

Site Plan and/or Subdivision submission requirements:

The development plans for such applications shall complete and submit the following Green Development Checklist and shall constitute a checklist for application completeness, pursuant to N.J.S.A. 40:55D-10.3.

The checklist is generally based on the LEED system standards for building and neighborhood development as well as Sustainable Jersey's Model Green Development Checklist, but is not intended to be exclusive. The information provided in the checklist is intended to guide and inform the dialogue between the applicant and the Borough regarding possible options and opportunities to use resources more efficiently, promote smart economic development, improve the environment, and generally improve the quality of life in the Borough.

The checklist is organized by scale from regional context, to individual site, to the structures on the site, as follows: first, it addresses the site within its regional and local context, looking at its physical location, development status, connectivity to infrastructure (transportation, community, green space) and beneficial and detrimental impacts within the regional or local context; second, it addresses the site itself, looking at the beneficial or detrimental impacts of the development on site; and, third, it address the structures on the site, again looking at beneficial or detrimental impacts:

Green Development Check List

Pursuant to §110-55.2 of the Metuchen Land Development Ordinance.

Checklist last revised January 17, 2023.

Application will not be deemed complete unless a complete checklist form is signed and dated.

The applicant shall complete the checklist indicating whether or not they are meeting and addressing each of the items in the checklist, and shall provide in narrative form its responses to each of the items requested in the checklist.

A. Context.

1. Site selection. Is the site a redevelopment, brownfield or infill location? Is the site located in an area with existing infrastructure? How does the development integrate with the existing streetscape, neighborhood and the overall community?
2. Proximity to public transportation. Is the site served by public transit, pedestrian and bicycle networks? Is there train service within 1/2 mile or bus service within 1/4 mile?
3. Streetscape design. Are the roads along the frontage of the site and within the development designed as "Complete Streets?" How does the development enhance the streetscape such that it is designed and operated with the safety, mobility, and accessibility needs of users of all ages and abilities in mind?
4. Historic context. Does the site's location, scale or use support any historic building conditions off site within its context?
5. Land use and housing diversity. Does the development provide or increase a mix of land use types? Please list. Are land use densities greater than current zoning or surrounding

context? Does the development provide or increase housing diversity by type and income (beyond affordable housing requirements)?

- 6. Civic and public spaces. Does the development provide or increase civic and public spaces (or have proximity to them)? Does the development provide or increase recreation facilities and green space/parks (or have proximity to them) and is it part of an integrated ecological network? Where not provided onsite and/or proximate to them, how does the development provide or enhance connectivity to them?
- 7. Parking capacity and alternative parking designs. Does the development utilize alternative parking designs such as reduced parking ratios, a percentage of compact stalls, banked parking, shared parking, priority parking for low emission vehicles and provisions for bicycle storage?
- 8. Local food production. Does the development provide or increase local food production, access to off-site facilities or opportunities for Community Supported Agriculture (CSA) or farmers' markets?
- 9. Open space and natural features. Does the development provide or increase open space? Does the development provide or increase natural features? Does the development include a plan for promoting and educating people on green features? Where not provided onsite and/or proximate to them, how does the development provide or enhance connectivity to them?
- 10. Regional stormwater management. Does the site feature or is the site adjacent to any floodplains, wetlands, or riparian corridors? Does the site drain to any streams or bodies of water? Does the development provide or increase regional stormwater management? Is the site part of a district energy or water infrastructure?

B. Site development.

- 1. Site disturbance. Does the development minimize site disturbance during construction?
- 2. Construction activity. Does the development increase erosion and sedimentation control (beyond county or municipal requirements)? Does the planned construction activity prevent airborne dust generation? Does the planned construction activity reduce or eliminate construction noise or vibration?
- 3. Soil compaction. Does the development include soil remediation measures to ensure full vegetative growth and rainwater infiltration after construction?
- 4. Pest management. Does the development consider landscape and stormwater maintenance specifications that employ Integrated Pest Management techniques, such as alternatives to standard pesticides, herbicides and synthetic fertilizers that kill organisms in the soil, post-bond to assure implementation for five years after occupancy?
- 5. Low Impact Design. Does the development include Low Impact Design features such as bio-swales, rain gardens, green roofs, green walls, and pervious pavements?

- 6. Tree retention and planting. Does the development maximize retention of large trees and wood areas, and provide or enhance the overall community tree canopy, including shade trees and street trees?
- 7. Native and indigenous species. Does the development incorporate native and indigenous species (non-invasive species, low maintenance landscaping)?
- 8. Onsite management of vegetative waste. Does the development incorporate onsite management of vegetative waste?
- 9. Water efficient design. Does the development reduce or eliminate use of potable water or other water resources by using water efficient landscaping, efficient irrigation systems, using captured rainwater with devices such as rain barrels, rain cisterns and downspout planters, or using recycled wastewater.
- 10. Regenerative Design. Does the development incorporate Regenerative Design? How does the development address habitat, wetlands or water body conservation or conservation management strategies? How does the development address habitat, wetlands or water body restoration? How does the development address long-term conservation management of these resources?
- 11. Alternative parking design onsite. Does the development provide alternatives to single occupancy vehicles such as van spaces, and also encourage use of alternative transportation, including provisions for bike parking/storage and, where appropriate to the use, changing facilities, and provisions for alternative energy vehicle or EV parking?
- 12. Heat island effect. Does the development minimize heat island effects through reduced paving, landscaping or other methods?
- 13. Site lighting. Does the development include Light Pollution Reduction and energy efficient site lighting and controls?
- 14. Historic preservation. Does the development include historic preservation or adaptive reuse of existing features or facilities?
- 15. Public art. Does the development include public art and opportunities for civic events? Does the site implement indigenously inspired art in the landscape? (i.e., sculpture; garden; mural/relief; artistic site furnishing, etc.)

C. Green building.

- 1. Green building certification. Does the building meet the criteria for a Certified Green Building? Will the project apply for LEED certification or other green building or development certification? A Green Building is also known as a sustainable or high-performance building, and is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life cycle from siting to design, construction, operation, maintenance, renovation and deconstruction. These practices have the potential to reduce or eliminate the negative impacts of development on the environment and on human health.

- 2. Building orientation. Is the building oriented to maximize benefits of daylighting, viewsheds and energy and to minimize detrimental impacts on surrounding sites?
- 3. Building scale. Does the building respect the scale of the context through its design?
- 4. Water efficiency. Does the building provide a 20% or greater reduction of water use beyond the minimum water efficiency standards set by the EPA or local government, whichever is greater? Will the project use the EPA WaterSense Water Budget tool or similar analysis?
- 5. Water conservation. Does the building employ water conservation features - including low-flow fixtures, waterless urinals, and/or sensor-controlled faucets?
- 6. Wastewater reuse. Does the building incorporate rainwater, gray water + stormwater capture and re-use? Is wastewater treated on site and recharged to the ground?
- 7. Energy efficiency. Does the building reduce energy usage through efficient heating and cooling, geothermal technology, enhanced daylighting, efficient lighting, occupant controls and an efficient building envelope?
- 8. ENERGY STAR®. Does the building incorporate ENERGY STAR® - labeled building products, such as appliances, light fixtures and windows?
- 9. Energy efficient roof design. Does the building utilize roof coloring, materials and design techniques that minimize heat island effects? Will the project meet ENERGY STAR® Cool Roof requirements or similar analysis?
- 10. Renewable energy. Does the project include onsite energy generation? What percentage of the project's electricity will come from renewable sources? Does the project include solar photovoltaic (PV) readiness and sufficient space in order to accommodate future installation of battery storage infrastructure?
- 11. Energy efficiency impacts. Will the project meet or exceed the requirement of ASRAE 90.1-2007? Will the project be benchmarking building efficiency savings with ENERGY STAR®'s Portfolio Manager or similar analysis? What are the anticipated energy savings? What are the anticipated carbon emission reductions?
- 12. Refrigerant management. Does the building utilize refrigerants and heating, ventilation, air conditioning and refrigeration equipment that will minimize or eliminate the emission of compounds that contribute to ozone depletion and climate change?
- 13. Indoor air quality. Is natural ventilation and efficient use of outdoor air during heating and cooling periods utilized? Are other measures being used to improve indoor air quality? Please describe. Will the project utilize South Coast Air Quality Management (SCAQM), Green Seal's GS-11, the Carpet and Rug Institute's Green Label Plus Program, and FloorScore requirements as standards for Volatile Organic Compound (VOC) limits?

14. Air tightness verification. Will the project utilize air tightness verification by American Society for Testing and Materials (ASTM) standards, as opposed to visual inspection?
15. Air filter equipment. Will the project utilize MERV 8+ air filters during construction and MERV 13+ air filters for occupancy?
16. HVAC equipment and ductwork. Will the project protect HVAC equipment and ductwork during construction, and flush HVAC equipment and ductwork prior to occupancy?
17. Indoor combustion devices. Will the project be all-electric, or not utilize indoor combustion devices such as stoves, cooktops, clothes dryers, water heaters, furnaces, spas, and fireplaces that are supplied by a fuel source?
18. Construction waste management. Are there construction waste management plans in place? What percentage of construction waste will be diverted from landfills?
19. Solid waste management. Are there solid waste management plans in place? How will the project facilitate the storage and collection of recyclables and composting organic materials? Is there a plan to facilitate donation of unused food or food waste or otherwise recycle unused food or food waste?
20. Building reuse. Is an existing building being reused? What portions of the existing building such as walls, floors, roof or interior non-structural items are being reused?
21. Materials reuse. Are building materials reused? What materials are being salvaged, refurbished or reused?
22. Recycled content. Do building materials contain recycled content? What percentage?
23. Local/regional materials specification. Are building materials sourced within the region (within a 500-mile radius)? What percentage?
24. Rapidly renewable materials. Are building materials rapidly renewable having a harvest cycle of 10 years or less, such as bamboo, cotton, wool, cork, agrifiber, wheatboard, strawboard, and linoleum? What percentage?
25. Certified wood. Are wood-based materials and products certified in accordance with the Forest Stewardship Council (FSC) Principles and Criteria? What percentage?
26. Non-toxic materials. Does the project avoid Red List materials?

D. Innovation and design process.

1. Accredited professionals. Does the applicant's project team include those who are LEED accredited professionals or have other comparable certification?
2. Innovation in design. Does the project include any additional sustainable project design or construction features?

Property Address: 20 Highland Avenue

Block: 11B

Lot: 15, 16, 17, 18.05, 40.02, 44

Completed by: Leslie Walker, PE

Date: 10/20/23

