

A I A 2 0 3 0 C O M M I T M E N T

Sustainability Action Plan

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G+P
GRIMM AND PARKER



10M⁺ SQUARE FEET OF CERTIFIED GREEN PROJECTS	85⁺ ENERGY STAR RATED PROJECTS	45⁺ LEED ACCREDITED PROFESSIONALS	45⁺ LEED CERTIFIED PROJECTS IN PROCESS
40⁺ LEED CERTIFIED PROJECTS COMPLETED	20⁺ ENTERPRISE GREEN COMMUNITIES PROJECTS	2⁺ NET-ZERO SCHOOLS IN DESIGN	Sustainable architecture creates sustainable futures.

Making the Commitment

In May 2016, Grimm and Parker Architects (G+P) signed the *AIA 2030 Commitment* to advance the goal of carbon neutrality by the year 2030. This document highlights the changes we have made to meet this challenge, and how we plan to lead the way in the industry for high performance design.

Over 45 years ago, G+P made a pledge to local communities in Maryland, Virginia, and DC to design buildings that inspire its inhabitants through the design of healthy environments that save energy. We have been involved in energy conservation design practices since the early 1980s and have been recognized for innovative energy efficient school design and Smart Growth before USGBC and LEED were the industry-standard. G+P pushes the envelope in high performance design having completed 40+ LEED certified projects, 45 currently in design or construction; 85+ Energy Star homes and schools; 14 Green Communities projects; three Viridiant (formerly EarthCraft Virginia) projects; and the design of two Net Zero Energy (NZE) schools that are tracking LEED Platinum.

G+P believes that green design is about more than buildings. It's about environmental literacy, stewardship, and harnessing the power of the natural environment to enhance wellness, learning, and happiness.



Helpful Definitions

AIA 2030 Commitment

The AIA's formal request for firms to develop an action plan and implement steps to advance the goal of carbon neutral buildings by the year 2030. Annually, each firm will report on the progress of the firm's design portfolio towards meeting the 2030 goals by using the *AIA 2030 Design Data Exchange*. The development of effective metrics and standards for reporting purposes will continue to be developed and firms will respect the confidentiality of information about specific clients and projects.

As of today, the goal for all new buildings, developments, or major renovations is to design to meet a fossil fuel, GHG-emitting, energy consumption performance standard of 70% below the regional (or country) average/median for that building type.¹

Carbon Neutrality

The goal of having a net zero carbon footprint and achieving net zero carbon emissions by balancing measured amounts of carbon released with an equivalent amount sequestered or offset.

Net Zero Energy (or Net Zero Site Energy)

Net Zero Energy (NZE) refers to when the total amount of energy used by a building on an annual basis is equal to the amount of renewable energy created on site, resulting in a zero net energy consumption.

¹ www.architecture2030.org



Who We Are

Grimm + Parker Architects is a nationally recognized design firm in the Washington metropolitan area with 100+ architects and interior designers that aspire to make our communities better places to live, learn, work, and play. Our purpose is to serve our clients and their neighborhoods through the design of schools, libraries, mixed-use developments, multi-family residential properties, and a wide variety of cultural and civic buildings. Collaboration and transparency are at the heart of all our efforts, and we approach every project as an opportunity to find the best and most sustainable solutions.

More than 70% of our design professionals are LEED Accredited or LEED Green Associates, yielding a holistic sustainable design approach to every project. G+P empowers each employee to understand green design tools and technology, to advocate for energy efficiency and resource stewardship locally and nationally, to push the envelope of collaboration with our team and our clients, and to create together a more sustainable future for our communities.

Locations



Calverton, MD ● Tysons, VA ● Charlottesville, VA

Our Clients



Over 90% of our clients are repeat clients, including relationships with school systems and county governments that have been ongoing for 40+ years. We take these relationships to heart and nurture them with care, understanding the significant impacts our designs will have on our clients and the end users for years to come. We have worked with many clients on their first LEED certified project, and now, NZE buildings, understanding how to incorporate innovative sustainable design goals with responsible systems that are now commonplace with our public stakeholders.

School system representatives have learned that sustainability is not just about the environment anymore, it's about performance and social responsibility. Our advocacy for designing green K-12 schools as learning labs for environmental education increases every year. As client leadership and understanding of green design spreads more widely, myths and misunderstandings about cost and complicated systems are diminishing, and being replaced by innovative solutions.



K-12 / Higher Education / Libraries / Cultural + Performing Arts + Civic / Recreation + Wellness / Residential + Urban Design



Why We are Committed

We are responsible design professionals to our clients, communities, the natural environment, and future generations on this planet. As designers working to build a sustainable future of buildings and communities that will operate, house, teach, and perform for our neighbors for years to come, we pledge to make smart design decisions now to reduce carbon emissions and conserve energy.

What We are Doing

We are creating sustainability natives.

G+P has equipped our staff with the tools necessary to design to meet these aggressive carbon neutrality goals. Our studios are located in Maryland, and two walkable high transit neighborhoods into Virginia, to reduce automobile needs and to encourage staff enjoy the outdoors resulting in a healthy work-life balance. We advocate that our clients prioritize low energy use intensity (EUI) goals for buildings. G+P educates building end-users on how to properly operate designed systems and how to integrate the building and site into curriculum lessons for environmental literacy.





This is How We Do It.

Staff Training and Education (People)

Monthly Green Bag Lunch Series – Lessons learned

Annual recap of sustainable design goals and results

Participation in annual Green Apple Day of Service events

Participation in local USGBC and AIA COTE chapters

Regular in-house Meet-and-Greet product sessions and lunch seminars for green products and systems (AIA and GCBI CEU)

Director of Environmental Design leads a team of green gurus + champions representatives in each studio

Tracking with AIA 2030 Commitment reporting database for predicted EUI for entire portfolio

Annual participation in Greenbuild conference and sharing with firm the lessons learned

Encourage LEED Green Assoc. and LEED AP certifications with over 45 of 65 accredited design professionals



of G+P's design professionals hold a LEED accreditation

Studio Resources on the intranet and server including 30+ Lessons Learned Powerpoints focusing on sustainable design topics and strategies with project examples, specifications, precedents, cost, and O+M information

Teaching resources to staff when teaching local classes or participating in career fairs and science fairs with a focus on sustainable design



A group of children wearing white lab coats are gathered around a table, focused on a project. The table is covered with various materials, including small white cylinders and a container of colored markers. In the background, a whiteboard features hand-drawn sketches and text, including the word 'Steps', 'YOU', 'Engineer', and 'I can design & build'.

Sustainable Design Goals

Sustainable design is a core principle at Grimm + Parker Architects. All of our projects must have goals that are relevant to the mission of *Architecture 2030*, but we understand that in the beginning only some of our projects will provide the necessary benchmarking data. We have established measurable goals that will guide us into the future.



Current Goals –

- Establish rating system goals including LEED or other green rating systems
- Achieve reduced energy targets by setting energy performance goals – track EUI number (kBtu/sf/yr)
- Verify percentage of projects that are designing with energy modeling
- Determine percentage of projects launching the design process with a sustainable goal setting charrette
- Identify projects that are not pursuing a third-party green certification or meeting IgCC to develop ways to incorporate green strategies into the design
- Assess renewable energy opportunities for each project
- Encourage post occupancy measurement and verification



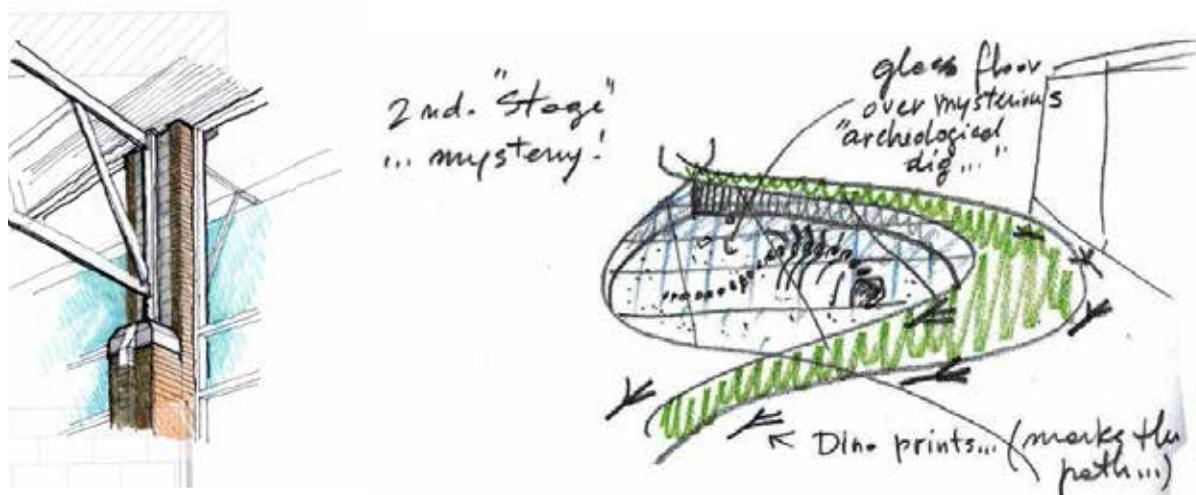
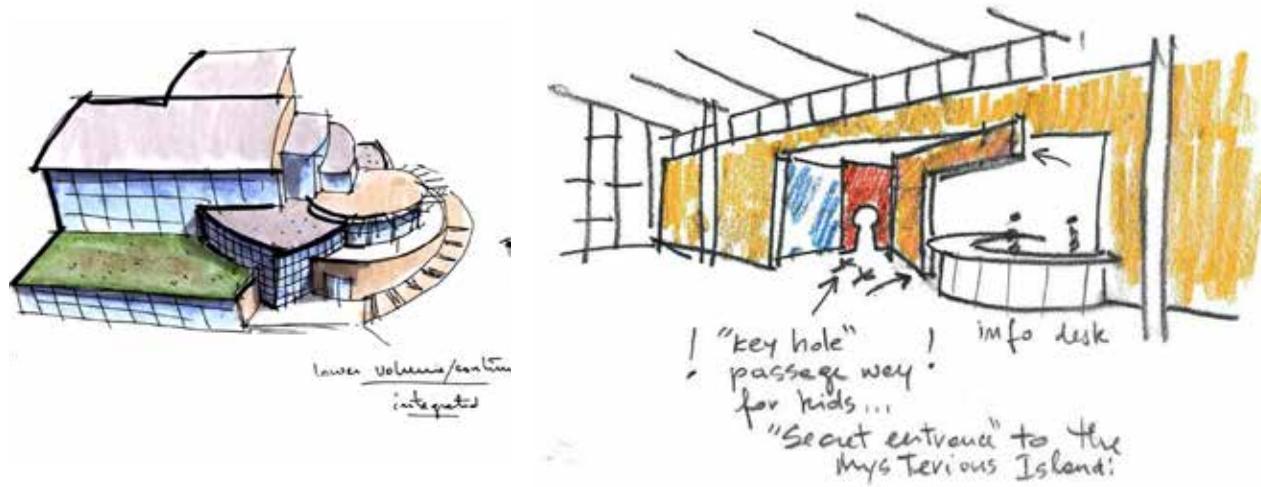
Short Term Goals –

- Incorporate early energy modeling and EUI reporting in MEP consultant contracts
- Complete two Net Zero Energy K-8 schools for Baltimore City Public Schools and continue user engagement sessions with students and faculty on what to expect and how to operate systems in place
- Create feedback loops with existing clients to get annual energy performance data of completed buildings
- Use box modeling software (Revit Insight 360, Sefaira, Vasari) to lead early concept design decisions



Long Term Goals –

- 100% project portfolio energy modeled
- 70% carbon neutrality for entire design portfolio to meet *AIA 2030 Commitment*
- Design carbon neutral, Passive Haus, and Living Buildings



How We Design

- Incorporate internal sustainability reviews as part of the design process (project kick-off and during each phase)



Top 5 List for Sustainable Design Process



Sustainability Navigator (Residential + Urban Design)

- Ensure quality assurance process includes sustainable design criteria



Top 5 List for Quality Control

- Standard specifications have been modified to include sustainability requirements
- Use energy model analysis as a design tool
- Develop environmental literacy curriculum tie-ins for K-12 and Higher Education projects
- Develop post occupancy training, tours, user cards, professional development, and teaching classes for clients



Customizable Client Kit for professional development, science fairs, school tours



Green Apple Day of Service modules/kits



Live + Work Sustainably



As a regionally diverse firm with multiple offices, it's necessary to develop a customized sustainable operations plan that can support the needs of each office and their respective communities. The Green Champions of each office will add studio specific initiatives to the core philosophy of living and working sustainably.



Current Goals –

- Audit which sustainable operational items are in practice in each office location
- **Office Energy Use:** Vacancy sensors in group spaces, LED lighting in locations less than two years old
- **Waste Reduction:** Use of paperless technology for agendas, handouts, and presentations whenever possible; recycling policy for two of three offices
- **Transportation:** Zipcar account, offset SmarTrip Cards for WMATA metro for Tysons office
- **Meeting Procedures:** Encourage virtual meetings via WebEx and GoToMeeting accounts whenever possible.



Short Term Goals

- 2017-2018 office renovation designed to meet LEED-CI and WELL Interiors for new Calverton Office (and upcoming Charlottesville lease)
- **Office Energy Use:** LED lighting in all three offices; purchasing/leasing policy for Energy Star equipment and appliances
- **Waste Reduction:** Implement recycling policy in all three offices; implement printing policy to reduce paper consumption (double-sided, PDF, employee number access code)
- **Supply Purchasing:** Enforce policies for purchasing environmentally friendly office, kitchen, and cleaning supplies
- **Meeting Procedures:** Establish an environmental policy to share with venues, vendors, lunch + learns, and attendees for meetings
- **Wellness:** Compostable paper goods; daily walks for exercise; annual Wellness Day of healthy foods, vendors, yoga, massage; pilot three WELL Interiors initiatives in all three offices

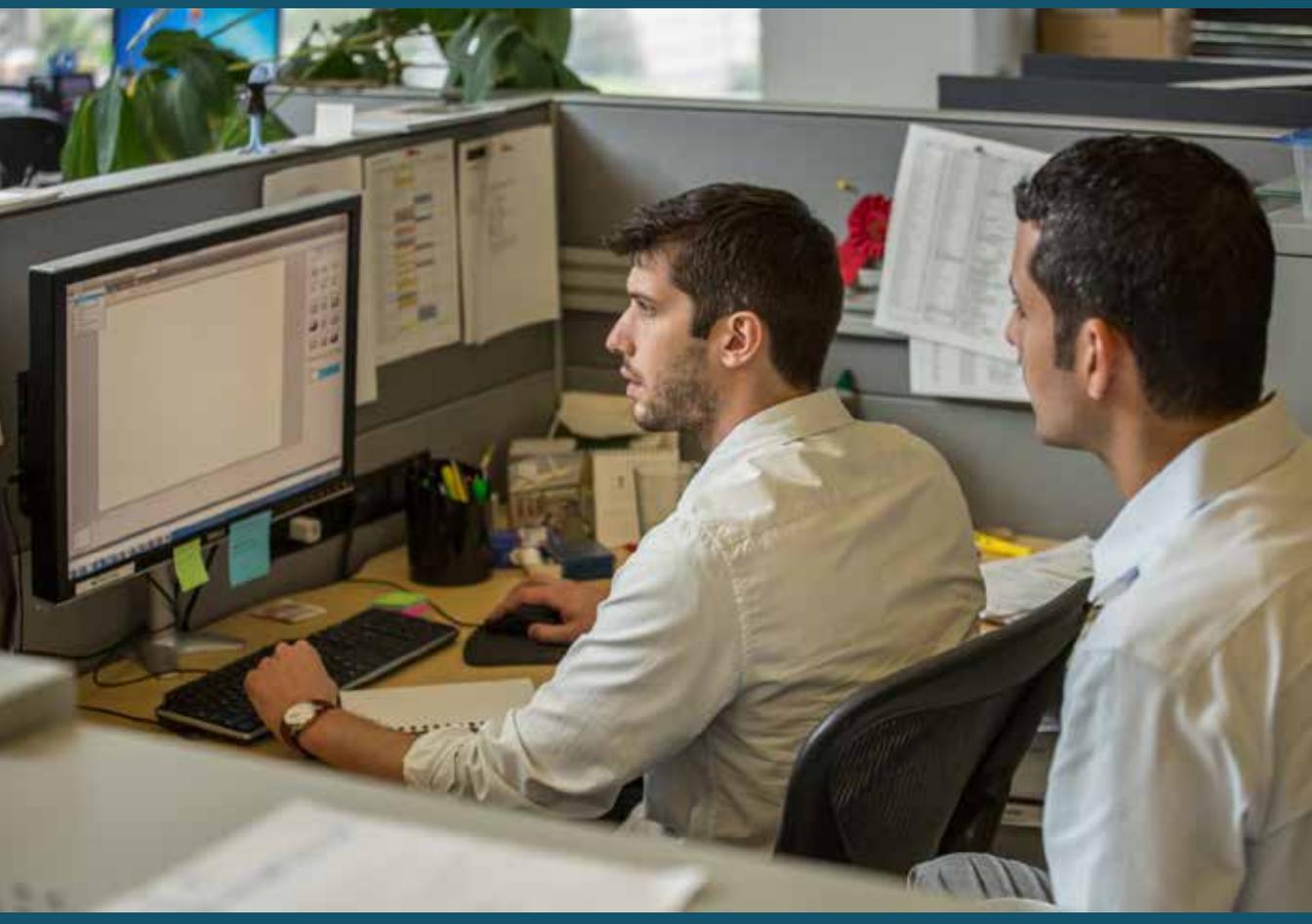


Long Term Goals

- **Office Energy Use:** Track and report energy usage in office
- **Transportation:** Incentivize use of public transportation, bicycling, and carpools; encourage telecommuting options and flexible hours for employees
- **Supply Purchasing:** Implement policy for environmentally friendly office furniture
- **Wellness:** Implement WELL for Interiors in all three offices



Reporting and Accountability



Each year we will track our projects' design energy usage and report it using *AIA's Design Data Exchange* portal. We strive to help our clients understand the market drivers that make sustainability an important component in their design, operation, and maintenance goals so that we can better assist them in making the right decisions every step of the way. Our process will include:

- Tracking energy performance of projects
- Compiling status reports on operational and project achievements
- Publicizing our success (website, speak at conferences, interviews, marketing, RFP responses, presentation to clients)



'16

Graceland Park/O'Donnell Heights ES/MS and Holabird ES/MS Analematic Sundials



'15

Washington Youth Garden at the U.S. Arboretum – Garden project



'15

Monticello HS Parking Lot Biofilter Project



'14

Wims ES High Performance Energy Demonstration Table Tour with Audubon Nationalist Society



'13

Ducketts Lane Sustainable Scavenger Hunt



'13

Barack Obama ES Demonstration Table/Tour of School



'12

Flora Singer ES Sustainable Scavenger Hunt



'12

Ft. Templeton ES Garden Project



'12

Chesterbrook ES Garden Project

Advocacy and Public Outreach

At Grimm + Parker we encourage each other to listen, learn, and lead. We recognize that by getting involved in our communities we can help make sustainable design valuable in every conversation we have with clients, consultants, students, visitors, and residents.

- Encourage staff to join and participate in local USGBC chapters and AIA COTE
- Host and volunteer at local USGBC *Sustainable Schools Summit*
- Host and captain *Annual Green Apple Day of Service* events in schools we have designed and constructed recently, in the past, and in our communities
- Assist local jurisdictions as they review the adoption of IgCC and revisit their local green building laws to encourage carbon neutrality goals
- Present at local and national conferences to facility planners, designers, occupants

