

Development  
Application Name: West Windsor Self Storage

ZB 19-10SP  
Application #

Address (Location): 201 Clarksville Road  
Street # and Name

West Windsor Township, NJ  
Town & State

Address (Mailing): Same  
Street # and Name

Same  
Town & State

Name & Title: Ralph A. Petrella, P.E.  
Print Name

Vice President, Site/Civil Engineering  
Title

Person Completing  
Checklist  
   
Signature

10/25/2021  
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.

West Windsor Self Storage

ZB 19-10SP

Adopted by Environmental Commission

DEVELOPMENT APPLICATION NAME

DEVELOPMENT APPLICATION #

1. Landscape					
	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
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.	<input checked="" type="checkbox"/>	The majority of plants specified are native plants and the non native plants are ones adapted to the area and grown in local nurseries.	<input type="checkbox"/>	
b	Develop landscape and stormwater maintenance specifications that employ integrated pest management post-bond to assure implementation for five years after occupancy	<input checked="" type="checkbox"/>	Refer to Stormwater Operations and Maintenance Manual for instructions on basin and general vegetation maintenance	<input type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	

2. Water					
	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
a	Construct drip landscape irrigation in lieu of spray systems and/or install soil water sensors to conserve irrigation water use.	<input checked="" type="checkbox"/>	The Owner will retain a vendor to provide design for an automatic irrigation system and will most likely provide drip irrigation where it makes sense.	<input type="checkbox"/>	
b	Maximize water efficiency – Use low flow fixtures for faucets, toilets and shower heads, dry fixtures, or occupant sensors.	<input checked="" type="checkbox"/>	~ LEED - Indoor Water Reduction ~ Water efficiency fixtures, Metered faucets ~ Water Closets - 1.6 GPF ~ Urinal - 1.0 GPF ~ Faucet - 2.2 GPM	<input type="checkbox"/>	
c	Use native, drought tolerant plants to reduce landscape watering	<input checked="" type="checkbox"/>	Most plants are native plans.	<input type="checkbox"/>	
d	Provide a system for recycling grey water (non-potable / landscape)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Not provided due to economics and not feasible for project type due to limited restrooms and landscaping
Total		<input type="checkbox"/>		<input type="checkbox"/>	

<b>3. Stormwater Management</b>					
	<b>Item</b>	<b>YES</b>	<b>Describe how this practice will be implemented and the benefits</b>	<b>NO</b>	<b>Reason this practice can not be integrated into this project</b>
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.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Soil testing indicated that the hydrologic soil group (HSG) is type 'D,' indicative of low permeability. Also, the paved areas of the project are mainly concentrated adjacent to buildings and their foundations thus it would not be ideal to have water stored against the foundations.
b	Utilize pervious materials for pedestrian sidewalks and paths.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Refer to response 3a above.
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.	<input checked="" type="checkbox"/>	About two thirds of the site is deed restricted and preserved as native woods which provides an excellent method of ecosystem and natural water management and treatment versus a man-made stormwater facility.	<input type="checkbox"/>	
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.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	The type of building proposed, a self-storage facility, will not utilize much water overall- there are only two bathrooms (a men's and a women's room) that are only accessible by employees proposed. Grey water utilization would not be economically feasible.
Total		<input type="checkbox"/>		<input type="checkbox"/>	

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.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Reviewed; given the roof area, adoption of solar panels not feasible at this time.
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.	<input checked="" type="checkbox"/>	~Utilization of Reduced Lighting Power Density (2012 IECC) ~0.4% Max (34% Reduction) ~Low Occupancy Use ~1 employee per day ~3 to 5 people per day (average) ~All site lights are Lithonia LED pole and wall mounted fixtures.	<input type="checkbox"/>	
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.	<input checked="" type="checkbox"/>	~LEED Heat Island Reduction Heat Island Effect   Cool Roof 60MIL White TPO (SRI — 89) ~Increased HVAC Efficiency 14 SEER (cooling)   95% AFU (heating)	<input type="checkbox"/>	
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.	<input checked="" type="checkbox"/>	The building is oriented north/south, this minimizes summer solar gain heat loads.  A wind break/screen hedge of Green Giant Arborvitae has been provided along the western property line to screen the neighbors and serve as a windbreak.	<input type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	

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	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Specified Landscape Forms Products for site furnishings, which are manufactured in Kalamazoo, Michigan, which is 700 miles from the site.
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.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Existing site has already been cleared
Total		<input type="checkbox"/>		<input type="checkbox"/>	

6. Social					
	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
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.	<input checked="" type="checkbox"/>	Specified Landscape Forms Products for the site furnishings and they are a clean modernist design.	<input type="checkbox"/>	
b	Reduce Light Pollution - Eliminate all light trespass from the building & site.	<input checked="" type="checkbox"/>	Site trespass has been minimized, we are using cut off fixtures. We are at 0.2 fc along the western property line and with the screen of Green Giant Arborvitae that will be minimal.	<input type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	



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.	<input checked="" type="checkbox"/>	Bike rack provided	<input type="checkbox"/>	
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.	<input checked="" type="checkbox"/>	Two buildings are connected through an overhead walkway on the third floor thus allowing for someone to drive to the main parking lot and access their unit without the need to return to their vehicle and drive to the back of the site or cross the parking lot on foot.	<input type="checkbox"/>	
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.	<input checked="" type="checkbox"/>	Separate from the main site, a new crosswalk and accessible curb ramps are being constructed across Clarksville Road for use by the public to access the existing bus stop to the east. Due to the type of use, self-storage facility, it is unlikely that patrons would bring their goods on foot or via public transportation to the site.	<input type="checkbox"/>	
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.	<input checked="" type="checkbox"/>	One EV charging station is provided for patrons or employees' use on the site.	<input type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	

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.	<input checked="" type="checkbox"/>	~LEED Minimum Energy Performance Energy Compliance Method IEEC 2018   ASHRAE 90.1 2016 Energy Cost Budget Method. ~High Efficiency / On-Demand Hot Water ~Increased HVAC Efficiency 14 SEER (cooling)   95% AFU (heating)	<input type="checkbox"/>	
b		<input type="checkbox"/>			
c		<input type="checkbox"/>			
Total		<input type="checkbox"/>		<input type="checkbox"/>	

THANK YOU