

CYCLE HOUSE

Next Generation Affordable Housing

1520-1522 No. Capitol Street Washington, DC



Urban Green, LLC
Flywheel Development
Studio Upwall Architects



Urban Green

- Urban Green is a **green affordable housing** development and consulting firm based in the District of Columbia (founded 2012).
- Specialize in sustainable, **net zero energy communities**.
- Mark James (President) is a DC native w/ 20 years experience in affordable housing. \$120 million in development experience.
- **Board Member with USGBC** and Nat. Center for Healthy Housing.
- Developing net zero energy homes in Mt. Rainier, MD and DC.
- Recently completed Savannah Park Apts. (64-unit, green retrofit) in DC. **Affordable housing community reduced energy 23%**.



Flywheel Development

- Flywheel is a **CBE based in the District of Columbia**
- Specialization in net zero energy development, renewable energy
- Principals have **over 20 years of experience** in real estate and renewable energy industries
- Currently developing Perry Street Townhomes in Mt. Rainier MD, which will achieve Passive House and **Net Zero Energy Performance**



Studio Upwall

- **Over 20 years experience** in designing quality, neighborhood oriented, innovative buildings.
- Studio Upwall is a local business, office in Shaw neighborhood.
- Greg Upwall **Bates Street resident since 2010**
- **LEED** Accredited, Certified Passive House Consultant
- CBE (pending) firm



Why Affordable Housing?



- “Affordable” housing has rents that do not exceed 30% of a person’s gross income.
- DC has been losing affordable housing – especially for persons at 60% or less of AMI
- 60% AMI for 2 persons = **approx. \$46K/yr**
- 60% AMI for 1 person = **approx. \$40K/yr**
- This income level includes **police officers, teachers, transportation, young professionals**
- High quality with **positive community impact**



Our “Green” Focus



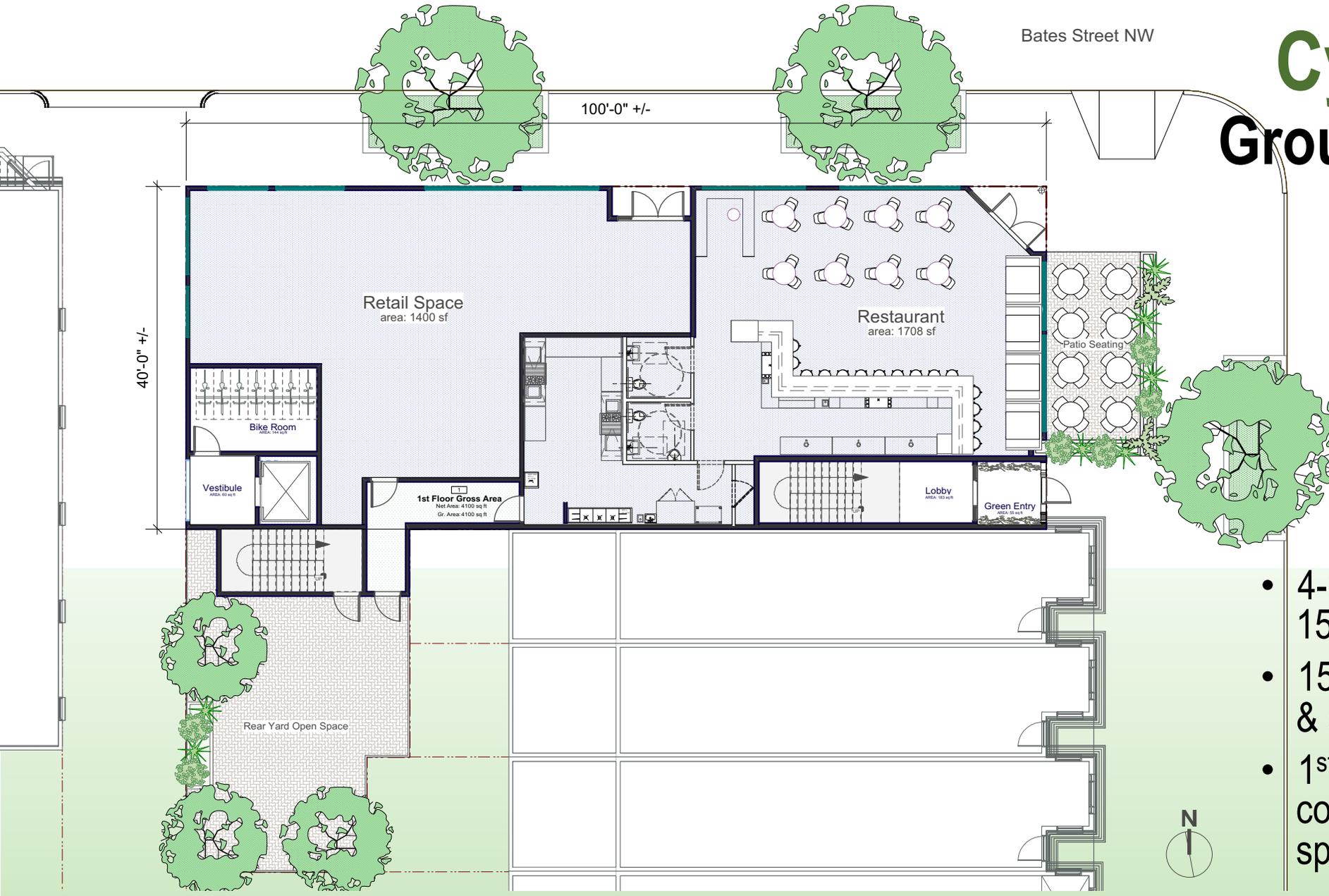
- DC’s green code encourages reductions in energy + potable water use + lower stormwater run-off
- DC residents are demanding sustainable, healthy, energy resilient buildings
- Cycle House will be LEED Gold Certified.
- Generate 100% of its energy on-site
- Use of roof-top solar and fuel cells for co-generation (heat/power) generation.
- Bicycle-friendly facility w/ on-site electric car
- Environmentally-friendly materials

Net Zero Energy



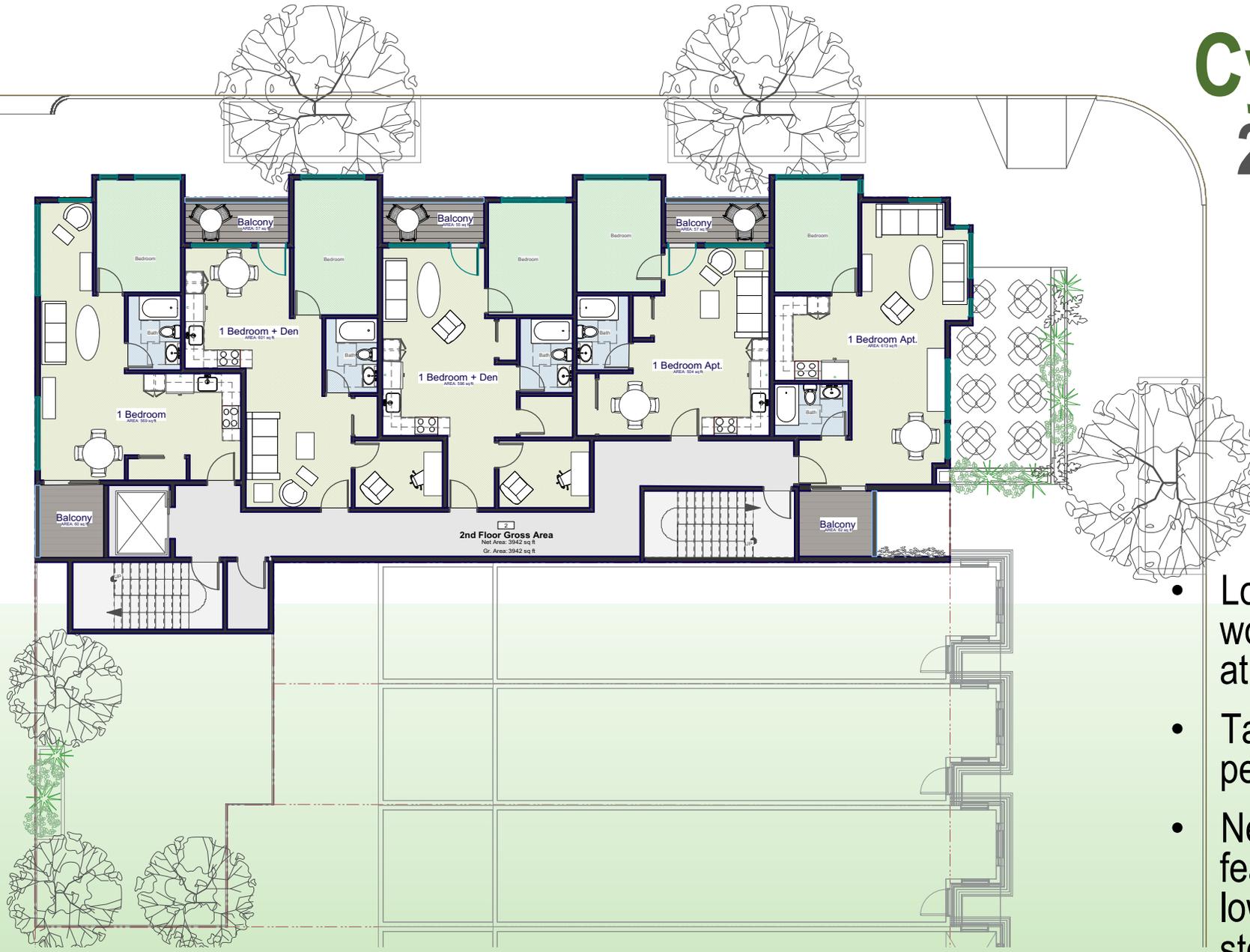
- Building will generate as much energy as it uses – only using grid as a “backup” energy supply
- High performance thermal envelope
- Use of roof-top solar and fuel cells for co-generation (heat/power) generation
- Energy efficient lighting, plug-loads, appliances
- “Off-grid” capable performance
- Community-solar project will give residents the opportunity to share generated energy

Cycle House: Ground Floor Plan



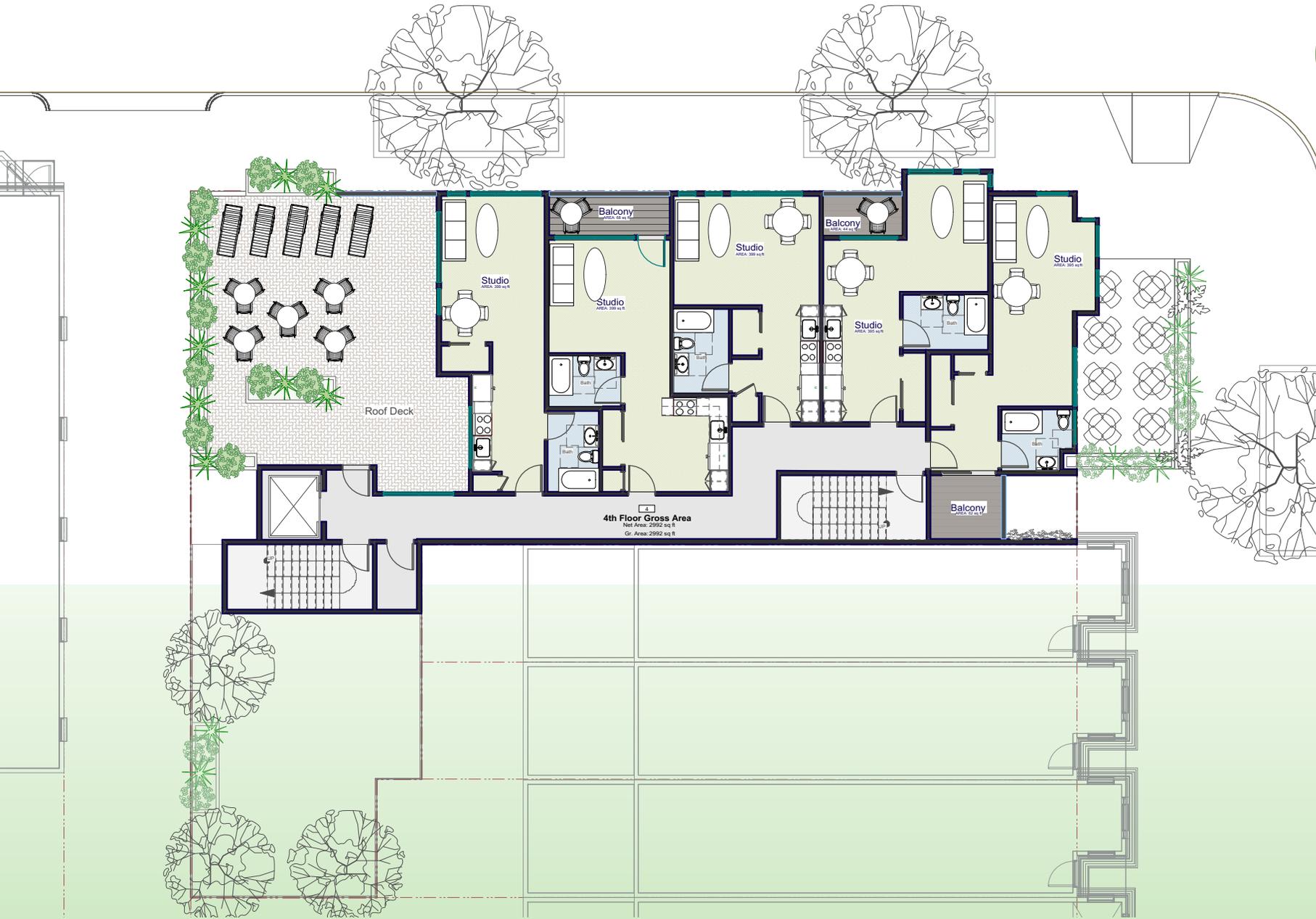
- 4-Story, mixed-use building. 15,000 sq.ft.
- 15 rental apts; Mix of 1 bdrm & studio units.
- 1st floor restaurant and community serving retail space

Cycle House: 2nd & 3rd Plan



- Long-term, affordable, workforce housing for persons at 50- 60% of median income.
- Targets bicycle, mass-transit, & pedestrian-oriented residents
- Net zero energy building featuring renewable energy, low-CO₂ emissions and zero stormwater runoff design.

Cycle House: 4th Floor & Roof Deck Plan



view from sidewalk



view from North Capitol Street



view from Bates Street

Community Benefits

- **Removes vacant lot** from neighborhood
- Model for high-performance, **sustainable** housing
- Provides **affordable** housing for neighborhood
- Bicycle and pedestrian-friendly building with **minimal parking impact**
- On-site **energy** systems with nominal impact to electric grid and maintain power during blackouts
- First floor family restaurant & neighborhood-serving retail space
- New **community mural** to replace existing mural
- Potential to implement neighborhood **Storm-Water management** system
- Option to include **electric car** for residents' use



- (2) ANC 5E-05 SMD Meetings
- (2) BACA Meetings
- Briefing to ANC-member Bradley Thomas
- Meetings with neighboring property owners
- Presented to and received support from Friendship Public Charter School
- Meeting with mural artist Michael Hammond



Stakeholder & Neighborhood Outreach

Neighbor Feedback

- **Three to Four** stories in height, step down along Bates Street
- **Coordinate** with immediate neighbors, businesses, and community to minimize impacts and improve neighborhood; hire locally
- During construction, **ensure alley remains open** because of its importance to car and pedestrian traffic
- **Frequent and professional** trash/recycling removal from site; integrated pest management (rodent-proof trash collection, etc.)
- **Manage Parking:** Mitigate impacts of additional residents by providing on-site electric car for use by residents. Restrict residents from obtaining parking permits. Recruit tenants who are carless





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