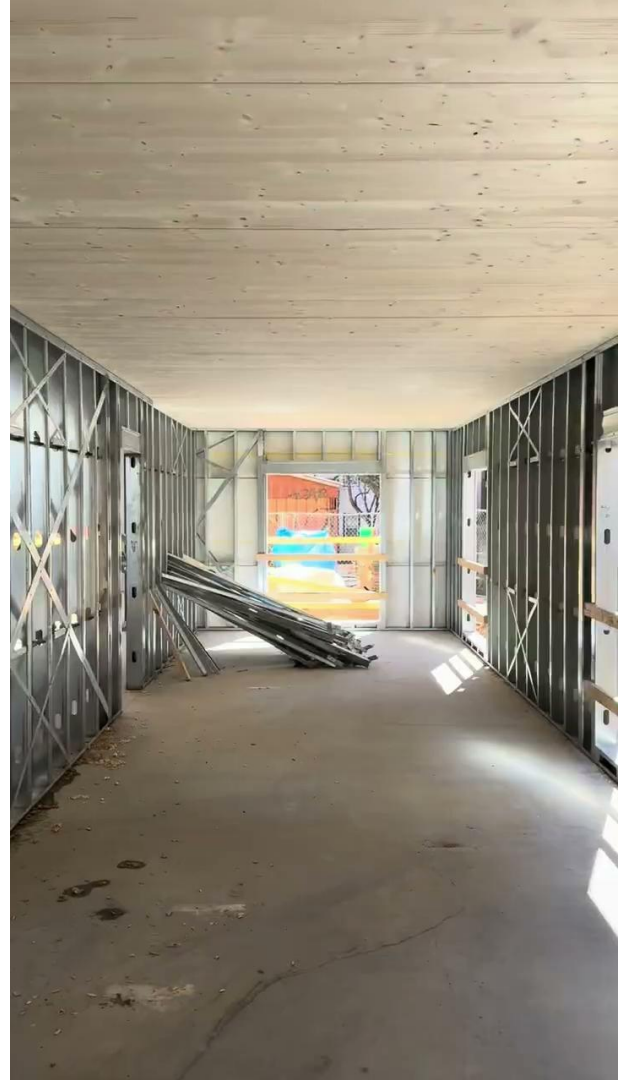
Structural Component Construction Sequencing



Lessons from 517 W Main St

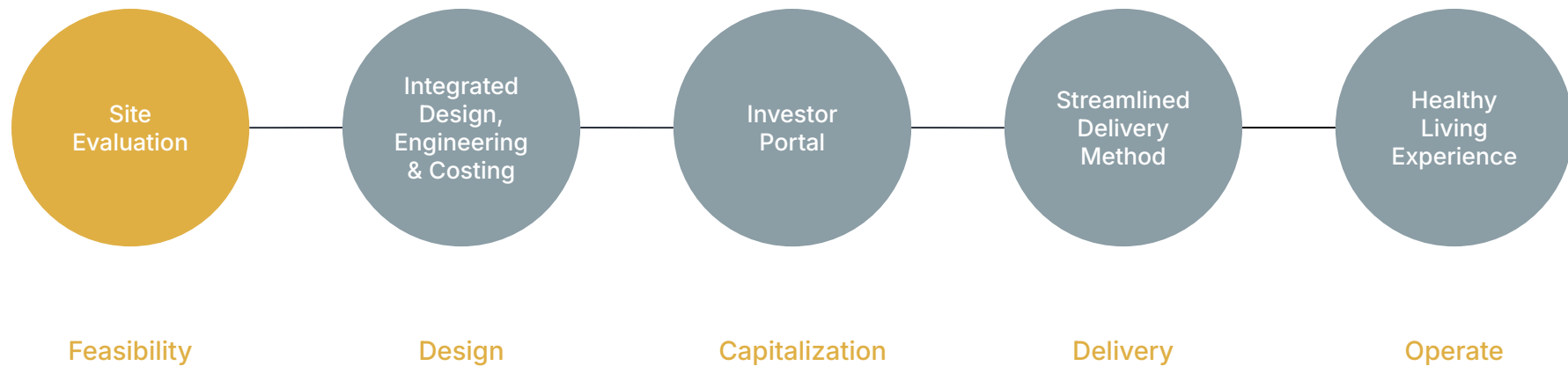
- Standardization Drives Efficiency: Even a single project benefits from a standardized approach.
- Proven Impact: Standardization improves speed, cost, and consistency.
- Scalable Approach: Incremental productization and componentization enhance efficiency.
- Benchmark: First project: 2 years from purchase to target completion.
- Future Goal: Clear path to reduce timelines to under 1 year.
- Key Focus Areas: Streamlining fundraising, design, and BOM generation for faster execution.

Neutral.



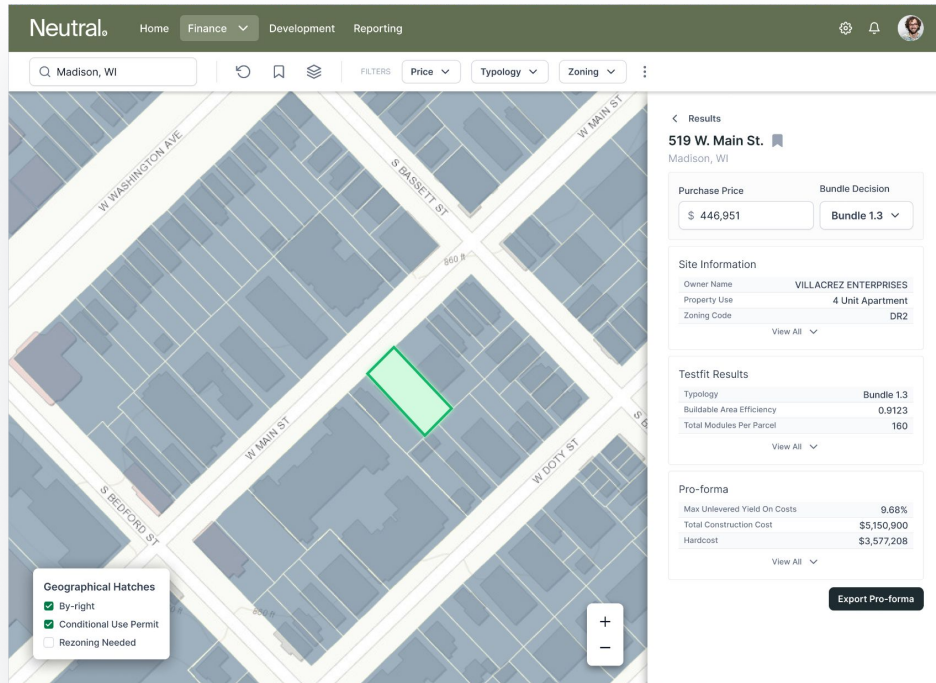
Productizing Fundraising

Tech-enabled development

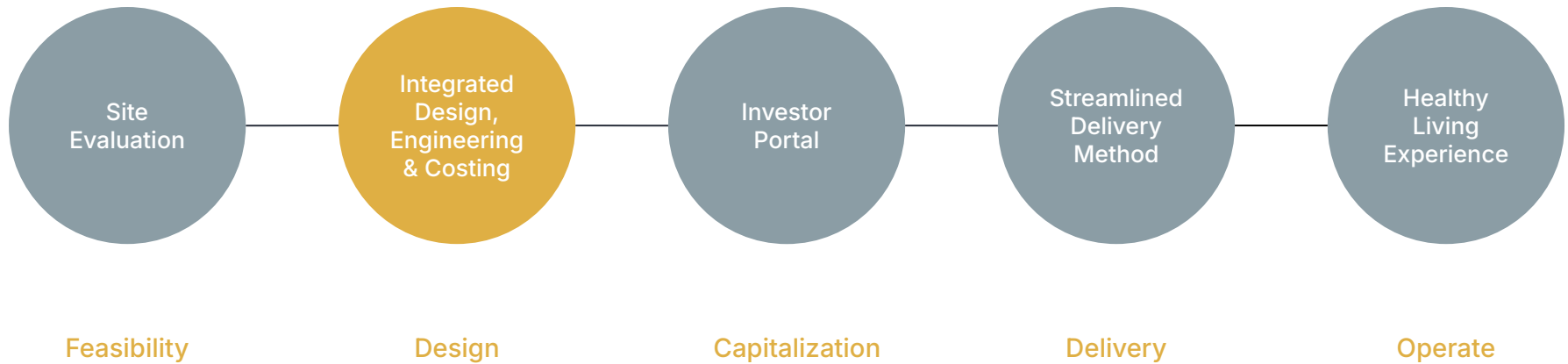


Spatial Research Tool: Smarter, Faster Decision-Making

- Market-Driven Approach: We partner with existing vendors for sourcing. If costs are too high or supply is limited, we default to traditional construction.
- Spatial Software Automation: AI-driven tools streamline underwriting, acquisitions, and site selection for smarter decisions.
- Predictable & Scalable Growth: Standardized processes + automation create repeatable, high-performance developments while minimizing risk.

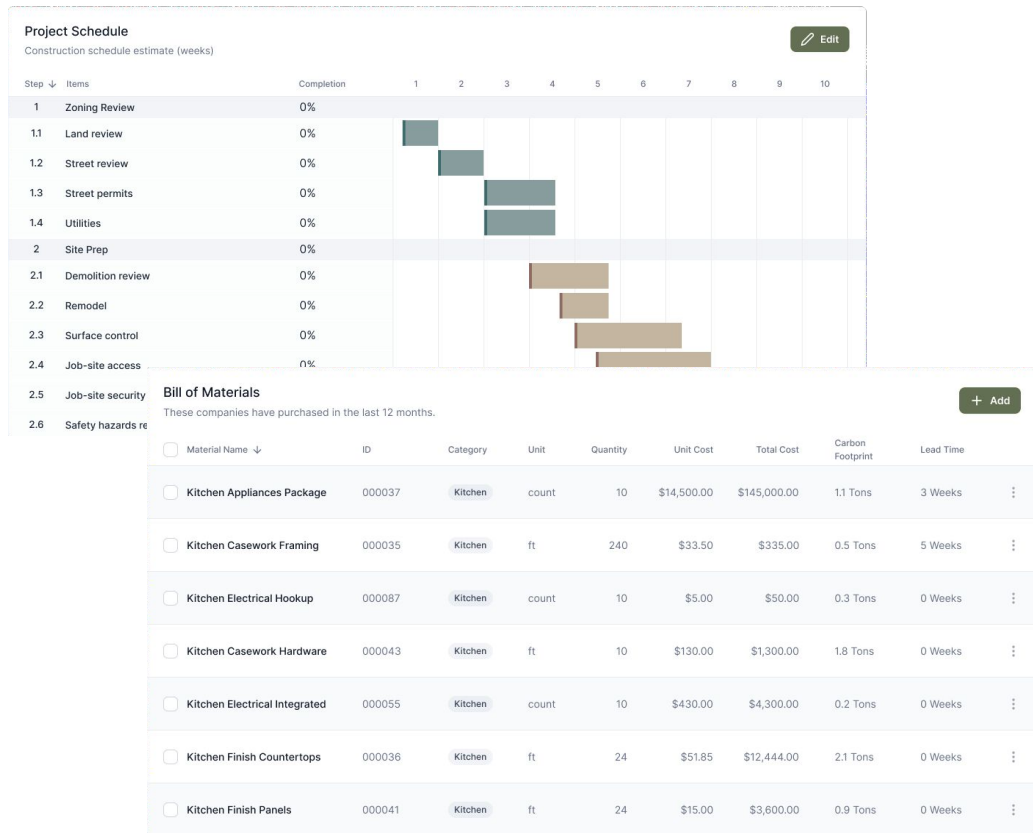


Automating the development process

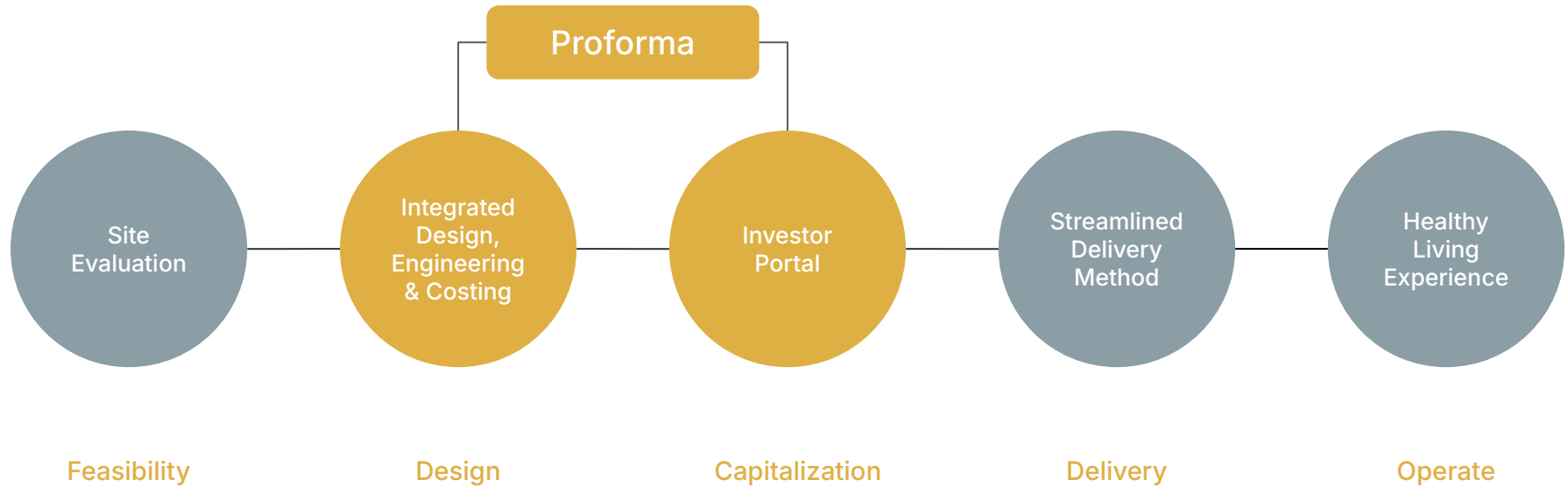


Spatial Research Tool: Smarter, Faster Decision-Making

- Fast, Data-Driven Design: Uses Bill of Materials (BOM) to quickly generate designs.
- Seamless Planning: Creates a project schedule and sequence for efficient execution.
- Financial Model Integration: Links design and scheduling to real-time cost analysis.
- Investment Feasibility: Ensures projects meet return thresholds before raising capital.
- Informed Decision-Making: If a project doesn't meet investor targets, we move on.

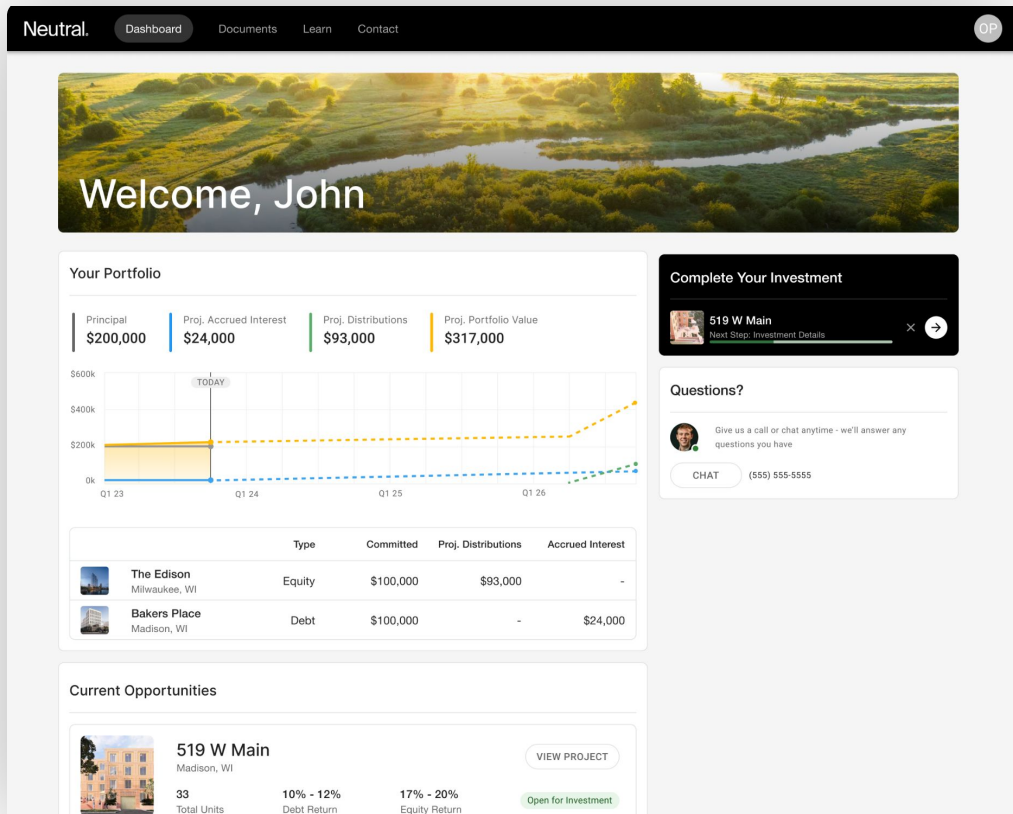


Automating the development process

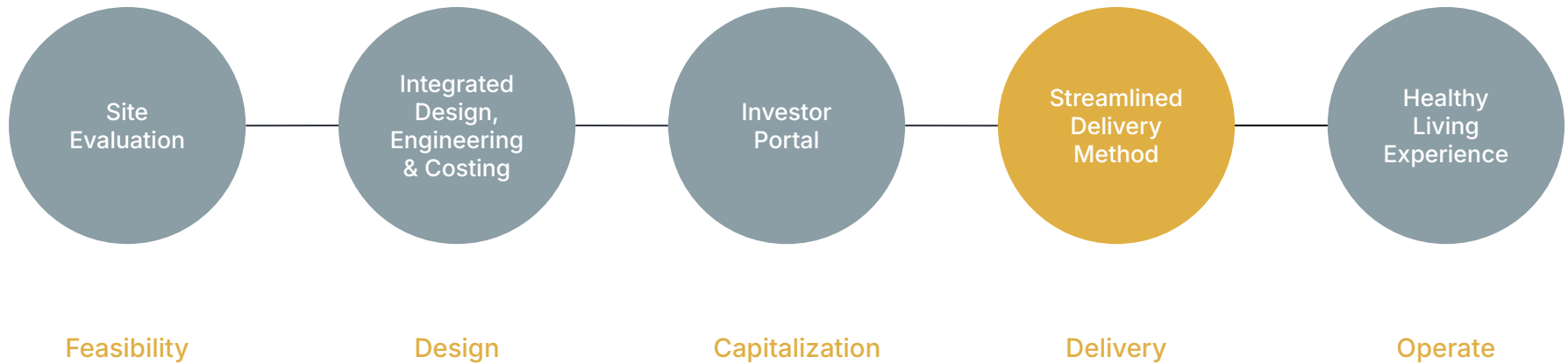


Democratizing Real Estate Investing

- Empowering Investors: Our proprietary investment software makes it possible for any accredited investor to participate in our real estate projects.
- Growing Investor Network: To date, over 275 private investors have joined us.
- Technology-Driven Efficiency: In 2023, we began developing our own software to streamline investment and management processes and launched V1 in 2024 and V2 in 2025.
- Expanding Opportunities: Our platform simplifies access, transparency, and management, making real estate investing more accessible than ever.



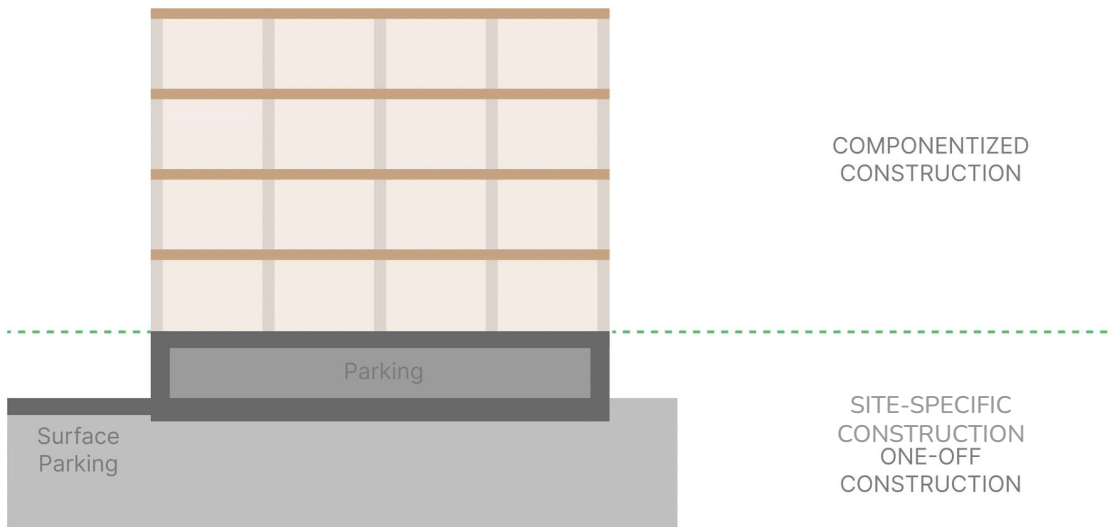
Automating the development process



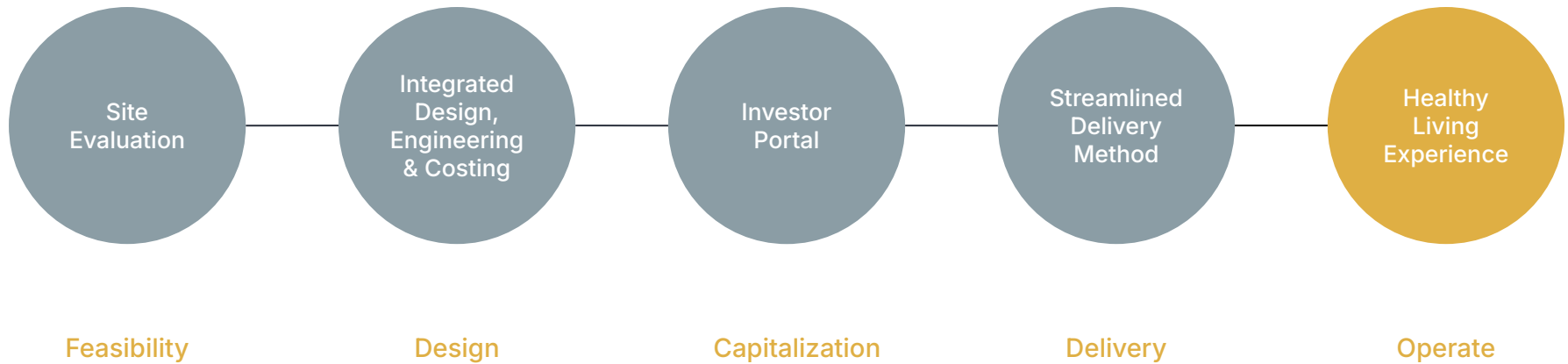
Seamless Delivery and Installation

Our building system consists of two adaptable approaches:

1. **Componentized Construction:** Prefabricated components can be relocated and reassembled across different sites, offering flexibility and efficiency.
2. **Site-Specific Construction:** Built to accommodate unique site conditions, ensuring structures integrate seamlessly with their surroundings.

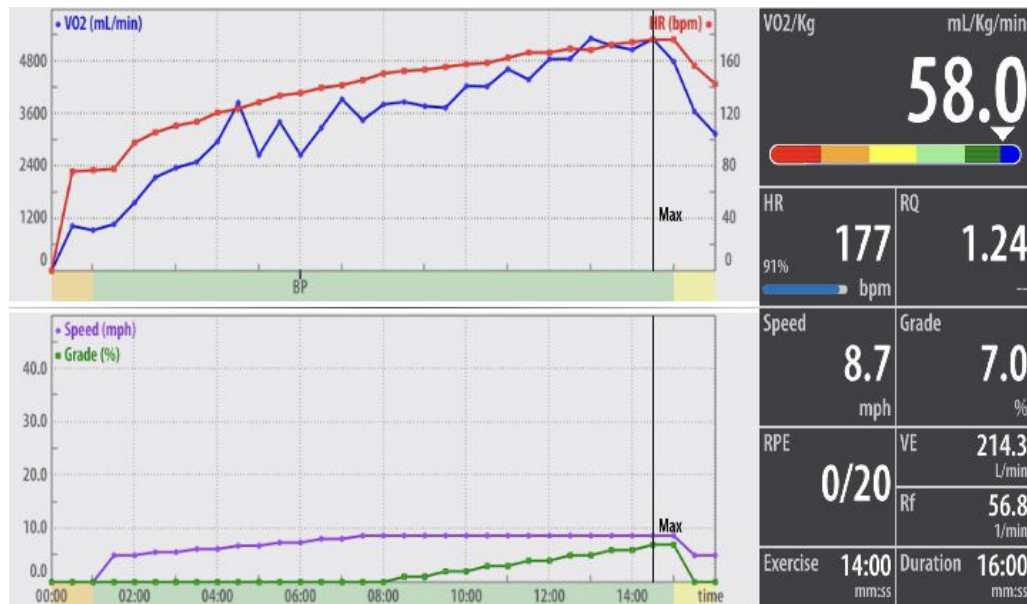


Automating the development process



Neutral's Extending Users Healthspan

- Lifespan: The total years a person lives.
- Healthspan: The years lived in good health, free from chronic disease or disability.
- The Gap: Many live longer but spend years in poor health.
- Our Focus: Extending healthspan, not just lifespan, for a better quality of life.



Neutral's Healthy Living Vision

- Pure, Natural Materials – Every surface, finish, and detail supports well-being.
- Exceptional Air & Water Quality – Advanced filtration ensures clean air, and freshwater.
- On-Site Wellness Studio – A free space for fitness, relaxation, and movement.
- Personalized Health & Nutrition – Tailored plans for your body and lifestyle.
- Farm-to-Table Living – Direct partnerships with local farmer, local fresh food to users doorstep.
- A Natural Urban Sanctuary – Lush landscapes and organic spaces in the heart of the city.



Thank you!



Neutral.