

I. SITE DESIGN		Maximum Value	Project Value
<b>1 Site Analysis &amp; Planning</b>			
<input type="checkbox"/> A.	Maintain a ratio of total gross floor area to total lot area of no less than 33% for initial site build-out.		Required
<input type="checkbox"/> B.	Along the primary street, build up to the street fronting property line. Where this is not feasible the setback shall not be more than 10'.		Required
<input type="checkbox"/> C.	Maintain a waterfront setback of at least 25 feet from the Menomonee River and/or Menomonee Canal (as measured from the ordinary highwater mark or bulkhead line).		Required
<input type="checkbox"/> D.	From the outset of the development project through construction, ensure that specifications, sequencing and site inspections are included so as to protect the function and quality of landscaped material, soils, and trees.		Required
<input type="checkbox"/> E.	Utilize beneficial reuse practices with construction materials, including soils.	1	
<input type="checkbox"/> F.	Use locally sourced and/or recycled materials for building and site signage.	1	
<input type="checkbox"/> G.	Install utility lines underground when feasible.		Required
<b>2 Stormwater Management</b>			
<input type="checkbox"/> A.	Design stormwater treatment to avoid direct, concentrated discharge into the river or canal.		Required
<input type="checkbox"/> B.	Connect to the regional stormwater treatment area (i.e., bioretention facility), or coordinate with neighboring parcels to create a regional stormwater management system across property lines. If regional or shared is not feasible or available, stormwater shall be collected on-site. Incorporate alternative forms of onsite stormwater management (ex: bioswales, cisterns, green roofs, pervious pavement). Utilize setbacks for public access and waterways as a blue belt to encourage an urban development pattern.		Required
<input type="checkbox"/> C.	Capture rainwater from roofs and downspouts and design outlets to be released to landscaped areas wherever possible. Integrate larger-scale rainwater capture for irrigation into the design of building systems.	1	
<input type="checkbox"/> D.	Design landscape planting materials, soils and sub-soils for infiltration and evapotranspiration of rainwater. Note that soils and subsoils placed above a remedial cover can serve to store and evapotranspire collected stormwater. Wherever landscaped areas will be designed and graded to receive stormwater runoff, provide a planting plan and soil specifications (i.e. mix, depth) that are consistent with WI DNR or comparable guidance for bioretention areas.	1	
<input type="checkbox"/> E.	All surface parking areas must be drained to landscaped perimeter and/or islands properly designed with porous pavers, or other stormwater management techniques, and maintained to receive stormwater outflows, unless being diverted to another onsite or shared stormwater management facility.  The design of landscaped areas receiving outflow from parking lots should follow Wisconsin DNR or equivalent guidance and must include appropriate features (i.e. energy dissipation at inlets, grading, planting plans, soil mixes and drainage) to function as stormwater management areas.  Other landscaped areas and open space on the site should be designed to maximize the environmental and water quality function through measures such as soil amendment, replacement of compacted soils or turfgrass with deep-rooted vegetation suited to the climate, and supplemental tree planting. Limit turfgrass to areas planned for recreation.	1	

**3 Natural Landscape**

<p><input type="checkbox"/> A. Ensure that all disturbed or exposed soil areas are fully stabilized throughout construction and until all final plantings are stabilized. All landscaping shall be planted within the first appropriate planting season following construction completion.</p> <p>If constructing a bioretention facility, stage the planting of bioretention and stormwater-related plantings with the life cycle of the specific plants in the planting plan.</p>	Required
<p><input type="checkbox"/> B. Surface parking lots shall have interior landscaping requirements in accordance with Sec. 295-405-2 of the City of Milwaukee Zoning Code.</p>	Required
<p><input type="checkbox"/> C. Use deciduous shade trees, vegetative cover and exterior structures such as louvres, arbors, or trellises to provide 30% shade cover over non-roof impervious areas within 5 years.</p>	Required
<p><input type="checkbox"/> D. Select native plants and trees tolerant of climate including extended dry periods and heavy rains in summer, in order to reduce the total potable water demand for irrigation systems. Use captured rainwater as a first source to minimize potable water usage.</p>	Required
<p><input type="checkbox"/> E. Specify native plant and tree species from the Menomonee Valley Species Palette for at least 80% of planted area, excluding expansion parcels. Expansion parcels should be planted with deep-rooted grasses or vegetation, or amend turfgrass areas to enhance soil quality and infiltration, rather than utilizing sod or leaving compacted turfgrass in place.</p>	Required
<p><input type="checkbox"/> F. Prepare a site and landscape management plan that includes Integrated Pest Management practices to reduce the use of pesticides and herbicides. Include specification that any pesticides, herbicides and fertilizers used be suitable for organic gardening, unless specifically required for a particular use.</p>	1
<p><input type="checkbox"/> G. Remove all existing invasive species on site and exclude all invasive species identified by the Invasive Plan Association of Wisconsin (<a href="http://www.ipaw.org">www.ipaw.org</a>) from the landscape plan.</p>	Required
<p><input type="checkbox"/> H. Where rooting area will be limited, use strategies such as connected planting beds, rooting breakouts under parking, or walkways floating on root-permeable soils to extend rooting space and increase plant vigor. Establish engineering specifications for these strategies, drainage patterns, and installation of structural soils as part of the building design and site grading plans.</p>	1

**4 Parking and Transportation**

<p><input type="checkbox"/> A. Encourage transportation alternatives for employees and visitors by providing:</p> <ul style="list-style-type: none"> <li>● Contiguous walkways linking parking areas, building entrance, public sidewalks, bicycle racks, and any existing transit facility.</li> <li>● Shower and changing facilities for bikers, walkers and runners.</li> <li>● Provide electric vehicle charging stations.</li> </ul>	1
	Required
	1
<p><input type="checkbox"/> B. While parking is strongly encouraged to be located on the side or rear of the building, any parking located in front of the primary street facing facade shall be limited to one double-sided row and shall not be within 10 feet of the front property line. Provide visual screening of parking areas using a combination of fencing or landscaping, which may be designed to accept and manage stormwater inflow.</p>	Required
<p><input type="checkbox"/> C. Minimize curb cuts and driveways, preferably no more than two. Driveway widths should be the minimum necessary for safe access by the types of vehicles anticipated for the property.</p>	Required
<p><input type="checkbox"/> D. Locate truck loading berths at the side or rear of the building and post "no idling" sign within sight of drivers. Identify any location where vehicles may stand idling away from fresh air intakes.</p>	Required
<p><input type="checkbox"/> E. Use on-street parking and shared parking in all parking calculations to minimize the area of surface parking on site. Minimize parking stall dimensions to 9' x 18', as smaller stalls will decrease the parking lot size and allow for a large building footprint, except as required for delivery or specialty vehicles and ADA-compliant spaces.</p>	Required
<p><input type="checkbox"/> F. Use steam infrastructure to heat parking lots and sidewalks to reduce or eliminate use of winter salting.</p>	1
<p><input type="checkbox"/> G. Establish a BublR Bike station independently or with surrounding businesses. If this is not feasible at time of construction, ready the site for any future bike sharing system with pre-laid electrical conduit and outlets leading to a new or existing power source.</p>	1

**5 Site Lighting**

<input type="checkbox"/> A. Use high efficiency LED lighting or plasma lighting.	Required	
<input type="checkbox"/> B. Provide site lighting appropriate for the security needs of the site while maintaining an overall "low-lighting profile" for the complex.	Required	
<input type="checkbox"/> C. Use low cut off angles and down-lighting for landscaping or energy-conserving motion sensed lights for all site lighting. Special attention should be given to security lighting, loading docks, and entry.	Required	
<input type="checkbox"/> D. Where appropriate, install pedestrian safety lighting along public trails and walks.	1	
<input type="checkbox"/> E. Incorporate best management practices to honor goals of achieving Dark Sky Standards.	1	

<b>II. Building Design &amp; Energy Use</b>	<b>Maximum Value</b>	<b>Project Value</b>
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**1 Building Design**

<input type="checkbox"/> A. At pedestrian areas of the building, use awnings, canopies, landscaping, windows and doors to lower the scale of the building.	Required	
<input type="checkbox"/> B. Design a principal façade and obvious main entrance parallel to the public street edge. Do not face blank walls towards public streets.	Required	
<input type="checkbox"/> C. Where possible, orient buildings on an east-west access to allow for maximum daylighting benefits.	1	
<input type="checkbox"/> D. Public facades shall utilize brick (reclaimed or new), architectural pre-cast concrete panels, architectural-finished metal cladding, decorative concrete block or cut stone. Sheet metal, vinyl siding, EIFS, imitation stone, and reflective glass are discouraged.	Required	
<input type="checkbox"/> E. Maximize glazing as a component of office and entry area design. Use regular spaced or continuous glazing elements such as clerestory windows and vertical bands on all other exterior walls to break up long stretches of blank walls.	Required	
<input type="checkbox"/> F. Screen sources of mechanical noise, odors and loading operations from public open space areas and adjacent properties.	Required	
<input type="checkbox"/> G. Locate utility meters and exhaust vents on the side or rear of building.	1	
<input type="checkbox"/> H. Screen or locate roof-top mechanical equipment so it is not visible from the street and trails.	Required	
<input type="checkbox"/> I. Design to accommodate areas for recycling of waste materials. Provide a centralized ground floor location for collection and storage of recyclables and composting and screen exterior collection areas.	1	
<input type="checkbox"/> J. Locate fresh air intake locations away from loading docks, HVAC exhaust, and any location where vehicles may idle.	1	

**2 Energy Efficiency**

<input type="checkbox"/> A. Meet current ASHRAE 90.1 for energy efficiency. Including: <ul style="list-style-type: none"> <li>● Group spaces for similar functions or requirements to concentrate similar heating and cooling demands, and use non-program spaces as climate buffers.</li> <li>● Use thermal mass such as masonry or concrete to moderate interior temperatures and to achieve desired R-value in foundation, walls and roof.</li> <li>● Design air-lock entrances to reduce heat loss or gain.</li> <li>● Use Energy Star Roof-compliant, high reflectance and high emissivity roofing to reduce heat retention in summer, unless using a green roof.</li> </ul>	1	
	1	
	1	
	1	
	1	
<input type="checkbox"/> B. Specify Energy Star equipment and appliances and purchase EPEAT-registered electronics ( <a href="http://www.epeat.net">www.epeat.net</a> )	1	
<input type="checkbox"/> C. Install separate circuitry to isolate HVAC, lighting and plug loads, enabling operations and maintenance staff to monitor energy use on site. If plug loads are grouped, the metering process for monitoring becomes easier to accomplish. Guides such as GIL 65 and the CIBSE TM39 2009: Building Energy Metering can assist. Monitor energy by sub-metering (see D below) and the BMS can run the calculations if programmed to do so	1	
<input type="checkbox"/> D. Install meters for submetering.	1	

**3 Daylighting and Interior Lighting**

<input type="checkbox"/> A. A minimum of 75% of occupied interior spaces to be daylit, including:	1	
<input type="checkbox"/> i. Maximize window height, and use roof monitors, clerestory windows, skylights, and light-pipe technology to transmit light to spaces not reachable by other means.	1	
<input type="checkbox"/> ii. Balance glazing color for view, daylight and energy performance. Choose clear, transparent glass to allow for double panes and energy efficiency.	1	
<input type="checkbox"/> iii. Use interior windows, light shelves and low partitions to bring daylight deeper into the space, manage glare, and balance light levels.	1	
<input type="checkbox"/> iv. Use south-facing windows with appropriate overhangs to reduce summer sun and admit winter sun.	1	
<input type="checkbox"/> B. Perform a photometric analysis of the floor plate for lighting (1 pt) and daylighting (1 pt).	2	
<input type="checkbox"/> C. Supplement daylighting with highly efficient electric light distribution that improves visual quality while reducing electricity use including:		
<input type="checkbox"/> i. Rely on low ambient lighting levels for general illumination (predominantly light reflected from the ceiling where achievable) boosted by high quality, flexible task lighting. For general office space and non-critical manufacturing task areas, consider achieving a lighting power density (LPD) goal of between 0.5 and 0.7 watts/ft2.	1	
<input type="checkbox"/> ii. Use high efficiency lamps, luminaires or LED's with electronic ballasts.	1	
<input type="checkbox"/> iii. Employ efficiency-based controls such as dimmers, occupancy sensors, and lumen maintenance controls that can also be programmed for daylighting.	1	
<input type="checkbox"/> iv. Wire luminaires parallel to walls with windows so they can be dimmed or turned off by row.	1	

**4 Alternative Energy**

<input type="checkbox"/> A. Purchase power generated from renewable sources (solar, wind, biomass, steam, or low impact hydro sources) through renewable energy credits (RECs.)	1	
<input type="checkbox"/> B. New construction should be built ready for onsite renewable energy generation such as small wind, solar hot water, solar electric or ground source heating cooling. Where feasible, use a closed loop ground source (geothermal) heating and cooling system.	1	
<input type="checkbox"/> C. Install onsite renewable energy generation for a minimum of 5% energy demand.	1	

**5 Building Commissioning (Quality Control)**

<input type="checkbox"/> A. Contract with an independent commissioning authority from the beginning of the design process to review design options and expected operation of building and its component systems. Have building engineer train building staff to operate and maintain the building.	1	
<input type="checkbox"/> B. Use long-term continuous measurement of performance for building and site systems.	1	

III. Materials & Resources	Maximum Value	Project Value
<b>1 Exterior and Interior Materials</b>		
<input type="checkbox"/> A. Achieve the following building goals: <ul style="list-style-type: none"> <li>● Use 35% materials with post-consumer and post-industrial recycled content.</li> <li>● Use 20% materials and products that are manufactured within a 500-mile radius.</li> <li>● Specify US Forest Stewardship Council-certified wood-based materials and products or urban wood for 25% of all wood used in the project.</li> </ul>		
	1	
	1	
	1	
<input type="checkbox"/> B. Specify mold- and moisture-inhibiting construction materials.	1	
<input type="checkbox"/> C. Within the air barrier, use paints, coatings, sealings, and adhesives that are certified by Green Seal as low- or no-VOC and chemical component limits.	1	
<input type="checkbox"/> D. Use carpet systems that meet the requirements of the Carpet and Rug Institute's Green Label Indoor Air Quality Test Program.	1	
<input type="checkbox"/> E. Use composite wood and agrifiber products that do not contain added urea-formaldehyde resins.	1	
<input type="checkbox"/> F. Specify building materials (e.g. insulation, carpet pad) that do not use CFC's or HCFC's as foaming agents or in other parts of the manufacturing products.	1	
<input type="checkbox"/> G. Use CFC-free HVAC&R equipment.	1	
<b>2 Water Conservation</b>		
<input type="checkbox"/> A. Employ whole-building design strategies and use the following high-efficiency plumbing fixtures to reduce aggregate water use:		
Specify lavatory faucet aerators and low-flow electronic sensor faucets, or EPA		
<input type="checkbox"/> i. WaterSense-certified fixtures and fixture fittings in lavatories or provide lavatories with pedal controls.	1	
<input type="checkbox"/> ii. Install ultra low flow, low flow, or dual plumbing fixtures.	1	
<input type="checkbox"/> B. Install a cooling tower.	1	
<input type="checkbox"/> C. Fully implement the Alliance for Water Stewardship Standard.	1	
<input type="checkbox"/> D. Ensure any leaking or lead laterals are replaced to ensure healthy and safe drinking water for building occupants.	1	

IV. Construction & Demolition	Maximum Value	Project Value
<b>1 Waste and Recycling</b>		
<p>Implement a Construction and Demolition (if applicable) Waste Management Plan to recycle and/or salvage at least 75% of construction, demolition and land clearing waste.</p> <p><input type="checkbox"/> A. Include waste reuse and recycling in project specifications. Calculations can be done by weight or volume, but must be consistent throughout. This plan should cover and take into account:</p> <ul style="list-style-type: none"> <li>● An approved neutral third party organization, like WasteCap Resource Solutions, should be used as Plan Manager. If a person is certified by WasteCap through their C&amp;D training course this person may also be used.</li> <li>● Identification of opportunities to reduce site disturbance and minimize environmental impact of construction activities. Work with an approved neutral third party organization, like WasteCap Resource Solutions.</li> <li>● A list of materials to be separated for recovery and designation of areas for collection.</li> <li>● A plan to educate workers about separation requirements and have on hand instructions for sorting/separating materials.</li> <li>● Procedures for waste auditing.</li> <li>● On-site soils management, including areas of concern, types of contamination and disposal or encapsulation methods.</li> <li>● List sorting/separation/tracking rules.</li> </ul>	Required	
<p><input type="checkbox"/> B. Salvage 80% of existing building materials for reuse or resale.</p>	1	
<p><input type="checkbox"/> C. Salvage 90% of construction, demolition and land clearing waste.</p>	1	
<b>2 Erosion and Dust Control</b>		
<p><input type="checkbox"/> A. Follow Wisconsin Administrative Code NR 216 and City of Milwaukee Chapter 290 to control erosion regardless of the size of land disturbance.</p>	Required	
<p><input type="checkbox"/> B. Create an erosion control plan that conforms to the best management practices (BMPs) in the EPA's Storm Water Management for Construction Activities (or local regulations if they meet or exceed the EPA standards)</p>	Required	
<b>3 Pre-Occupancy Controls for Indoor Air Quality</b>		
<p><input type="checkbox"/> A. Protect stored on-site or installed absorptive materials from moisture damage and mold, and replace all filtration media immediately prior to occupancy.</p>	1	
<p><input type="checkbox"/> B. Install wet materials before dry in construction sequence to reduce indoor air pollutants.</p>	1	

V. Indoor Environmental Quality		Maximum Value	Project Value
<b>1 Indoor Air Quality</b>			
<input type="checkbox"/> A.	Demonstrate ventilation compliance at worst-case condition (i.e. supply fan at minimum speed and outdoor air damper at minimum position).	Required	
<input type="checkbox"/> B.	Provide direct exhaust for all spaces that generate moisture and pollutants, including manufacturing, toilet and locker rooms, copy rooms and rooms where chemicals and cleaners are stored.	Required	
<input type="checkbox"/> C.	Prohibit smoking within 25 feet of entrances and post signs stating this. Provide a designated smoking area and receptacles for cigarette waste.	Required	
<input type="checkbox"/> D.	Prepare an indoor air quality plan.	1	
<input type="checkbox"/> E.	Replace all filtration media immediately prior to occupancy using filtration media that have a Minimum Efficiency Reporting Value (MERV) of 13, as determined by most current ASHRAE standards.	1	
<input type="checkbox"/> F.	Increase ventilation to exceed air change effectiveness of 0.9 per most current ASHRAE standards.	1	
<input type="checkbox"/> G.	Provide for the use of natural ventilation in transition seasons. Take advantage of cross ventilation, prevailing winds and stack effects when possible.	1	
<input type="checkbox"/> H.	Provide mats or grills at entry areas to control dirt and dust.	1	
<input type="checkbox"/> I.	Utilize a carbon dioxide monitoring system in spaces of variable occupancy to provide feedback on space ventilation performance. Specify initial operational set point parameters to ensure indoor carbon dioxide levels do not exceed outdoor levels by more than 530 ppm at any time.	1	
<input type="checkbox"/> J.	Conduct a two-week flush of systems at 100% outside air before occupancy.	1	
<input type="checkbox"/> K.	Use (UV) Ultra Violet light sources to keep heat exchangers and "A" Coils clean and running at peak efficiency.	1	
<b>2 Acoustic Quality</b>			
<input type="checkbox"/> A.	Maintain a maximum interior Noise Criteria of 35 decibels in occupied areas. Ceiling panels and carpeting can assist in absorbing sound.	1	
<input type="checkbox"/> B.	Place acoustic buffers (corridors, lobbies, stairwells, storage rooms, etc.) and sound-insulated partitions between noise-producing spaces and noise-sensitive areas.	1	
<input type="checkbox"/> C.	Place vibrating equipment on isolation pads and enclose in sound-absorbing walls, floors and ceilings.	1	
<input type="checkbox"/> D.	Maintain a maximum external decibel reading of 50 db at property line.	1	
<input type="checkbox"/> E.	In areas of high ambient noise, specify windows rated at an STC of 40 or better.	1	
<input type="checkbox"/> F.	In other areas, specify windows rated at 35 or better.	1	

VI. Operations & Maintenance		Maximum Value	Project Value
<b>1 Operations Manual and Monitoring</b>			
<input type="checkbox"/>	A. Prepare a Building Operating Plan, Systems Narrative, Sequence of Operations, and Preventative Maintenance Plan. Creation of a Systems Manual is optional. (Call-out box for additional guidance: See LEED v4 Fundamental Commissioning for sections of Systems Manual.)	1	
<input type="checkbox"/>	B. Schedule regular systems review and maintenance.	1	
<input type="checkbox"/>	C. Prepare an operational waste prevention and recycling plan.	1	
<b>2 Facility Maintenance</b>			
<input type="checkbox"/>	A. Maintain healthy and efficient custodial operations using Green Seal or equivalent cleaning products.	1	
<input type="checkbox"/>	B. Frequently inspect for fungus and molds.	1	
<input type="checkbox"/>	C. Form an in-house "Green Team" to raise awareness of workplace associated environmental concerns.	1	
<input type="checkbox"/>	D. Provide dedicated areas for the collection and storage of recyclable materials for the entire building.	1	
<input type="checkbox"/>	E. Do not store materials, products or equipment outdoors, except finished product in transit and company-owned vehicles.	1	
<b>3 Maintenance and Stewardship of Site and Landscape Elements</b>			
<input type="checkbox"/>	A. Prepare and implement a landscape care and maintenance manual or plan to ensure long term viability of plantings. This should identify any long term sequencing actions that are intended by the landscape designer.	1	

Sub-Totals	Maximum Value	Project Value
I. Site Design	13	0
II. Building Design & Energy Use	28	0
III. Materials & Resources	14	0
IV. Construction & Demolition	4	0
V. Indoor Environmental Quality	14	0
VI. Operations & Maintenance	9	0
<b>Totals</b>	<b>82</b>	<b>0</b>
<b>Percent Compliant</b>		
<b>Compliance Target</b>	<b>85%</b>	<b>0%</b>

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_ 30% Project

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_ 60% Project

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_ 90% Project

Original Draft Date: May 2007  
 Revision Date: October 2017