West Windsor Township Green Development Practices Checklist - Cover Sheet February 14, 2019

Adopted by Environmental Commission

Development Application Name:	ER/UDC West Windsor, LLC	Application #
Address (Location):	332-340 Hightstown Rd & 125 Southfield Rd (Street # and Name)	Township of West Windsor, NJ (Town & State)
Address (Mailing):	250 Miron Drive (Street # and Name)	Southlake, Texas (Town & State)
Name & Title: Person Completing Checklist	Tung-To Lam, PE (Print Name)	Associate, Bohler Engineering NJ, LLC (Title)
	X Tung-To Lam (Signature) — Digitally signed by Tung-To Lam DN: c=US, st=New Jersey, l=Warren, o=BOHLER ENGINEERING, P.C., cn=Tung-To Lam, email=tlam@bohlereng.com Date: 2022.04.04 13:58:06 -04'00'	(Date)

I (above) certify that the information provided herewith is true and accurate to the best of my knowledge.

The "Green Development Practices" are intended to function as "guiding principles" for all Site and Subdivision applications in West Windsor Township. Each applicant shall be expected to responsibly incorporate as many of these items, as practical, into the project design. The practices are offered as a checklist to enable flexibility to be progressive and innovative, since many of these practices are still being incorporated into the mainstream realm of the development industry. It is expected that these items will facilitate more sustainable development. Sustainable development seeks to balance environmental, economic and social aspects of a proposal such that the resultant neighborhood or business will be efficient in cost, impact and function. This list is not intended to be exclusive; incorporation of additional "Green Development Practices" similar to these items is strongly encouraged to help achieve the goal of making West Windsor Township a more sustainable community.

By incorporating this checklist into the Township plan submission checklist, developers will be encouraged to consider "Green Development Practices" with the genesis of the project program.

Township staff will be using this checklist to review the "green" character of an application.

Applicants will be asked to provide testimony and support documents to describe the actions or practices that will be incorporated into their proposal, including verification subsequent to implementation.

Attached Checklist: 6 pages Cover Sheet

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DEVELOPMENT APPLICATION NAME | DEVELOPMENT APPLICATION #

	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
1. Landscape					
a	Plants - Specify only indigenous plant species within 3,000 feet of the Township Greenbelt and elsewhere when possible. Completely avoid exotic invasive plant species. Township will offer guidance for species to avoid.	✔	Native plantings will thread through and around the proposed site improvements, including around the walkways and building. Ornamental plantings will include species that provide food and resources for pollinators. The use of native species will provide a habitat for natural enemies of pests and reduce the need for pesticides.		
b	Develop landscape and stormwater maintenance specifications that employ integrated pest management post-bond to assure implementation for five years after occupancy	✔	Outlined within the Stormwater Management Facilities Operations & Maintenance Manual are measures to eliminate potential mosquito breeding habitats.		
	Total	2		0	
2. Water					
a	Construct drip landscape irrigation in lieu of spray systems and/or install soil water sensors to conserve irrigation water use.			✔	An irrigation system is proposed for the landscaping however, it should be noted proposed landscaping is low maintenance and requires minimal watering.
b	Maximize water efficiency – Use low flow fixtures for faucets, toilets and shower heads, dry fixtures, or occupant sensors.			✔	Low flow fixtures are not proposed as part of the building design due to the building use of food preparation and sales.
c	Use native, drought tolerant plants to reduce landscape watering	✔	Native and low maintenance plants are proposed to reduce the watering.		
d	Provide a system for recycling grey water (non-potable / landscape)			✔	Grey water recycling is not proposed due to the nature of the type of building use as well as the need for additional plumbing throughout the building.
	Total	1		3	

3. Stormwater Management					
	Item	**YES**	**Describe how this practice will be implemented and the benefits**	**NO**	**Reason this practice can not be integrated into this project**
a	Design and construct 10% to 30% of parking lots with pervious pavements (eco-pavers, etc.). Consider pervious paver or pavement parking stalls and drive aisles where permitted by code.	☑	Five (5) pervious pavement systems are proposed throughout the parking areas to capture and treat stormwater runoff.	☐	
b	Utilize pervious materials for pedestrian sidewalks and paths.	☑	Two (2) areas of pervious concrete systems are proposed to capture and treat stormwater runoff.	☐	
c	Develop innovative and progressive stormwater best management practices that embrace ecosystem-based, natural and sustainable versus artificial and high-maintenance means of treating storm water quality at the conceptual design phase (e.g., raingardens; bioretention swales / basins). Sand bottom basins are not considered sustainable since they are not ecosystem-based.	☑	Two (2) aboveground bioretention basins are proposed as part of the stormwater design. These biroretention basins will benefit the project by allowing visual benefits such as additional landscaping as well as quality benefits to treat the water quality storm runoff.	☐	
d	Re-think stormwater management — do not think of stormwater as a by-product — manage stormwater as a resource. Implement stormwater harvesting elements such as collection of stormwater in cistern that is pumped into a building for water closet flushing, or into a water feature using solar-powered pumps.	☐		☑	Grey water recycling is not proposed due to the nature of the type of building use. The proposed stormwater system complies with the green infrastructure components of the New Jersey stormwater requirements.
	Total	3		1	

4. Energy					
	Item	**YES**	**Describe how this practice will be implemented and the benefits**	**NO**	**Reason this practice can not be integrated into this project**
a	Implement solar or other alternative energy generation systems for the building, or planned development. Goal: 20% electric energy generation from on-site sustainable sources.	☐		☑	Solar or other alternative energy generation systems are not proposed for the building. The building roof is proposed to be a light color roof surface.
b	Lighting - Implement L.E.D. lighting technology for site lighting fixtures. Consider solar powered pedestrian scale lighting systems and signage. Install motion sensors & timers for lights.	☑	All site lighting is proposed to use LED lighting. This will benefit the project by using less energy and lower maintenance costs.	☐	
c	Energy Use Reduction – Building design promotes passive solar shading & natural daylighting. Implement green roof or light color roof surface. Specify energy efficient windows. Install high eff. HVAC. Install Energy Star compliant equipment & fixtures.	☑	The building roof is proposed to be a light color roof surface. Energy efficient windows and high eff. HVAC systems, and energy star compliant equipment are not proposed.	☐	
d	Apply site planning techniques, from the W.W.Twp. high density housing ordinance - Site planning for climate & wind orientation siting building to promote energy conservation (e.g. max. south, solar building exposure, consider prevailing wind - reduce effect of cold winter wind & enhance cool summer breeze). Landscape design enhances conservation.	☐		☑	Due to the use of the building, the building is proposed to front Princeton-Hightstown Road with a rear entrance door facing McGetrick Lane. Maximum window exposure is proposed along the North building facade with additional window exposure along the South building facade.
	Total	2		2	

5. Resources					
	Item	**YES**	**Describe how this practice will be implemented and the benefits**	**NO**	**Reason this practice can not be integrated into this project**
a	Specify and implement site furnishings, site improvement and exterior building materials that are manufactured locally - within a radius of 500 miles - Provide list of products and manufacturer location to be evaluated with resolution compliance	☐		✔	Site furnishings and site improvements manufacturers are to be determined. A list of products and manufacturer locations will be provided at a later time to be evaluated with resolution compliance.
b	Construction Waste Management - Divert construction, demolition and land clearing debris from landfill disposal. Recycle and or salvage at least 50 % to 75% (by weight) all construction, demolition and land clearing waste.	☐		✔	Construction waste disposal locations are to be determined.
	Total	0		2	

6. Social					
a	Art - Implement indigenously inspired art in the landscape (sculpture — garden — mural/ relief — artistic site furnishing, etc.) - one application per building or per 300 residential units.	☐		✔	Art such as sculptures and murals are not proposed, however native landscaping is proposed throughout the site and within the bioretention basins.
b	Reduce Light Pollution - Eliminate all light trespass from the building & site.	☐		✔	Lighting is proposed to not trespass onto the adjacent property. Light trespasses off the site property line at the McGetrick Lane driveways into the right-of-way.
	Total	0		2	

7. Transportation					
	Item	**YES**	**Describe how this practice will be implemented and the benefits**	**NO**	**Reason this practice can not be integrated into this project**
a	Bicycles - Bicycle friendly parking area and road design, including exclusive or shared marked bike lanes and crossings. Provide lockable bicycle parking and lockers and showers for employees to encourage biking to work. Multi family residences should have accessible bicycle storage areas.	✔	Four (4) bicycle parking is proposed on proposed lot 1 to encourage local residents to bike to the site.		
b	Pedestrian – Pedestrian friendly design, to encourage walking between buildings. Follow best practices in design including sidewalks, crosswalks, signs and safe access to parking lots and buildings.	✔	Proposed sidewalks and crosswalks are proposed to connect the building entrances on proposed lots 1 and 2 to each other as well as connections to a proposed sidewalk along Princeton-Hightstown Road, Southfield Road and McGetrick Lane frontages. Benches are also proposed along the proposed sidewalk along the right-of-way.		
c	Public Transportation – Provide safe pedestrian and bicycle access to available nearby public transportation. Provide or work with transportation officials to provide a safe and dry waiting area for nearby public transportation.	✔	A NJ Transit Bus Stop exists along the Princeton-Hightstown Road right-of-way on adjacent Block 113, Lot 1.01. Proposed sidewalks are proposed to connect the proposed site with the existing crosswalk at the Princeton-Hightstown Road and Southfield Road intersection.		
d	Electric vehicles – Provide electric vehicle charging stations with minimum Level 2 (240 volt) capability. Charging spots should be clearly marked as reserved for vehicles while charging only.	✔	Three (3) electric vehicle charging stations are proposed on proposed lot 1 and two (2) electric vehicle charging stations are proposed on proposed lot 2.		
	Total	4		0	

8. Other Green Building Practices					
	Item	**YES**	**Describe how this practice will be implemented and the benefits**	**NO**	**Reason this practice can not be integrated into this project**
a	Other Green Building Practices that could be voluntarily implemented, exceeding building code requirements, to be listed for verification as part of code official review, but distinctly separate from the requirements of the building code review.	☐		☑	The proposed building has no further green building practices from those mentioned in this checklist, however the proposed stormwater system complies with the green infrastructure components of the New Jersey stormwater requirements.
b		☐			
c		☐			
	Total	0		1	

THANK YOU