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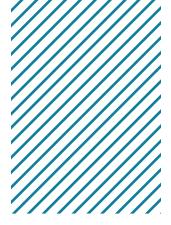
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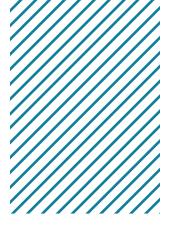




### **APPROVAL AND ADOPTION**

The FORWARD Kosciusko County-wide Greenways and Blueways Plan was approved by the Kosciusko County Board of Commissioners during their March 25, 2025 meeting.

The FORWARD Kosciusko County-wide Greenways and Blueways Plan was approved and adopted as a amendment to the County-wide Comprehensive Plan by the Kosciusko County Area Plan Commission during their May 7, 2025 meeting.

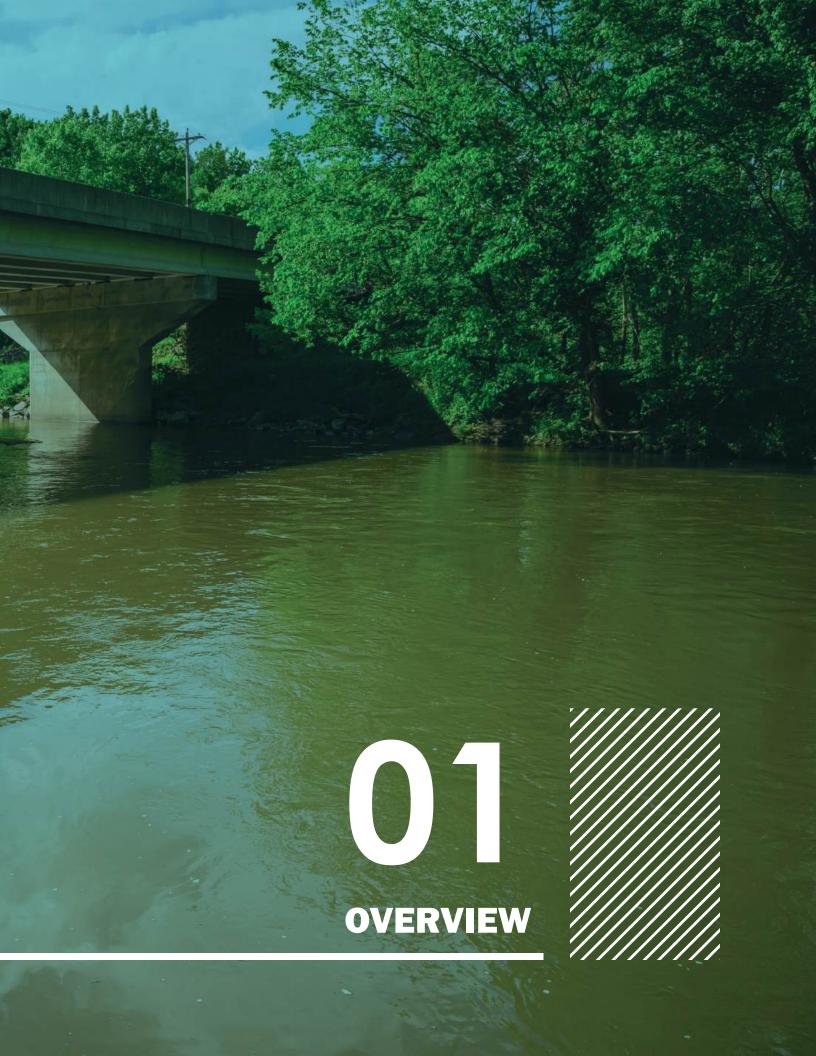




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## DESIGN GUIDELINES

### **PURPOSE AND USE**

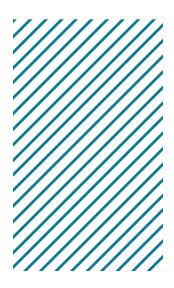
Design is more than just appearance and standards are more than just a set of rules to follow. Through thoughtful and deliberate design choices, we can proactively plan for the future, foster a strong identity, and create memorable user experiences.

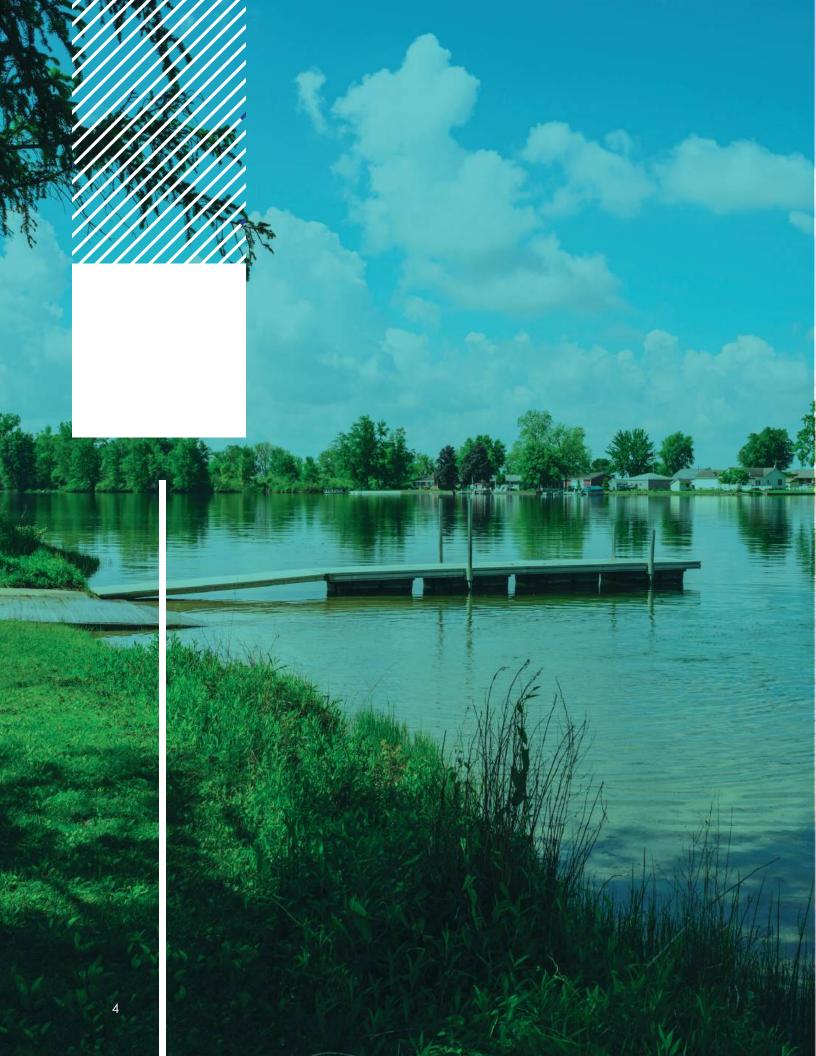
The Kosciusko County Greenways and Blueways Design Guidelines (Design Guidelines) are a companion document to the County-wide Greenways and Blueways Master Plan and are intended to provide standards and general oversight to the Kosciusko County Parks Board, as well as the local communities and their implementation partners, as they seek to create a unified and dynamic set of recreational experiences at a county-wide scale.

As trail and blueway implementation continues in the future, these Design Guidelines will help ensure that the goals set forward in the broader Master Plan are achieved.

The *Design Standards* outline the principles, regulatory guidance, and general best practices for trail segments, trailheads, waterway access points, and trail crossings. Additionally, product information and design intentions are outlined for specific user amenities including furniture, shelters, and wayfinding signage.

Creativity and flexibility within the boundaries of these standards is encouraged however, this booklet should be the primary reference for development, design, and implementation across the County. This will ensure that all phases of implementation are rooted in a unified vision.





## DESIGN CHARACTER

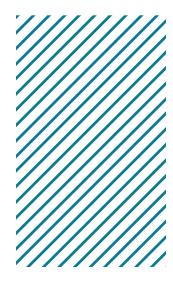
### **INTENTIONS AND OVERVIEW**

Specific design parameters, materials and products are outlined within this Design Guidelines document, however the overall alignment and placement of trails, launch points and trailheads will vary based on segment, ecological habitats and topography.

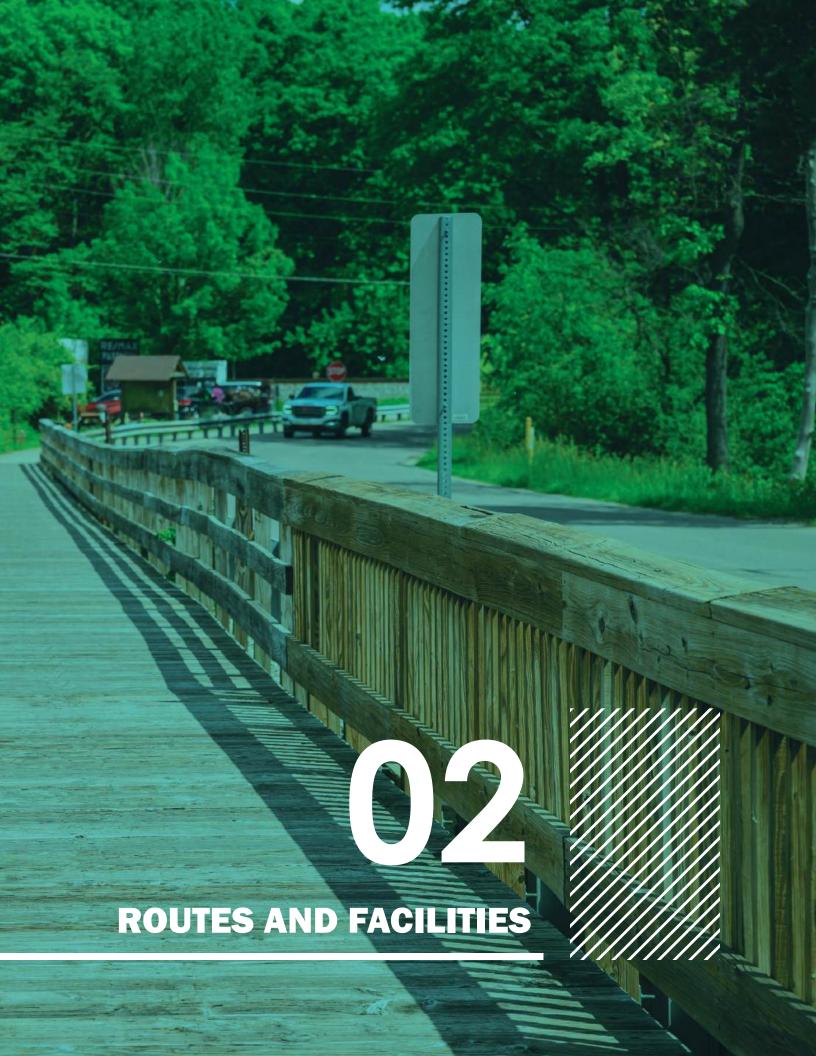
Above all else, the implementation of greenways and blueways, including the stopping and access points noted within the plan, should be done in a way that is beneficial to the surrounding environment. The following are key design principles that should be considered at the onset of each feasibility and engineering process:

- Trail corridors should meander where possible to leverage existing topography, stands of vegetation and view sheds. It is not advisable for trail segments to simply run parallel to the roadway.
- Trailheads should be visible to vehicular traffic but should also include buffering to protect surrounding properties and native habitats.
- Blueway access points should be constructed in a way that is minimally invasive to the riparian corridor or lake edge.
- Mitigation efforts, to accommodate for tree or plant loss, should be amplified so that native habits are restored and reinforced as a part of the trail system.
- Materials should reflect the natural environment and agricultural culture of the county. Stone, wood and simple metals are preferred.

These criteria should only be considered the first step when approaching design and construction methods. Additional details and design considerations are outlined on the following pages.









# ROUTES AND FACILITIES

### **GREENWAYS, BLUEWAYS AND TRAILS**

The Kosciusko County Greenways and Blueways system can be categorized into either' greenway' or 'blueway' facilities.

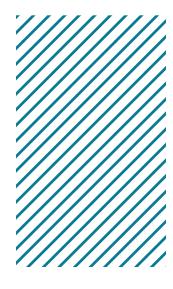
**Blueways** are water trails that are designed for recreational activities such as kayaking, canoeing, paddleboarding, and fishing. They follow rivers, lakes, and canals, providing safe and accessible routes for water-based recreation.

**Greenways**, are linear parks, trails, or open spaces that connect different areas within a community or region. They are typically designed for various forms of outdoor recreation such as walking, biking, hiking, and jogging, and they often link parks, nature reserves, cultural features, and historic sites with each other. Within Kosciusko County, greenway facilities are further refined based on the intended connection type, and overall user experience.

This section is intended to define the purpose of each route, the ownership and maintenance recommendations, along with the minimum design criteria and amenity treatments needed. This section specifically covers the following system routes:

- Kosciusko County Blueways
- Tippecanoe River Trail
- · Community to Community Routes
- Recreational Shared-Use Routes
- · On-Street Signed Routes

Trailheads, access points and trail crossing standards apply to all recommended route types. Supporting design criteria and product information for amenities such as parking, signage and seating are also included and referenced when appropriate.





## PADDLE AND FLOAT

### **KOSCIUSKO COUNTY BLUEWAY**

#### **DESIGN STRATEGY**

While not every body of water can be physically connected across the county, the intention is to provide a diverse set of water-based experiences to users of all abilities. Using signage, and strategic placement of amenities and physical elements, blueway users will engage with lakes, channels, and river corridors at multiple scales.

### **OWNERSHIP AND MAINTENANCE**

The waterways within Kosciusko County are a mix of public and private waters. Many lakes are held under conservation easements with adjacent property owners as the sole users. Just as many waterways are deemed public, which allows residents and visitors to access the water through open beaches, launch points, or docks, these public waterways are maintained by the Indiana Department of Natural Resources and, in some specific cases, are overseen by local advocates and volunteers.

In specific cases, public waterways can also include legal drains, which serve as vital drainage infrastructure within the county. While these ditches and channels provide a public function, they are on private property and have restrictions that prohibit built features that may interfere with the movement of water.

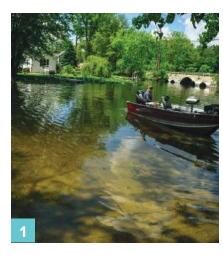
Blueways will be maintained by independent organizations and entities based on land ownership. Philanthropic agencies will also participate in yearly maintenance activities and fundraising.

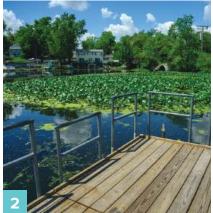
#### **MATERIALS AND AMENITIES**

The lakes and waterways that create the foundation of the blueway system are naturally occurring. Therefore, there are no standard widths or materials that apply to the routes themselves.

ONENTS	Greenway-Blueway Trailhead	P. 34
EWAY COMP	Blueway Access Points	P. 38
3REENWAY AND BLUEWAY COMPONENTS	Recreational Activity Areas	P. 50
GREENW	Regulatory and Wayfinding Signage	P. 81

The Kosciusko County Blueway is a series of water-based routes designed to encourage interaction with one of the County's most valuable resources. These navigable routes provide opportunities for fast and moving watercraft, fishing, and waterway observation.









- Existing lake use at Grassy Creek Public Access point.
- 2. Existing dock and overlook.
- 3. Paddle activity along the Tippecanoe River.
- 4. Existing open space along lake edge at Waubee Lake Park.

Images by Orange Door Creative and TSWDG



## MEANDER AND EXPLORE

### **TIPPECANOE RIVER TRAIL**

#### **DESIGN STRATEGY**

The trail travels adjacent to the Tippecanoe River in areas where construction is feasible and should be designed and constructed to avoid ecologically sensitive areas, minimize tree and vegetation clearing, and protect and enhance existing ecological habitats to prevent negative impacts on the riparian corridor.

The trail will be used by pedestrians, bicyclists, and other forms of non-motorized transportation. The trail will be 12' in width to allow pedestrians and bicyclists to safely pass each other when traveling in the same or opposite directions. The Tippecanoe River Trail will include Greenways- Blueways Trailheads, Blueway Access Points, and both recreation and water activity areas. Trailheads and access points will be shared with the Kosciusko County Blueway routes, which in some areas will run parallel to the trail.

### **RIGHT OF WAY WIDTH**

The minimum width of the right of way for the Tippecanoe River Trail will be 16', however that does not include drainage swales or buffer zones. The right of way will include the 12'-0" trail, a 2'-0" crushed gravel shoulder on either side and appropriate buffer zones needed to meet existing elevations. Buffer zones should have a maximum slope of 1:6.

### **OWNERSHIP AND MAINTENANCE**

Land used for Tippecanoe River Trail facilities will be owned and maintained by the County Parks Board. Maintenance will be provided by cooperative partnerships which include the County Parks Board, the County Highway Department, and philanthropic agencies.

	Greenway-Blueway Trailhead	P. 34
NENTS	Blueway Access Points	P. 38
Y COMPO	Recreational Activity Areas	P. 50
BLUEWA	Midblock Crossings	P. 58
SREENWAY AND BLUEWAY COMPONENTS	Parallel Crossings	P. 62
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	Regulatory and Wayfinding Signage	P. 81

The Tippecanoe River Trail allows users to experience the Tippecanoe River, and its surrounding watershed and riparian habitat, in a way that allows for exploration, education, and active and passive recreation.









- Natural elements should be incorporated into trail system.
- 2. Greenway should meander to protect existing trees.
- 3. Greenway should amplofy existing viewsheds along the
- 4. Trail should run parallel to the waterway whenever possible.

# DESIGN CRITERIA TIPPECANOE RIVER TRAIL

### **SURFACE MATERIALS**

The trail will be asphalt, which provides a comfortable surface for pedestrians, bicyclists, and those using mobility devices such as wheelchairs.

#### **BOARDWALK**

In some conditions, such as wetlands and other ecologically sensitive areas, raised boardwalks will be required to limit impacts to the surrounding environment. Boardwalks will be constructed where necessary with resilient, durable materials that withstand periodic flooding and standing water. Site-specific structural recommendations based on soils and the presence of sensitive plants and animals will be required to minimize disturbance to the natural environment.

Boardwalk surface materials will include concrete boardwalk planks and composite decking.

### **ACCENT SURFACE MATERIAL OPTIONS**

In locations where bicycle and pedestrian traffic should be slowed or alerted to visual or spatial changes within the trail corridor, decorative pavers should be used in conjunction with traditional asphalt and concrete.

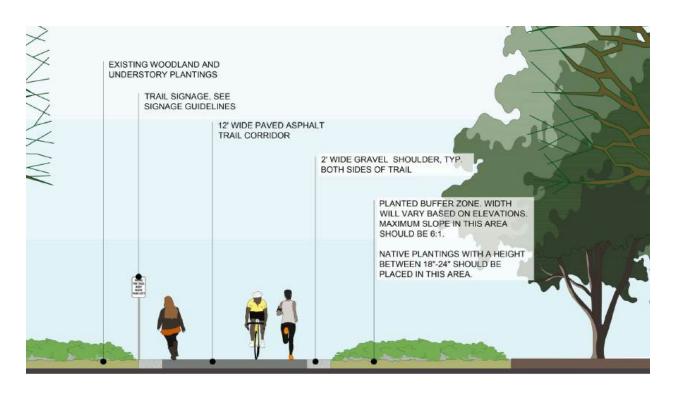
#### ADDITIONAL DESIGN CONSIDERATIONS

In some instances, denoting lanes on the greenway may be warranted or desired. Lane separation between two directions of travel may be used to minimize conflicts between pedestrians and bicyclists. Two types of lane separation may be used: grinding and painting.

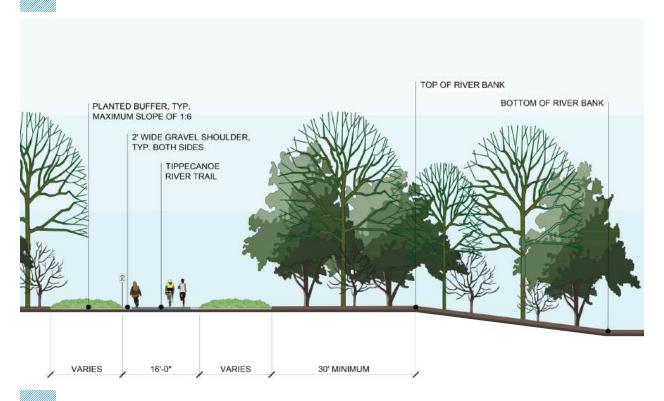
Pavement grinding provides visual and tactile warnings for users crossing lanes but is more expensive than painting. Grinding is recommended for use in areas with high pedestrian and bicycle traffic. Painting provides visual warnings on the pavement and is cheaper than grinding but requires more maintenance. Painting is recommended in areas where bicycle and pedestrian traffic is low, but directional indicators are deemed necessary.







### **ENLARGED CROSS SECTION: TIPPECANOE RIVER TRAIL**



**OVERALL CROSS SECTION: TIPPECANOE RIVER TRAIL** 

- 1. Enhanced trail surfacing (Tualatin River Greenway)
- 2. Proposed boardwalk character
- 3. Proposed riparian edge plantings
- 4. Proposed riparian edge treatment
- 5. Silver Bow Creek Greenway Trail shows intended character of trail.
- 6-8. Intended trail character and integration with nature.







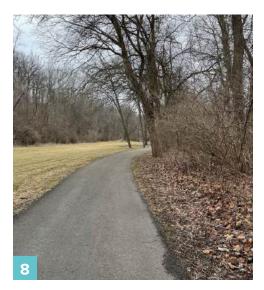












### **VEGETATION TREATMENTS**

The Tippecanoe River Greenway will be constructed within and adjacent to wetland and flood-prone areas. Proposed plantings along the corridor will be designed to tolerate inundation during high-water seasons. Plantings should be native to the region and provide seasonal interests such as color, flowers, seeds, and overall shape. Deciduous trees, understory shrubs, and perennials should all be considered when applying vegetation treatments along the trail corridor.

### **COST SAVING ALTERNATIVES**

If available funding will not accommodate the recommended design standards, the following considerations can be made to minimize costs:

### Trail surfacing

Stabilized crushed aggregate, which is more affordable than asphalt, fits aesthetically into the natural surroundings, minimally disrupts the surrounding environment, and provides a comfortable surface for pedestrians and bicyclists. During installation, the surface must consider the aggregate size and use of a stabilizer, such as Gravel-Lok, to establish a firm and stable surface compliant with ADA standards.

While initial cost savings may be realized, stabilized crushed aggregate may be difficult to maintain and is susceptible to erosion.

### Boardwalk decking

Composite decking, such as Trex, is made from wood and non-organic materials, including plastic. Because it is a combination of wood and plastic, it is insectresistant, water-resistant, and scratch-resistant. It holds strong against potential damage such as nicks, cracks, and splitting.

Composite decking has a lifespan of 25-50 years and can become slippery over time, which would require additional maintenance.



## CONNECTIONS AND CULTURE

### **COMMUNITY TO COMMUNITY ROUTES**

#### **DESIGN STRATEGY**

The routes travel adjacent to local roadways and are intended to mimic the historic Inter Urban routes that connected the communities of Milford and Syracuse and Mentone, Warsaw, and Winona Lake in the 1900s. While the corridors that previously allowed for passenger transportation are gone and now privately owned, the community-to-community routes are intended to be the most direct pathway between the county's incorporated cities and towns.

The trail will be used by pedestrians, bicyclists, and other forms of non-motorized transportation. The trail will be 12' in width to allow pedestrians and bicyclists to safely pass each other when traveling in the same or opposite directions. The trail will be separated from the roadway by a 10'-0" vegetated buffer to provide maximum comfort. The routes will include Greenway-Blueway Trailheads, Community Culture Nodes and Recreational Activity Areas.

### **RIGHT OF WAY WIDTH**

The width of the right of way for the routes will be a minimum of 76' wide. The right of way will include the 12'-0" trail, a 2'-0" crushed gravel shoulder on either side, a 10'-0" vegetated buffer, appropriate buffer zones needed to meet existing elevations, and all adjacent roadway facilities including curbs, gutters, turn lanes, and travel lanes. Buffer zones should have a maximum slope of 1:6.

### **OWNERSHIP AND MAINTENANCE**

The County Highway Department will maintain the right of way as part of the County's trail system.

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MPONENT	Community Culture Nodes	P. 46
EWAY CO	Recreational Activity Areas	P. 50
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	Regulatory and Wayfinding Signage	P. 81

Communityto-Community routes provide for the most direct connection between the County's cities and towns. The routes are modeled after the historic Interurban Rail routes that provided passenger travel throughout the region.









- 1. Shared use path bridge treatment
- 2. Buffer treatment between road and shared use path
- 3. Intended character of Community to Community routes.
- Intended character of Community to Community routes.

## **DESIGN CRITERIA**

### **COMMUNITY TO COMMUNITY ROUTES**

### **SURFACE MATERIALS**

The trail will be asphalt, which provides a comfortable surface for pedestrians, bicyclists, and those using mobility devices such as wheelchairs.

### **ACCENT SURFACE MATERIAL OPTIONS**

In locations where bicycle and pedestrian traffic should be slowed or alerted to visual or spatial changes within the trail corridor, decorative pavers should be used in conjunction with traditional asphalt and concrete.

### ADDITIONAL DESIGN CONSIDERATIONS

Routes are designed to accommodate travelers passing one another; in some instances, denoting lanes on the greenway may be warranted or desired. Lane separation between two directions of travel may be used to minimize conflicts between pedestrians and bicyclists. Two types of lane separation may be used: grinding and painting.

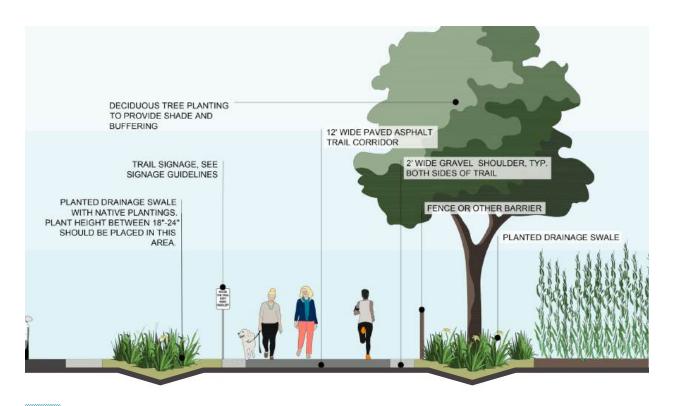
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Painting provides visual warnings on the pavement and is cheaper than grinding but requires more maintenance. Painting is recommended in areas where bicycle and pedestrian traffic is low, but directional indicators are deemed necessary.

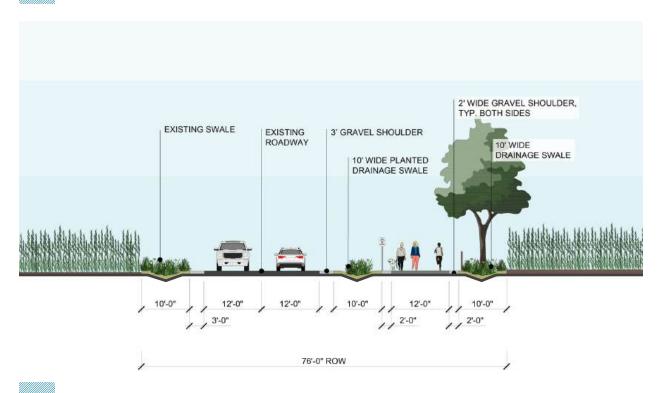
### **VEGETATION TREATMENTS**

Routes will be constructed adjacent to existing roadways and will need to incorporate drainage as a design feature. Along county roadways, side ditches are typically used to convey stormwater runoff to legal drains. Routes will utilize a 10'-0" wide vegetated bioswale along the outside edge of the trail to facilitate these natural patterns. Plantings should consist of native perennial species that can be inundated during wet weather to minimize maintenance and improve stormwater management.





### **ENLARGED CROSS SECTION: COMMUNITY TO COMMUNITY ROUTES**



OVERALL CROSS SECTION: COMMUNITY TO COMMUNITY ROUTES

- 1. Enhanced trail surfacing (Tualatin River Greenway)
- 2. Proposed boardwalk character
- 3. Proposed bridge deck treatment
- 4. Intended curvilinear nature of pathway
- 5. Split rail fence barrier along Cardinal Greenway
- 6-8. Intended trail character and integration with nature.







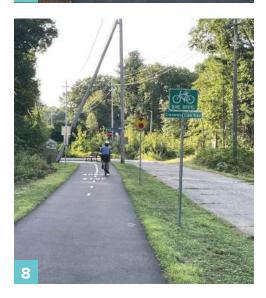












### **COST SAVING ALTERNATIVES**

If available funding will not accommodate the design standards as recommended, the following considerations can be made to minimize costs:

### Trail surfacing

Stabilized crushed aggregate, which is more affordable than asphalt, fits aesthetically into the natural surroundings, minimally disrupts the surrounding environment, and provides a comfortable surface for pedestrians and bicyclists. During installation, the surface must consider the aggregate size and use of a stabilizer, such as Gravel-Lok, to establish a firm and stable surface compliant with ADA standards.

While initial cost savings may be realized, stabilized crushed aggregate may be difficult to maintain and is susceptible to erosion.



## TOUR AND DISCOVER

### **RECREATIONAL SHARED-USE ROUTES**

### **DESIGN STRATEGY**

The routes travel adjacent to county roadways and offer short and long "loops" to local communities, destinations, parks, and waterways.

The trail will be used by pedestrians, bicyclists, and other forms of non-motorized transportation. The trail will be 10' in width to allow pedestrians and bicyclists to safely pass each other when traveling in the same or opposite directions. The trail will be separated from the roadway by an 8'-0" vegetated buffer to provide maximum comfort. The routes will include trailheads, access points, overlooks, and large and small trail nodes.

#### **RIGHT OF WAY WIDTH**

The minimum width of the right of way for the routes will be 76'. The right of way will include the 12'-0" trail, a 2'-0" crushed gravel shoulder on either side, an 10'-0" vegetated buffer, a 10'-0" drainage swale, appropriate buffer zones needed to meet existing elevations, and all adjacent roadway facilities including curbs, gutters, turn lanes, and travel lanes. Buffer zones should have a maximum slope of 1:6.

### **OWNERSHIP AND MAINTENANCE**

The right of way will be maintained by the County Highway Department as part of the County's trail system.

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	Recreational Route Nodes  Community Culture Nodes  Recreational Activity Areas  Water-based Activity Areas  Midblock Crossings  Parallel Crossings  Intersection Crossings  Regulatory and Wayfinding

Recreational Shared-**Use Routes** establish "loops" throughout the county to provide multiple route options at varying lengths. These routes follow existing roadways and connect users to local destinations. open spaces, and recreational opportunities.









- Existing shared use route near County
   Athletic Complex
- 2. Existing shared use path along community roadway.
- 3. Existing boardwalk pathway near Syracuse.
- 4. Existing shared use pathway along waterway in Winona Lake.

## **DESIGN CRITERIA**

### **RECREATIONAL SHARED-USE ROUTES**

### **SURFACE MATERIALS**

The trail will be asphalt, which provides a comfortable surface for pedestrians, bicyclists, and those using mobility devices such as wheelchairs.

### **ACCENT SURFACE MATERIAL OPTIONS**

In locations where bicycle and pedestrian traffic should be slowed or alerted to visual or spatial changes within the trail corridor, decorative pavers should be used in conjunction with traditional asphalt and concrete.

### ADDITIONAL DESIGN CONSIDERATIONS

Routes are designed to accommodate travelers passing one another; sometimes denoting lanes on the greenway may be warranted or desired. Lane separation between two directions of travel may be used to minimize conflicts between pedestrians and bicyclists. Two types of lane separation may be used: grinding and painting.

Pavement grinding provides visual and tactile warnings for users crossing lanes but is more expensive than painting. Grinding is recommended for use in areas with high pedestrian and bicycle traffic.

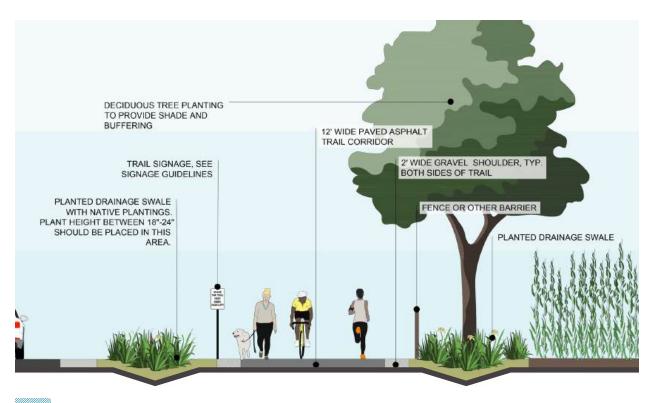
Painting provides visual warnings on the pavement and is cheaper than grinding but requires more maintenance. Painting is recommended in areas where bicycle and pedestrian traffic is low, but directional indicators are deemed necessary.

### **VEGETATION TREATMENTS**

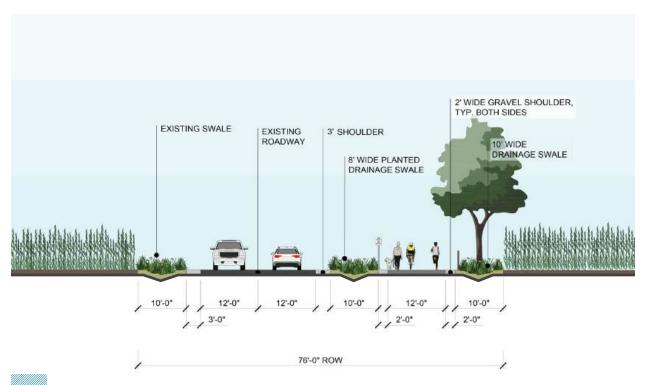
Routes will be constructed adjacent to existing roadways and will need to incorporate drainage as a design feature. Along county roadways, side ditches are typically used to convey stormwater runoff to legal drains. To facilitate these natural patterns, routes will utilize an 8'-0" wide vegetated bioswale along the outside edge of the trail. Plantings should consist of native perennial species that can be inundated during wet weather to minimize maintenance and improve stormwater management.



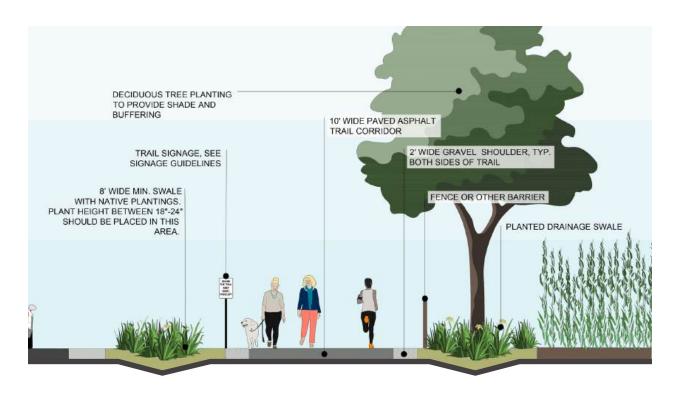




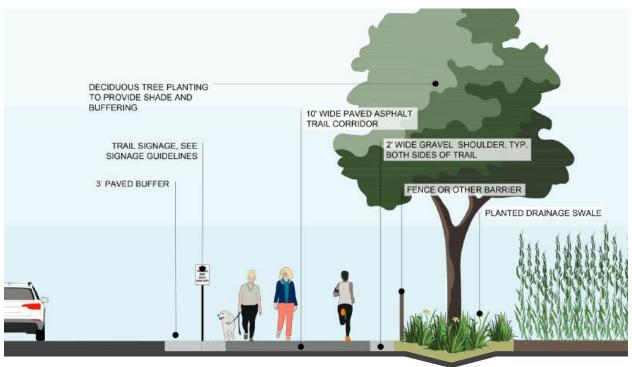
### **ENLARGED CROSS SECTION: RECREATIONAL SHARED-USE ROUTES**



**OVERALL CROSS SECTION: RECREATIONAL SHARED-USE ROUTES** 



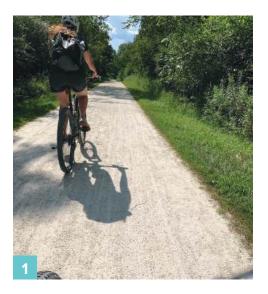
### RIGHT OF WAY ALTERNATIVE: RECREATIONAL SHARED-USE ROUTES





RIGHT OF WAY ALTERNATIVE: RECREATIONAL SHARED-USE ROUTES









#### **COST SAVING ALTERNATIVES**

If available funding will not accommodate the design standards as recommended, the following considerations can be made to minimize costs:

#### **Property Acquisition**

While the recommended paved width for a twodirectional shared-use path is 12'-0", in instances where right-of-way space is limited along existing roadways due to physical conditions or property ownership, the accepted width of the trail can be reduced to 8'-0". This reduced width should only be used in areas where pedestrian and bicyclist traffic is expected to be low, even during peak hours.

Additionally, in areas with minimal right-of-way, shared-use path facilities may be separated from vehicular traffic by a paved buffer that is 3'-0" wide at a minimum. This road adjacent condition should only be used in areas where vehicular, pedestrian, and bicyclist traffic is expected to be low, even during peak hours.

#### Trail surfacing

Stabilized crushed aggregate, which is more affordable than asphalt, fits aesthetically into the natural surroundings, minimally disrupts the surrounding environment, and provides a comfortable surface for pedestrians and bicyclists. During installation, the surface must consider the aggregate size and use of a stabilizer, such as Gravel-Lok, to establish a firm and stable surface compliant with ADA standards.

While initial cost savings may be realized, stabilized crushed aggregate may be difficult to maintain and is susceptible to erosion.

1-3. Examples of trails utilizing stabilized crushed aggregate



# COMMUTE AND TRAVEL

### **ON-STREET SIGNED ROUTES**

#### **DESIGN STRATEGY**

Currently, miles of on-street signed routes exist within the county today. These routes are used by experienced cyclists who are comfortable sharing the road with small to large vehicles. The routes are marked with simple signs indicating a shared use situation.

#### **RIGHT OF WAY WIDTH**

The width of the right of way width for the routes will match existing widths since the facilities are shared with vehicular roadway facilities.

#### **OWNERSHIP AND MAINTENANCE**

The right of way will be maintained by the County Highway Department as part of the County's trail system. Regulatory and Wayfinding P. 81
Signage
P. 81

**On-Street Signed** Routes support a larger, regional network of bicycle routes. These routes use signage to alert drivers that bicyclists are on the road and provide opportunities for people to travel longer distances for transportation and recreation.









- Paved shoulders can enhance existing onstreet signed routes.
- 2. On-street routes can be used by pedestrians in some cases.
- 3. Exsiting on-street routes are used within local communities.
- 4. Existing on-street routes are used throughout the county.



# STOPPING POINTS

## TRAILHEADS, ACCESS POINTS AND NODES

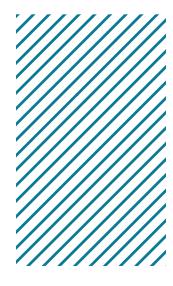
While trail users spend the majority of their recreational or commuting time on a specific facility, trailheads, or other stopping points, are often the users first and last impression of the system itself. Providing appropriately spaced and designed stopping points will ensure that system users have access to not only system facilities, but also amenities that increase overall comfort, navigation and general understanding of the surrounding environment.

For the Kosciusko County greenways and blueway system, a hierarchy of trailheads, access points and nodes was developed to provide multiple entry points into the county-wide system, the existing communities and the area's natural attractions.

This section is intended to define the purpose of each stopping point, the ownership and maintenance recommendations, along with the minimum design criteria and amenity treatments needed. This section specifically covers the following:

- Greenway-Blueway Trailheads
- Blueway Access Points
- Recreational Route Nodes
- Community Culture Nodes
- Complementary Recreational Activity Zones
- · Complementary Water-Based Activity Zones

In many cases, identified stopping points also serve as a trail crossing. Trail crossing standards should be applied in addition to the minimum criteria identified within this section. Supporting design criteria and product information for amenities such as parking, signage and seating are also included and referenced when appropriate.





# GREENWAY-BLUEWAY

### **TRAILHEADS**

#### **DESIGN STRATEGY**

Trailhead locations are highly visible and function as both destinations and gathering areas within the county. Greenway-Blueway trailheads are located near residential neighborhoods, schools, and existing open spaces. Local municipalities are encouraged to provide connections to Greenway-Blueway Trailheads to further expand the county-wide system.

In otherwise variable conditions, the priority treatments and amenities show in the table to the right should be provided at all Greenway-Blueway Trailhead locations to provide consistency. Where space permits, secondary amenities should also be considered. Conceptual plans showing both priority and supporting amenities are shown on the following pages for reference.

#### **OWNERSHIP AND MAINTENANCE**

Greenway-Blueway Trailheads are opportunities for the Kosciusko County Parks Board to create recreational spaces within the incorporated and unincorporated areas of the County. While in areas of new development, the goal should be for the Parks Board to own and maintain these properties, in many cases, public-private partnerships can be used to create trailhead spaces at key points within the system.

Where complementary land uses are adjacent to the proposed trailheads, the Kosciusko Parks Board should enter into cooperative agreements that define ownership, access and maintenance responsibilities.

	Vehicle Parking	P. 100
	Waterway Access	P. 101
PRIORITY AMENITIES	Restroom Facilities	P. 139
IY AMI	User Amenities	P. 105
RIORI	Signage	P. 81
<b>a</b>	Walkways & Landing Areas	P. 104
	Open Space	P. 140

	Loading Area	P. 100
ITIES	Trailer Parking	P. 100
AMEN	Overhead Shelter	P. 142
SUPPORTING AMENITIES	Overlook and Deck	P. 103
SUPPC	Public Art	P. 141
	Rentals	P. 143

Greenway-Blueway Trailheads are designated public areas where countywide greenways, blueways, and recreational routes intersect. These areas provide users with multiple opportunities for activities and will have the highest level of user amenities.









- launch areas give equal access to residents.
- 2. Trail facilities and amenity zones.
- 3. Ample parking with drop off and turnaround zones serve as amenity.
- 4. Watercraft and paddle board renting to expand water based recreation opportunities.



# DESIGN CRITERIA GREENWAY-BLUEWAY TRAILHEADS

These should be considered general design guildines for priority and supporting amenities. Specific design requirements and product information can be found on referenced pages within these Design Guidlines.

- **Vehicular Parking-** Provide parking for approximately 8-12 vehicles, 1-2 of which are marked as accessible. Where utilities are present, parking lot lighting will be installed to promote safety and overall visibility of the area.
- Waterway Access- Provide a permanent structure that provides year-round access to adjacent bodies of water for individuals and small groups with watercraft (canoes, kayaks, etc.).
- **Restroom Facilities** Provide a permanent structure with a minimum of one unisex restroom designed to meet or exceed accessibility guidelines.
- User Amenities- Provide a mix of amenities that are geared towards creating a
  comfortable environment for trail and blueway users, including benches, litter
  receptacles, dog waste station, bicycle racks, bike repair station, AED/ First aid station,
  and appropriate path lighting to ensure safe levels of lighting.
- **Signage** Provide signage to identify the trailhead location, use maps to provide directions and general distances, and use images and text to interpret key features of the area.
- Walkways and Landing Areas- Paved areas will be located at the entry/ exit points
  of both greenway and blueway facilities. Paved walkways will connect all trailhead
  features (parking lots, comfort stations, landing areas, etc.).
- Open Space- Areas well suited for use as a park, open space, or other recreational
  activity should be provided. In areas where existing recreational areas are not
  currently present, trailhead designs should address future acquisition and the
  provision of flexible open space at or near the trailhead.











- 1. Intended character of trailhead
- 2. Signage will denote trailhead and available amenities
- 3. Access to public waterways will be provided
- 4. Amenities will provided comfort for users
- 5. Decorative materials will be used to indicate the trailhead area.



# TIPPECANOE WATERSHED

### **BLUEWAY ACCESS POINTS**

#### **DESIGN STRATEGY**

Blueway Access Points are located along or near existing roadways or bridges. As blueway route usage increases and land is available for development, Blueway Access Points can be expanded to serve as a Greenway-Blueway Trailhead in the future.

In otherwise variable conditions, the priority treatments and amenities show in the table to the right should be provided at all Blueway Access Point locations to provide consistency. Where space permits, secondary amenities should also be considered. Conceptual plans showing both priority and supporting amenities are shown on the following pages for reference.

#### **OWNERSHIP AND MAINTENANCE**

Blueway Access Points are opportunities for the Kosciusko County Parks Board to create water-based recreational spaces within the incorporated and unincorporated areas of the County. While in areas of new development, the goal should be for the Parks Board to own and maintain these properties, in many cases, public-private partnerships can be used to create safer and enhanced spaces at key points within the system.

Where complementary land uses are adjacent to the proposed trailheads, the Kosciusko Parks Board should enter into cooperative agreements that define ownership, access and maintenance responsibilities.

In some cases, especially when the access point is adjacent to an existing bridge or other roadway rightof-way, the County Highway Department can maintain proposed access points.

IES	Waterway Access	P. 101
MENIT	User Amenities	P. 105
PRIORITY AMENITIES	Signage	P. 81
PRIO	Walkways & Landing Areas	P. 104

Si	Vehicle Parking	P. 100
BNITE	Loading Area	P. 100
NG AN	Trailer Parking	P. 100
SUPPORTING AMENITIES	Restroom Facilities	P. 139
S	Overlook and Deck	P. 103

Blueway Access Points are designated points along the riparian corridor where users can enter or exit the waterway route safely and protectively. These areas provide users with access to the County's river, lakes, and streams and offer conservation and user education opportunities.









- 1. Stable and interactive river banks allow for access and gathering
- 2. Concrete ramps provide accessible entry points
- 3. Floating boardwalks and docks can be used at public lakes
- 4. Rustic staircases and terraces provide access while also providing overlook opportunities.

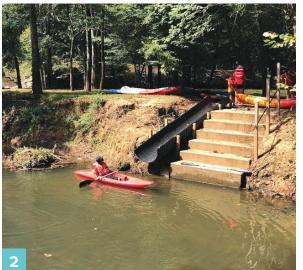
# DESIGN CRITERIA BLUEWAY ACCESS POINTS

These should be considered general design guidelines for priority and supporting amenities. Specific design requirements and product information can be found on referenced pages within these Design Guidelines.

- Waterway Access- Provide a nature-inspired, permanent structure that provides
  year-round access to adjacent bodies of water for individuals and small groups
  with watercraft (canoes, kayaks, etc.). Infrastructure and materials that encourages
  universal design is preferred.
- Walkways and Landing Areas- Paved areas will be located at the entry/ exit points
  of the body of water. Paved walkways will connect blueway access points to nearby
  pedestrian or bicycling facilities where possible.
- User Amenities- Provide a mix of amenities that are geared towards creating a
  comfortable environment for trail and blueway users, including benches, litter
  receptacles, dog waste station, bicycle racks, bike repair station, AED/ First aid station,
  and appropriate path lighting to ensure safe levels of lighting.
- **Signage** Provide signage to identify the access point location and use maps to provide directions and general distances. Regulatory signage related to the waterway should also be included.











- Small scale ramps can be used to provide access in hard to reach areas
- 2. Chutes can be used to provide access to waterways
- 3. Signage should be used at the access point to highlight rules and educational opportunities
- 4. Accessible infrastructure is encouraged in all areas



# RECREATIONAL ROUTES

## **TRAIL NODES**

#### **DESIGN STRATEGY**

Recreational Route Nodes provide rest areas for a limited number of trail users. They are located at the intersections of trail facilities and regularly spaced along the trail between trailheads to provide resting opportunities along long stretches. In some cases, Recreational Route Nodes can be used along the trail to provide educational and interpretive opportunities for trail users.

In otherwise variable conditions, the priority treatments and amenities show in the table to the right should be provided at all Recreational Route Trail Node locations to provide consistency. Where space permits, secondary amenities should also be considered. Conceptual plans showing both priority and supporting amenities are shown on the following pages for reference.

#### **OWNERSHIP AND MAINTENANCE**

In many cases, especially when the trail node is adjacent to an intersection or roadway right-of-way, the County Highway Department can maintain proposed Recreational Route Trail nodes as a part of the overall transportation system.

Where complementary land uses are adjacent to the proposed trail nodes, such as at schools, or churches, the Kosciusko Parks Board should enter into cooperative agreements that define ownership, access and maintenance responsibilities.

AMENITIES	Signage	P. 81
PRIORITY AMENITIE	Walkways & Landing Areas	P. 104

Recreational
Route Nodes
are small-scale
connections
where shared use
paths intersect
and offer
opportunities for
a user to change
directions.









- Seating can be located at trail nodes where space allows
- 2-4. Signage including gateway, trail identification and orientation mapping should be included to aid users along the trail

# DESIGN CRITERIA RECREATIONAL ROUTE TRAIL NODES

These should be considered general design guidelines for priority and supporting amenities. Specific design requirements and product information can be found on referenced pages within these Design Guidelines.

- Walkways and Landing Areas- Paved areas will be located at the intersections of trail facilities. Paved walkways may connect all landing areas to surrounding features that support trail users.
- **Signage** Provide signage to identify the location, use maps to provide directions and general distances, and use images and text to interpret key features of the area as applicable.
- User Amenities- A mix of amenities geared towards creating a comfortable
  environment for trail users, including benches, litter receptacles, and a bike repair
  station. If additional space is available, litter receptacles, dog waste stations, bicycle
  racks, AED/ First aid stations, and path lighting should be considered to ensure safe
  levels of lighting.











- 1. Small plantings and signage help denote trail
- 2. Benches and pedestrian furniture are encouraged where possible
- 3. Node areas often happen at crossing points so they should fit multiple users
- 4. Benches and pedestrian furniture are encouraged where possible
- 5. Specialty pavement visually separates node from trail



# COMMUNITY CULTURE

## **TRAIL NODES**

#### **DESIGN STRATEGY**

Community Culture Nodes are intended to serve as a gateway into a specific community. These nodes are intended to serve as an interpretive opportunity for trail users to learn more about a community's culture, history, and attractions. Community Culture Trail Nodes should feature unique materials and design characteristics based on the location and overall community context.

Community Culture Trail Nodes should be placed on public or quasi-public lands to further support community involvement and neighborhood pride.

In otherwise variable conditions, the priority treatments and amenities show in the table to the right should be provided at all Community Culture Trail Node locations to provide consistency. Where space permits, secondary amenities should also be considered. Conceptual plans showing both priority and supporting amenities are shown on the following pages for reference.

#### **OWNERSHIP AND MAINTENANCE**

In many cases, especially when the trail node is adjacent to an intersection or roadway right-of-way, the local Street Department or County Highway Department (dependent on location and jurisdiction) can maintain proposed Community Culture Trail Nodes as a part of the overall transportation system.

Where complementary land uses are adjacent to the proposed trail nodes, such as at schools, or churches, the Kosciusko Parks Board should enter into cooperative agreements that define ownership, access and maintenance responsibilities.

NITIES	Signage	P. 81
PRIORITY AMENITIE	Walkways & Landing Areas	P. 104
PRIOR	Public Art	P. 141

ENITIES	Vehicle Parking	P. 100
SUPPORTING AMENITIE	User Amenities	P. 105
SUPPO	Rentals	P. 143

Community Culture Trail Nodes serve as the terminus of the county's trail system within any specific community. These nodes are often located at public properties such as schools, parks, or government buildings and provide an opportunity for unique treatments and amenities.









1-4. Community culture nodes should represent local interests whenever possible

Locations of nodes can be tied to locally know elements and areas or they could feature the work of local public artists

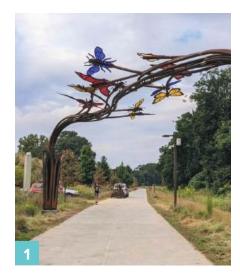
# DESIGN CRITERIA COMMUNITY CULTURE TRAIL NODES

#### **DESIGN REQUIREMENTS**

These should be considered general design guidelines for priority and supporting amenities. Specific design requirements and product information can be found on referenced pages within these Design Guidelines.

- Walkways and Landing Areas- Nodes should feature a paved area of some type
  to ensure that trail users have access to signage, art, and other community-specific
  installations. Paved walkways may connect all landing areas to trail facilities and
  surrounding features that support trail users.
- **Signage** Provide signage to identify the location, use maps to provide directions and general distances, and use images and text to interpret key features of the area as applicable.
- Public Art- In addition to signage elements, public art can be used as a cultural
  element at Community Culture Nodes. Sculptures, statues, and murals are all
  applicable applications. A priority should be placed on using local artists to ensure
  that community history and values are shown in the work.











1-4. Community culture nodes should represent local interests whenever possible

> Locations of nodes can be tied to locally know elements and areas or they could feature the work of local public artists



### **RECREATION ACTIVITY AREAS**

#### **DESIGN STRATEGY**

Recreation activity areas are add-on areas that complement Greenway-Blueway Trailheads, Blueway Access Points, and Community Culture Nodes. Sometimes, they can also be standalone opportunities to increase the County's Park system. They are located at key points within the system where user rates are anticipated to be high and are in areas that may benefit from additional recreation opportunities. They are often found in areas where trail system facilities are either on or near public and quasi-public developments where trail users can be accommodated in shared open spaces.

When land is purchased to create a Recreation Activity Area, the land and the included amenities should be added to the County's park system through land purchase or partnership agreement.

#### **DESIGN OPPORTUNITIES**

In Recreation Activity Areas, the following should be considered as key elements for consideration:

- *Open Lawns* Open lawns provide opportunities for picnicking and flexible play for individuals and small groups.
- *Playground Structures for Ages 2-12* In areas where size permits, play structures and equipment can be added to provide active opportunities for trail users.
- **Shelters** Permanent structure that provides year-round shelter for small groups using the recreation area. Picnic tables, grills and hot coal ash receptacles can be added to encourage seasonal use.
- Overflow Parking Areas- Provide additional parking areas to accommodate high use days.
   Where utilities are present, parking lot lighting will be installed to promote safety and overall visibility of the area.
- User Amenities- A mix of amenities that are geared towards creating a comfortable
  environment for trail and blueway users, including benches, litter receptacles, dog waste
  station, bicycle racks, bike repair station, AED/ First aid station, and appropriate path lighting
  to ensure safe levels of lighting.
- **Native Habitats** Enhanced planting areas adjacent to the waterway that would improve local ecology and animal habitats, Interpretive signs are encouraged in these areas to distinguish planting species and habitat locations.

Recreation
activity areas are
small to largescale properties
that can function
as useable park
space now or in
the future.









1-4. Complementary recreation activity areas should feature amenities and treatments that encourage interaction, movement and education

Playgrounds, open areas for picnics and play should be located in areas where additional park grounds are needed



### **WATER-BASED ACTIVITY AREAS**

#### **DESIGN STRATEGY**

Water- Based Activity Areas are add-on areas that complement Greenway-Blueway Trailheads and Blueway Access Points. In some instances, they can also be stand-alone opportunities to increase the County's Park system. They are located at key points within the system where unique hydrologic features, lands, or habitats exist. They are often found in areas where blueway system facilities are either on or near public and quasi-public developments where users can be accommodated in shared open spaces.

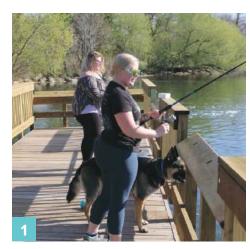
When land is purchased to create a Water-based Activity Area, the land and the included amenities should be added to the County's park system through a land purchase or partnership agreement.

#### **DESIGN OPPORTUNITIES**

In Water-based Activity Areas, the following should be considered as key elements for consideration:

- **Beaches or Wide Banks** Areas adjacent to bodies of water where watercraft users can stop, step onshore and experience the surrounding environment in a safe and secure way.
- Waterway Access- Permanent structures that provide year-round access to adjacent bodies
  of water for individuals and small groups with watercraft (canoes, kayaks, etc.). Access points
  could utilize terraced steps or other rustic elements to provide both access, seating and
  overlook opportunities.
- **Observation Areas** Overlooks, boardwalks or other built structure that provides open views to adjacent bodies of water.
- *Fishing Piers* Permanent structures that provide opporutnities for individual and small group fishing adjacent to bodies of water.
- *User Amenities* Provide a mix of amenities that are geared towards creating a comfortable environment for trail and blueway users, including benches, litter receptacles, dog waste station, bicycle racks, bike repair station, AED/ First aid station, and appropriate path lighting to ensure safe levels of lighting.
- **Native Habitats** Enhanced planting areas adjacent to the waterway that would improve local ecology and animal habitats, Interpretive signs are encouraged in these areas to distinguish planting species and habitat locations.

Water-based
Activity Areas
are small to
large-scale
additions that
provide unique
experiences
adjacent to
the County's
lakes and the
Tippecanoe River.









1-4. Complementary water based recreation areas should be used to highlight the unique features of the area

Areas for fishing, and habitat exploration can be developed in ways to enhance the natural environment

Resting beaches can be used to provide unique observation areas for those in watercraft







# CROSSINGS

### **GREENWAY AND TRAIL CROSSINGS**

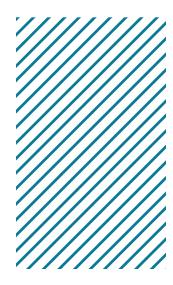
Trails are intended to attract a wide range of users, including users of all ages and physical abilities such as young children, fast-paced bicyclists, elderly individuals, and those with mobility challenges. While trail segments often are seen as the primary piece of the trail system, ensuring that users can safely, and comfortably cross streets and intersections is arguably the most critical portion of the system.

Crossings allow system users to safely navigate conflicting traffic patterns and without safe crossings, the greenway and trail system would just be a set of standalone, segments with minimal connectivity.

The trail crossings within the Kosciusko County system are intended to be functional by providing safe access for all intended users regardless of age and ability. Trail crossing types are based on the type of roadway and trail, the surrounding environment, and trail user needs. The Kosciusko County system includes the following intersection types:

- Mid-block trail crossings;
- · Parallel trail crossings; and
- Intersection crossings

Within these design standards, each trail crossing type is defined by an overall strategy and a series of design and visibility requirements. While the primary function of a crossing is to protect trail users, in some cases these areas can also double as a rest area or informal route node. Within each definition, complementary amenities and treatments have been identified. The inclusion of these complementary elements should be considered on an as-needed basis.





# MID-BLOCK

### TRAIL CROSSING

#### **DESIGN STRATEGY**

Midblock crossings commonly occur at schools, parks, waterfronts, and other desirable community destinations. By providing enhanced crossing treatments at these desirable locations, pedestrians and cyclists are better protected from conflicting vehicular traffic. Generally, there are two types of midblock crossings: perpendicular crossings, which occur when the trail and the roadway intersect at right angles, and skewed crossings, which occur most often when the trail and the roadway intersect at an angle. To avoid skewed crossings, which create challenging site distances, a swerve in the trail path is used so that the trail crossing is perpendicular to the roadway.

It is preferred that all midblock crossings utilize actuated pedestrian signals, hybrid beacons, or rapid flash beacons to improve visibility. In rare occurrences, where pedestrian volume is projected to be low or inconsistent, midblock crossings may be unsignalized and rely on signage and pavement markings.

Midblock crossings occur when a trail or pathway crosses a roadway when there are no other adjacent intersections or crossings. Midblock crosswalks facilitate crossings to places that people want to go but that are not well served by the existing traffic network.









1-4. Midblock crossings should utilize highly visible crosswalk markings and pedestrian signals to denote the presence of pedestrian and cyclists

Decorative materials and specialty lighting can also be added to further enhance visibility

# DESIGN CRITERIA

### **MID-BLOCK CROSSINGS**

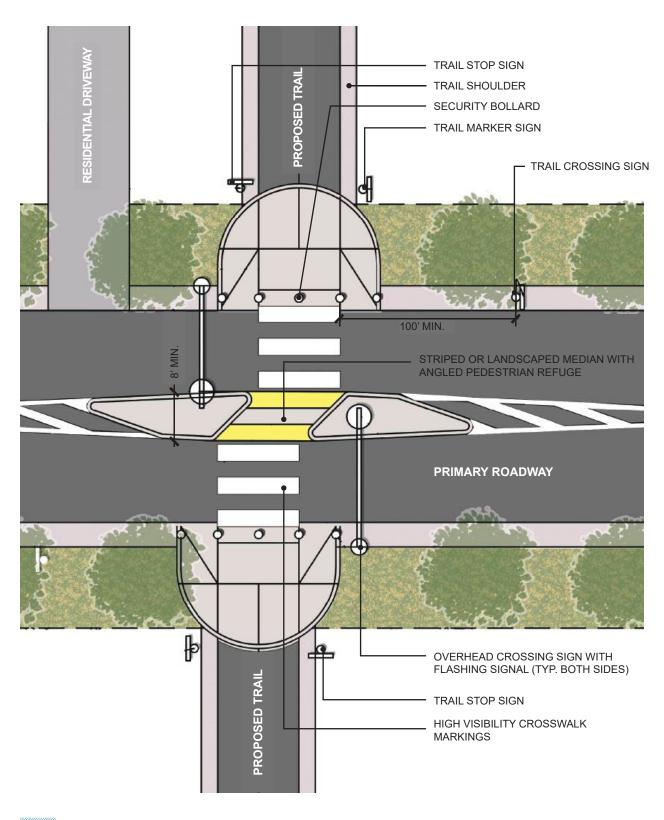
#### **DESIGN REQUIREMENTS**

- Crossings should be ADA-accessible so they can be used by all trail users.
- Immediately adjacent to the street, trail connections shall be concrete. Concrete shall extend 10' from the edge of the street pavement to the connecting trail.
- Concrete pavement shall include a 2' wide detectable warning extending the width of the trail surface.
- A 10' wide "roadway clear zone" shall be provided on both sides of the street. The surface of the roadway clear zone shall be crushed aggregate.
- Where possible, low medians within the public right of way should be considered
  to reduce the vehicular speeds of intersections traffic. Medians can also serve as a
  refuge for trail users while crossing the road.
- Stop lines, within the roadway, should be set back 20-50 feet from the midblock crossing. This ensures that a person crossing the street is visible to the second driver when the first driver is stopped.

### **VISIBILITY REQUIREMENTS**

- Visual obstructions, including overgrown vegetation, should be removed where possible to improve visibility near the crossing.
- 24" wide thermoplastic crossing bars shall extend across the street and match the width of the trail surface.
- Pavement treatments and other more permanent traffic-calming measures, such
  as rumble strips or pavement treatments, on both the road and the trail should be
  applied to improve driver and trail user recognition of crossings.
- Trail markers shall be included on both sides of the trail before the trail crossings.
- Midblock crossings should include Audible Pedestrian Signals to provide audible and vibrotactile information to help blind, visually impaired, and deaf-blind pedestrians cross the street.





TYPICAL MID BLOCK CROSSING PLAN



## PARALLEL

### **TRAIL CROSSING**

#### **DESIGN STRATEGY**

Within the Kosciusko County greenway and trail system, routes and facilities follow county roads, making parallel crossings the most common type of crossing in the system. Due to the presence of turning vehicles, parallel trail crossings have more potential for conflict between vehicles and trail users. While vehicular drivers may see trail users, pedestrians and bicyclists traveling on adjacent trails travel in both directions and may not see traffic turning onto the street from behind.

Along high-volume roadways, parallel crossings should utilize actuated pedestrian signals, hybrid beacons, or rapid flash beacons to improve visibility. Where traffic volumes are projected to be low or inconsistent, parallel crossings may be unsignalized and rely on signage and pavement markings.

Parallel trail
crossings occur
when a trail
running adjacent
to a roadway
crosses another
roadway.









1-4. Parallel crossings should utilize highly visible crosswalk markings and pedestrian signals to denote the presence of pedestrian and cyclists

Decorative materials and specialty lighting can also be added to further enhance visibility

# DESIGN CRITERIA PARALLEL TRAIL CROSSINGS

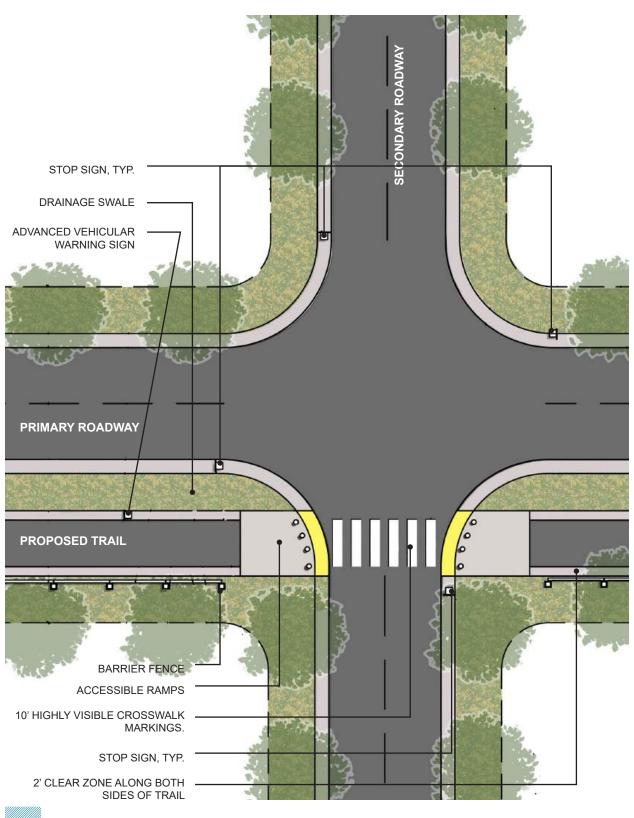
#### **DESIGN REQUIREMENTS**

- Crossings should be ADA-accessible so they can be used by all trail users.
- Immediately adjacent to the street, trail connections shall be concrete. Concrete shall extend 10' from the edge of the street pavement to the connecting trail.
- Concrete pavement shall include a 2' wide detectable warning extending the width of the trail surface.
- Raised crosswalks shall be used to increase driver yielding and decrease approaching speeds. Raised crosswalks are flush with the height of the sidewalk and are a minimum of 10' wide to allow the front and rear wheels of a passenger vehicle to be on top of the table at the same time.
- A 10' wide "roadway clear zone" shall be provided on both sides of the street. The surface of the roadway clear zone shall be crushed aggregate.

#### **VISIBILITY REQUIREMENTS**

- Visual obstructions, including overgrown vegetation, should be removed where possible to improve visibility.
- 24" wide thermoplastic crossing bars shall extend across the street and match the width of the trail surface.
- Pavement treatments and other more permanent traffic-calming measures, such
  as rumble strips or pavement treatments, on both the road and the trail should be
  applied to improve driver and trail user recognition of crossings.
- Trail markers shall be included on both sides of the trail before the trail crossings.
- When high-intensity activated crosswalk beacons are used, crossings should also include Audible Pedestrian Signals to provide audible and vibrotactile information to help blind, visually impaired, and deaf-blind pedestrians cross the street.





TYPICAL PARALLEL ROADWAY CROSSING



## INTERSECTION

#### TRAIL CROSSINGS

Intersection crossings include intersections that have a nonstandard geometry, such as a "T" intersection or required skewed approaches. They occur at points in the trail system, where users need to cross the roadway and change directions to remain on the trail facility. Intersection crossings can also include intersections with multiple through lanes and turn lanes, permitted U-turns, or complex signal operations such as split phasing or flashing turn arrows. In these configurations, turning movement conflicts between trail users and vehicles are the biggest concern.

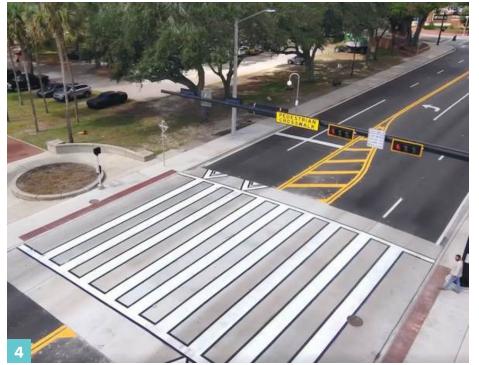
It is preferred that all intersection crossings utilize actuated pedestrian signals, hybrid beacons, or rapid flash beacons to improve visibility. In rare occurrences, where both vehicular and pedestrian volume is projected to be low or inconsistent, intersection crossings may be unsignalized and rely on signage and pavement markings.

Intersection
crossings
occur at either
signalized or
unsignalized
intersections and
require the trail
user to change
directions.









1-4. Intersection crossings should utilize highly visible crosswalk markings and pedestrian signals to denote the presence of pedestrian and cyclists

Decorative materials and specialty lighting can also be added to further enhance visibility

### DESIGN CRITERIA

#### **INTERSECTION TRAIL CROSSINGS**

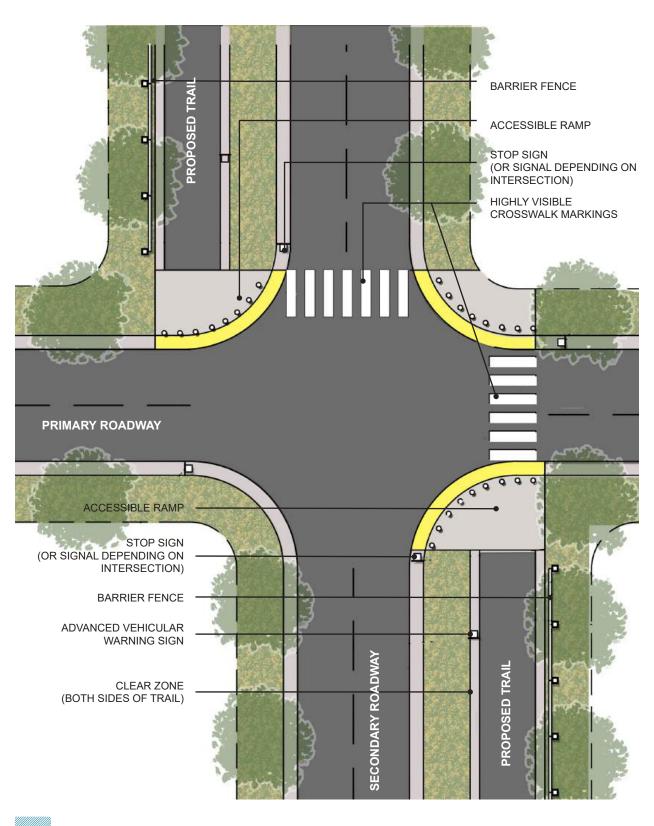
#### **DESIGN REQUIREMENTS**

- Crossings should be ADA-accessible so they can be used by all trail users.
- Immediately adjacent to the street, trail connections shall be concrete. Concrete shall extend 10' from the edge of the street pavement to the connecting trail.
- Concrete pavement shall include a 2' wide detectable warning extending the width of the trail surface.
- In areas with multiple travel lanes, pedestrian safety islands and median treatments shall be considered to offer trail users a safe place to wait for the next crossing cycle.
   Pedestrian safety islands are protected refuge areas in medians that help trail users cross multi-lane roads.
- Signal phasing and timing shall favor trail users to reduce wait times and allow enough time to safely cross the street.
- A 10' wide "roadway clear zone" shall be provided on both sides of the street. The surface of the roadway clear zone shall be crushed aggregate.

#### VISIBILITY REQUIREMENTS

- Visual obstructions, including overgrown vegetation, should be removed where possible to improve visibility.
- 24" wide thermoplastic crossing bars shall extend across the street and match the width of the trail surface.
- Pavement treatments and other more permanent traffic-calming measures, such
  as rumble strips or pavement treatments, on both the road and the trail should be
  applied to improve driver and trail user recognition of crossings.
- Trail markers shall be included on both sides of the trail before the trail crossings.
- When high-intensity activated crosswalk beacons are used, crossings should also include Audible Pedestrian Signals to provide audible and vibrotactile information to help blind, visually impaired, and deaf-blind pedestrians cross the street.





TYPICAL INTERSECTION CROSSING PLAN

69





# US 30 CORRIDOR

#### TRAIL CROSSING SCENARIOS

ProPEL is an Indiana Department of Transportation (INDOT) initiative to streamline transportation planning using a collaborative approach to consider environmental, community, and economic goals while also providing recommendations for roadway improvements. The ProPEL 30 study area extends from Beech Road in Marshall County to the Indiana/Ohio state line in Allen County, with the exclusion of portions of I-69 and I-469 around the north side of Fort Wayne.

In November 2024, INDOT shared an update on the process which included potential concepts for the US 30 corridor. The Level 3 Screening Report, included potential traffic changes along the corridor. The report was released with the intention of collecting public input and feedback on proposed alternatives prior to identifying preliminary recommendations.

The screening report divides the entire study area into planning segments in which traffic characteristics and community context are similar and where improvements at one intersection could influence the recommendations at surrounding intersections. Kosciusko County was broken down into four key corridors that primarily impact Etna Green, Warsaw and Pierceton in addition to the rural areas between communities.

Previous iterations of the screening process identified improvement packages that explored a range of potential options that would improve safety and mobility but also tracked environmental impacts and projected implementation costs. Within the Phase 3 Screening Report, each preliminary package was rated to determine if it should be eliminated from future considerations, carried forward for additional consideration, or preliminary recommended as the preferred alternative. With final design decisions still being identified, firm design guidelines for crossings at US 30 cannot be generated. To assist in the continued advocacy surrounding bicycle and pedestrian safety and access within the county, the design guidelines development process did seek to include high level recommendations to show how multi-modal connections can be incorporated into the INDOT recommendations. These design recommendations should be used by the Parks Board to continue advancing conversations with INDOT as they make determinations on intersection improvements and configurations. While INDOT may not include multi-modal facilities in the construction plans moving forward, it is the intention that the US 30 improvements would not preclude multi-mobility projects from occurring in the future.

#### **ETNA GREEN**

The current master plan does not include a crossing at US 30 within this location, primarily due to the existing conditions, and the proposed reuse of the Old US 30 right of way which provides access to Etna Green from the south. A future crossing would be beneficial for residents, including the local Amish population traveling from the north and would most likely occur at the SR 19 and US 30 intersection due to the direct route it provides heading north.

The following are provided considerations in the Phase 3 Screening Report, and the benefits they could pose to county-wide connectivity.

Package 1 and 2- Non-motorized crossing Packages 1 and 2 accommodate a non-motorized path as a component of the recommendations.

#### Package 3- US 30 Overpass at SR 19

Package 3 does not include dedicated multimodal facilities but could easily accommodate a trail corridor parallel to SR 19 that would pass under US 30 and minimize conflicts with vehicles. Additional right of way along SR 19 would be needed.

#### Package 4- Interchange

Package 4 does not include dedicated multimodal facilities but could also accommodate a trail corridor parallel to SR 19. Crossings and pedestrian signals would be needed at the ramp locations, along with additional right of way along SR 19.

For this segment of the US 30 effort, the nonmotorized pathway shown in Package 1 and 2 should be a priority to ensure that future trail implementation is easily accommodated across INDOT's right of way.



PACKAGE 1 AND 2 SCENARIO



**PACKAGE 3 SCENARIO** 



**PACKAGE 4 SCENARIO** 





**PACKAGE 1 AND 3 SCENARIO** 



**PACKAGE 2 SCENARIO** 

#### **HOFFMAN LAKE**

The current greenways and blueways master plan recommends a US 30 crossing at CR 800 W. This crossing would provide connectivity to the proposed trail segment along Old Us 30 and would extend northward, giving access to Hoffman Lake, the surrounding campgrounds and properties to the north.

The following are provided considerations in the Phase 3 Screening Report, and the benefits they could pose to county-wide connectivity.

#### Package 1 and 3- Reduced Conflict Intersection

Packages 1 and 3 do not include dedicated multimodal facilities but could accommodate a trail corridor and pedestrian crossing within the limits of the intersection. A shared use path would be located along CR 800 W to provide connectivity both north and south. The trail would cross half of the US 30 corridor at a time and would utilize a pedestrian refuge in the center median. In this configuration, multiple pedestrian crossing points would be needed as well as additional right of way for the facilities that parallel CR 800 W.

#### Package 2- Directional Intersection

Package 2 does not include dedicated multi-modal facilities but could accommodate a trail corridor and pedestrian crossing within the limits of the intersection. A shared use path would be located along CR 800 W to provide connectivity both north and south. The trail would cross half of the US 30 corridor at a time and would utilize a pedestrian refuge in the center median. In this configuration, multiple pedestrian crossing points would be needed as well as additional right of way for the facilities that parallel CR 800 W.

#### Package 4- Interchange

Package 4 could accommodate a multimodal facility if additional right of way, and pavement were added to the approach connecting CR 800 W to Old US 30. The bridge spanning US 30 would need to be widened to accommodate the pathway and appropriate safety amenities. Additional crossings and pedestrian signals would also be required at the ramp crossings.

For this segment of the US 30 effort, the interchange configuration shown in Package 4 should be a priority if INDOT is willing to provide additional right of way width and width in the bridge deck to ensure that future trail implementation is easily accommodated across INDOT's right of way. Future trailheads and local connections are shown in the diagrams for reference and future use.



**PACKAGE 4 SCENARIO** 







**PACKAGE 2 SCENARIO** 



**PACKAGE 3 AND 4 SCENARIO** 

#### **WARSAW WEST**

The current greenways and blueways master plan recommends a US 30 crossing at CR 350 W. This crossing would provide connectivity to the proposed greenway/ bluewyay trailhead at the Chinworth Bridge and the trail segment along Old US 30 which is south of the crossing at US 30.

The following are provided considerations in the Phase 3 Screening Report, and the benefits they could pose to county-wide connectivity.

#### Package 2- Right in Right Out Intersection

Package 2 does not include any dedicated multimodal facilities, but could accommodate a trail corridor and mid-bock crossing within the limits of the intersection. The trail corridor would parallel CR 350 and would utilize pedestrian crossings and traffic beacons to provide a safe crossing. Crossings and pedestrian signals would be needed, along with additional right of way along CR 350 W.

#### Package 3 and 4- Crossroad Closure

Packages 3 and 4 do not include any dedicated multimodal facilities, but the design could accommodate a trail corridor and mid-bock crossing within the limits of the intersection. The trail corridor would parallel CR 350 and would utilize pedestrian crossings and traffic beacons to provide a safe crossing. Crossings and pedestrian signals would be needed, along with additional right of way along CR 350 W.

For this segment of the US 30 effort, either proposal package will accommodate multi-modal users. Design efforts should be made to ensure that INDOT accommodates appropriate right of way where pedestrian landing zones would be following a crossing of US 30.

#### **WARSAW**

The current greenways and blueways master plan does recommend a US 30 crossing at Anchorage Road within Warsaw city limits. Through this connection, county facilities would be tied into Warsaw and Winona Lake corridors and allow users to travel eastward to Pierceton.

The following are provided considerations for Anchorage Road in the Phase 3 Screening Report, and the benefits they could pose to county-wide connectivity.

### Package 1- Restricted Crossing U Turn Intersection

Package 1 does not include dedicated multimodal facilities but could accommodate a trail corridor along Anchorage Road and through the US 30 intersection. The trail corridor would parallel Anchorage Road and connect to existing facilities on the southwest side of the US 30 corridor. Pedestrian crossings, with signage and lighting beacons, would be placed in multiple locations to note crossing activity at ramps and through lanes.

#### Package 3, 4 and 6- Overpass

Packages 3, 4 and 6 do not include dedicated multi-modal facilities but could accommodate a trail corridor parallel to the proposed US 30 overpass. This connection would pass over US 30 and minimize conflicts with vehicles. The bridge spanning US 30 would need to be widened to accommodate the pathway and appropriate safety amenities.

For this segment of the US 30 effort, the interchange configuration shown in Packages 3, 4 and 6 should be a priority if INDOT is willing to provide additional width along the bridge deck and overall right of way to ensure that future trail implementation is easily accommodated across INDOT's right of way.



**PACKAGE 1 SCENARIO** 



PACKAGE 3 AND 4 SCENARIO







#### **PIERCETON**

The current greenways and blueways master plan recommends a US 30 crossing on the east side of Pierceton at CR 250 S. This crossing, and associated trail route, is a secondary option to connect Winona Lake to Pierceton.

The following are provided considerations for CR 250 S in the Phase 3 Screening Report, and the benefits they could pose to county-wide connectivity.

#### **Package 1- Current Configuration**

Package 1 does not include any dedicated multimodal facilities, but the design could accommodate a trail corridor and mid-bock crossing within the limits of the intersection. The trail corridor would parallel CR 250 S and would utilize pedestrian crossings and traffic beacons to provide a safe crossing. Crossings and pedestrian signals would be needed, along with additional right of way along CR 250 S.

#### Package 2, 3, 4 and 5 - Right in Right Out

Packages 2, 3, 4 and 5 do not include any dedicated multi-modal facilities, but the design could accommodate a trail corridor and mid-bock crossing within the limits of the intersection. The trail corridor would parallel CR 250 S and require similar treatments to those outlined in Package 1.

For this segment of the US 30 effort each configuration offers the same benefits. If packages 2, 3, 4 or 5 are preferred by INDOT, local advocates push for the design to include wider right of way along CR 250 S to accommodate trail facilities and pedestrian refuge areas.

PACKAGE 2- 5 SCENARIO





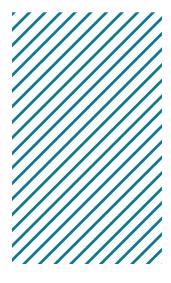


# SIGNAGE

#### REGULATORY AND INTERPRETIVE SIGNS

Wayfinding signage helps orient people to new spaces, assists in helping them find their destinations without getting lost, and encouraged the discovery of information. A well-designed wayfinding signage system follows four key principles to help people find their way using a consistent user experience: visibility, clarity of information, predictability, and identification of trail destinations.

- Visibility- Wayfinding signage should present information simply, with legible fonts and designs that can be understood quickly and from afar for people moving. Signage should be placed in areas unobstructed by vegetation or other obstacles for optimal viewing.
- 2. Clarity of Information- Narrative should be kept clear and concise; excess information may overburden trail users and discourage use. Special consideration should be given to those facing educational and/or language barriers that may prevent them from understanding sign content.
- 3. Predictability- Wayfinding signage should be predictable in both design and placement to establish visual cues that are quickly identifiable by trail users. Consistency in sign materials, dimensions, colors, forms, fonts, and symbology contribute to a continuity of experience that raises the level of comfort for pedestrians and bicyclists.
- **4. Identification of Trail Destinations** Effective wayfinding signage connects people to places by providing navigational assistance to, from, and between trail destinations on a local and regional level. Signs should be placed at major decision points, including intersections, to indicate the direction of each option and help users make informed decisions.



# SIGNAGE FAMILY SIGN TYPES AND DEFINITIONS

A family of wayfinding signage has been developed for use throughout the Kosciusko County Greenways and Blueways system. This family of signs is designed in a consistent manner that reinforces the identity of the route and contributes to the character of the trail. These signs include Mile Marker Signs, Directional Signs, Trailhead Signs, Interpretive Signs, and Trail ID Signs.

#### MILE MARKER SIGNS

Mile Marker signs are numbered markers placed at regular intervals along the trail to help users understand the distance traveled and how far they must go to reach their next destination. They state accurate locations along the trail to assist maintenance staff and emergency responders.

#### **DIRECTIONAL SIGNS**

Directional signs are located at trail junctions and turns. They are used to inform trail users about their route choices and provide directions to destinations along the trail.

#### TRAILHEAD SIGNS

Trailhead signs are located at trailheads and access points. They are used to provide orientation and relevant information to trail users, such as rules and regulations.

#### **INTERPRETIVE SIGNS**

Interpretive signs provide storytelling opportunities at significant points along the trail. They offer educational information regarding a place's history, culture, and natural features.

#### TRAIL IDENTIFICATION SIGNS

Trail identification signs are located at street crossings and other strategic points to identify the trail. They may be displayed alongside other regulatory signage elements, such as bicycle and pedestrian crossing signs and trail crossing signs.

#### **REGULATORY SIGNS**

Trail regulatory signs are spaced along the trail in appropriate locations to inform users of traffic laws and regulations. They may include signs such as stop, yield, and do not enter signs, signs prohibiting or encouraging certain behaviors, cautionary signs, and signs informing users of nontraffic regulations.







**CONCEPTUAL SIGNAGE FAMILY** 

### MILE MARKER SIGNS

Mile marker signs should be located at every quarter mile along the trail to help users determine distance traveled and judge progress to their next destination. Sign locations should be given to maintenance staff and emergency responders to assist in providing more precise geographic information for trail segments. Mile marker signs should adhere the following guidelines:

#### **MILEAGE**

Distance should be calculated for each trail segment individually in quarter miles. Distance calculations should begin at one end of the trail and run consecutively in one direction.

#### **PLACEMENT**

Signs should be placed in highly visible areas at every quarter mile parallel to the trail, with the outside edge of the sign 2' from the edge of trail pavement.

#### **SIGN PANELS**

Mile marker signs shall include the following panels:

#### **MILE MARKER PANEL**

The mile marker panel shall be a 9" X 9" aluminum sign, .080" thickness, with UV-vinyl resistant graphics.

#### TRAIL INDICATOR PANEL

The trail indicator panel shall be a 9" X 27" aluminum sign, .080" thickness, with UV-vinyl resistant graphics.

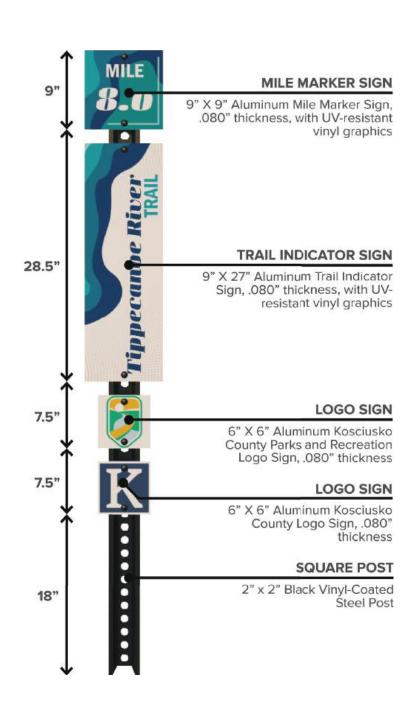
#### **LOGO PANELS**

Logo panels shall be provided for the Kosciusko County Parks and Recreation logo and the Kosciusko County logo. Panels shall be 6" X 6" aluminum signs, .080" thickness, with UV-vinyl resistant graphics.

#### **POST ATTACHMENTS**

Post shall be a 2" X 2" black vinyl-coated steel posts at height indicated.





**CONCEPTUAL MILE MARKER SIGN** 

85

### DIRECTIONAL SIGNS

Directional signs assist with wayfinding along the trail and include destinations and distances. They are located at major decision points along the trail, including junctions and turns. Directional signs should adhere to the following guidelines:

#### **PLACEMENT**

Signs should be placed at major decision points along the trail to provide information to trail users to reach their destinations. Signs shall be placed parallel to the trail, with the outside edge of the sign 2' from the edge of trail pavement.

#### **SIGN PANEL**

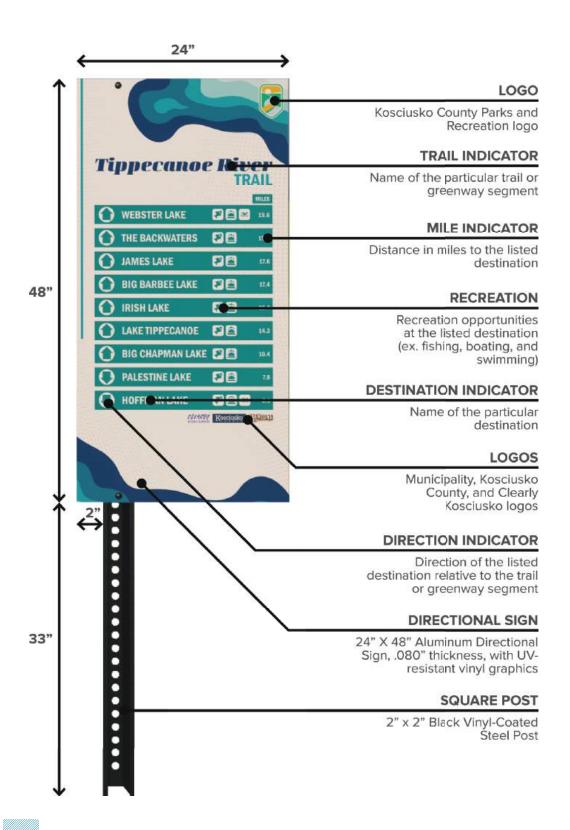
The directional sign panel shall be a 24" X 48" aluminum sign, .080" thickness, with UV-vinyl resistant graphics. The sign should include the following:

- Trail Indicator including the name of the trail or greenway segment.
- Direction Indicator showing the direction of the listed destination relative to the trail or greenway segment.
- Recreation Indicator includes the recreation opportunities at the listed destination, such as fishing, boating, and swimming.
- Logos including the Kosciusko County Parks and Recreation logo, the Kosciusko County logo, the Clearly Kosciusko Logo, and the logo of the specific municipality where the trail segment is located.

#### **POST ATTACHMENTS**

Post shall be a 2" X 2" black vinyl-coated steel posts at height indicated.





**CONCEPTUAL DIRECTIONAL SIGN** 

### TRAILHEAD SIGNS

Trailhead signs provide the first impression of the designated trail or greenway segment in the Kosciusko County Greenways and Blueways system. They are located at trailheads and access points and offer a central location for trail users entering the system to obtain critical information regarding the trail, including maps and trail rules and regulations. Trailhead signs should adhere to the following guidelines:

#### **PLACEMENT**

Signs should be placed at trailheads and access points to welcome users to the trail and provide important information for their trail experience. Placement may vary according to the specific location of the trailhead or access point.

#### **SIGN PANEL**

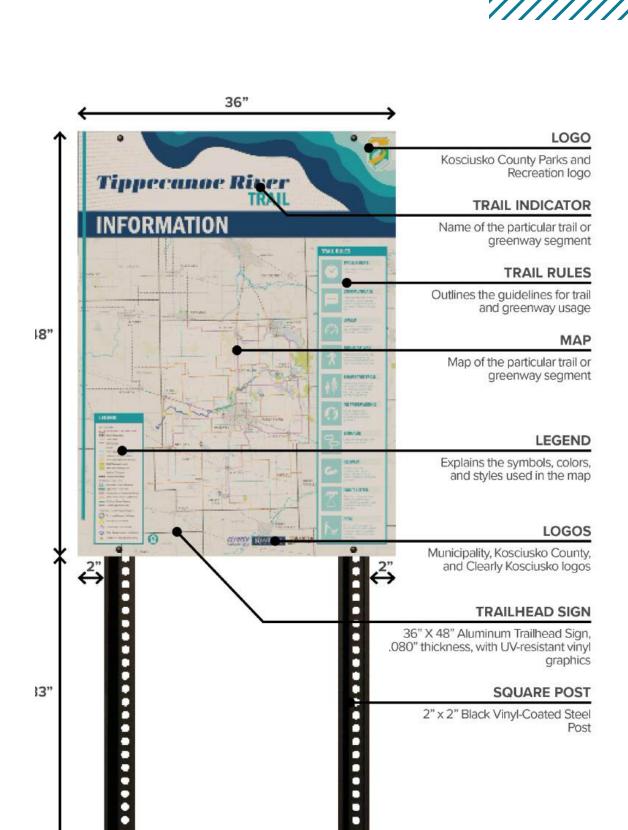
The trailhead sign panel shall be a 36" X 48" aluminum sign, .080" thickness, with UV-vinyl resistant graphics. The sign should include the following:

- Trail Indicator including the name of the trail or greenway segment.
- · Map including an overview of the trail or greenway segment.
- Legend explaining the symbols, colors, and styles used on the map.
- Trail Rules outlining the guidelines for trail and greenway usage.
- Logos including the Kosciusko County Parks and Recreation logo, the Kosciusko County logo, the Clearly Kosciusko Logo, and the logo of the specific municipality where the trail segment is located.

#### **POST ATTACHMENTS**

Posts shall be 2" X 2" black vinyl-coated steel posts at heights indicated.





**CONCEPTUAL TRAILHEAD SIGN** 

### INTERPRETIVE SIGNS

Interpretive signs shall be used at strategic points along trails and greenways to highlight the historical, cultural, and natural features of the trail. They should adhere to the following guidelines:

#### **PLACEMENT**

While interpretive signs are general in nature, if they refer to a specific feature or location along the trail, they should be located within sight of that feature. Signs shall be placed parallel to the trail, with the outside edge of the sign 2' from the edge of trail pavement.

#### **SIGN PANEL**

The interpretive sign panel shall be a 36" X 48" aluminum sign, .080" thickness, with UV-vinyl resistant graphics. The sign should include the following:

- Trail Indicator including the name of the trail or greenway segment.
- Topic of discussion, such as blueways or native species.
- Overview including a brief narrative of the topic of discussion.
- Story text includes a lengthier narrative of the topic of discussion.
- · Compelling Image to help tell the story.
- Logos including the Kosciusko County Parks and Recreation logo, the Kosciusko County logo, the Clearly Kosciusko Logo, and the logo of the specific municipality where the trail segment is located.

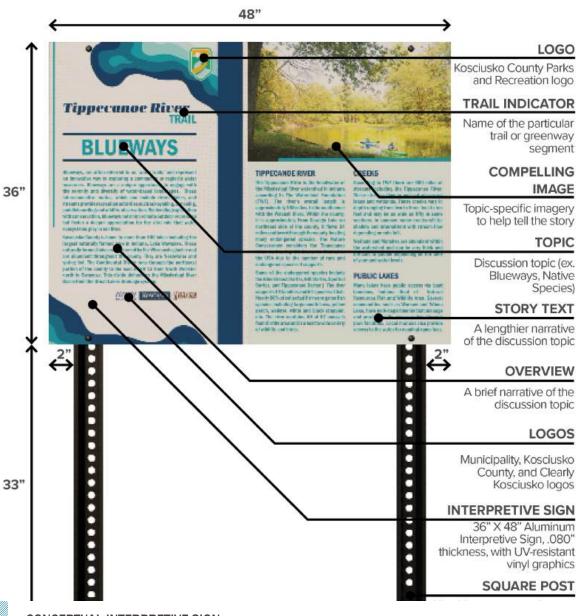
#### **POST ATTACHMENTS**

Posts shall be 2" X 2" black vinyl-coated steel posts at heights indicated.









**CONCEPTUAL INTERPRETIVE SIGN** 

### TRAIL IDENTIFICATION SIGNS

Trail identification signs are used to identify a particular trail or greenway segment to non-trail users at street crossings and other strategic points. They may share a post with regulatory signage elements, such as bicycle and pedestrian crossing signs and trail crossing signs. Trail identification signs should adhere to the following guidelines:

#### **PLACEMENT**

Signs should be placed where the trail or greenway segment crosses the street or where it intersects with another mode of transportation. Signs shall be placed parallel to the intersecting path or roadway, so it is clearly visible to non-trail users, with the outside edge of the sign 2' from the edge of pavement.

#### **SIGN PANELS**

Trail identification signs shall include the following panels:

#### TRAIL INDICATOR PANEL

The trail indicator panel shall be a 27" diameter aluminum sign, .080" thickness, with UV-vinyl resistant graphics.

#### **W11-15 PANEL**

The W11-15 Panel (MUTCD Bicycle and Pedestrian Crossing Sign) shall be a 30" X 30" aluminum sign, .080" thickness, UV-vinyl resistant graphics.

#### **W11-15P PANEL**

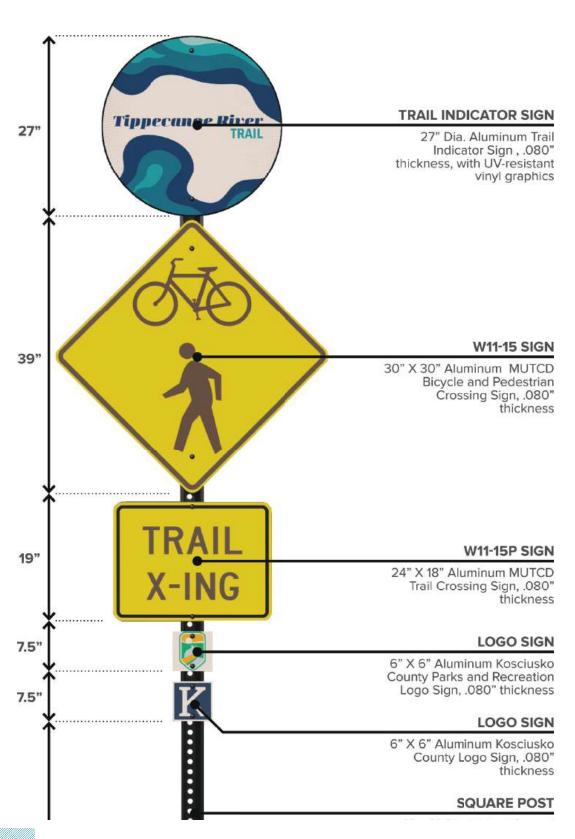
The W11-15P Panel (MUTCD Trail Crossing Sign) shall be a 24" X 18" aluminum sign, .080" thickness, UV-vinyl resistant graphics.

#### **LOGO PANELS**

Logo panels shall be provided for the Kosciusko County Parks and Recreation logo and the Kosciusko County logo. Panels shall be 6" X 6" aluminum signs, .080" thickness, with UV-vinyl resistant graphics.

#### **POST ATTACHMENTS**

Post shall be a 2" X 2" black vinyl-coated steel posts at height indicated.



**CONCEPTUAL TRAIL IDENTIFICATION SIGN** 

### REGULATORY SIGNS

Regulatory signs inform users of traffic laws and regulations and may include signs such as stop, yield, and do not enter signs, signs prohibiting or encouraging certain behaviors, cautionary signs, and signs informing users of nontraffic regulations. They are required to comply with the standards set forth in the Manual of Uniform Traffic Devices (MUTCD). Regulatory signs should adhere to the following guidelines:

#### **PLACEMENT**

Signs shall be placed parallel to the trail, with the outside edge of the sign 2' from the edge of trail pavement.

#### **SIGN PANELS**

Sign panels shall comply with the MUTCD required sizes, heights and placement. Signs shall be mounted at a height of 48" above the trail surface. Typical regulatory signs may include the following panels:

#### **R1-1 PANEL**

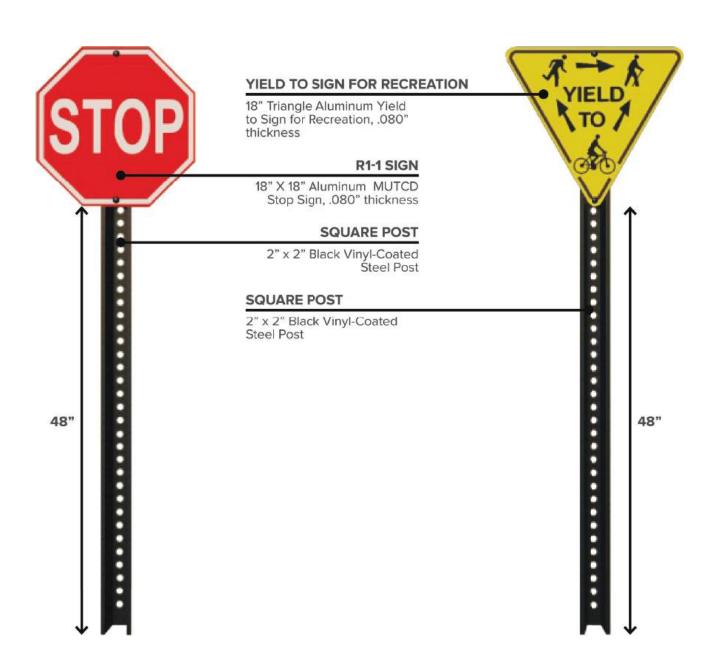
The R1-1 panel (MUTCD Stop Sign) shall be an 18" X 18" aluminum sign, .080" thickness, with UV-vinyl resistant graphics.

#### YIELD TO SIGN FOR RECREATION

The yield to sign for recreation shall be an 18" triangle aluminum sign, .080" thickness, with UV-vinyl resistant graphics.



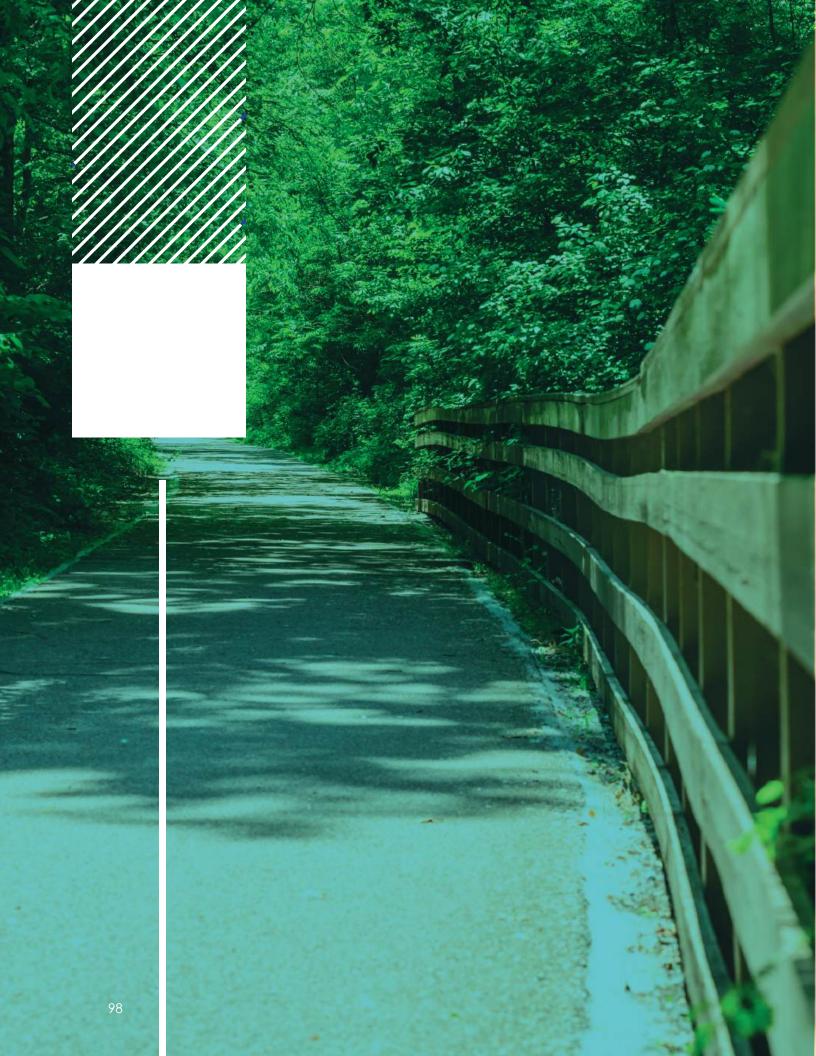




STANDARD REGULATORY SIGNAGE





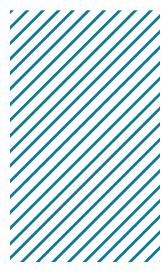


# **MATERIALS**

#### TREATMENTS AND AMENITIES

Materials and amenities are character defining moments in the Kosciusko County Greenways and Blueways system. They enhance the experience of individuals traveling the system by foot, bike, or kayak by facilitating opportunities for safety, rest, and engagement. Materials and amenities include the following:

- Vehicle Parking
- Loading Areas
- · Trailer Parking
- Water Access
- · Overlooks and Observation Decks
- Walkways and Landing Areas
- User Amenities
- · Restroom Facilities
- · Open Spaces
- Public Art
- Shelters
- Bike and Paddle Shares (Rentals)



### VEHICULAR PARKING

An asphalt parking lot should be provided at all Greenway-Blueway trailheads and select Blueway Access Points. While the size of the parking lot will largely depend on the amount of land available and the number of anticipated users, 8-12 parking spaces should be provided where possible, including no less than 2 accessible parking spaces. Parking spaces for passenger vehicles should be 10-12 feet in width, and 18-22 feet in length to allow sufficient space for visitors with canoes/kayaks loaded on top of their vehicles to unload without damaging adjacent vehicles.

#### **LOADING AREAS**

A short distance should be provided from the parking lot to the launch to allow users to park their cars, unload their canoes/kayaks, and transport everything to the launch. Where longer distances are unavoidable, a designated drop-off area that will accommodate passenger vehicles, shuttles, and canoe/kayak trailers should be provided to allow users to unload and then relocate their vehicles to the parking area.

#### TRAILER PARKING

Ease of parking is essential to water access. Where possible, designated trailer parking should be provided at Greenway-Blueway trailheads and Blueway Access Points. Trailer parking spaces allow visitors with their craft loaded on a trailer to park and transport their gear. Parking spaces for vehicles with trailers should be 10-12 feet in width, and 40-50 feet in length.















## WATER ACCESS

Canoe/kayak launches should be constructed to allow paddlers of all ages and abilities to launch and land safely without capsizing or damaging their boats. Launch pads should be firm enough to support movement, wide enough for multiple paddlers, and long enough to accommodate the length of the boat during put-in and take out. Types of canoe/kayak launches include implanted beaches, concrete ramps, terraced steps, and adaptive floating launches.

### **IMPLANTED BEACHES**

Length: 10'-12' Width: 8-10' Slope: 10-20%

Natural materials, such as crushed aggregate, may be used to form implanted beaches on gradually sloped banks. Implanted beaches include simple ramps that blend in with the natural landscape. Implanted beaches must be long enough to accommodate the length of the boat during put-in and take-out and wide enough to accommodate the length of a kayak paddle. Implanted beaches are suitable in areas with limited water level fluctuation.

### **CONCRETE RAMPS**

Length: 10'-12' Width: 8-10' Slope: 10-20%

Concrete ramps may be used in areas with mild to moderately high banks or side slopes to access the water. Ramps should be long enough to provide launches at low water levels and wide enough to facilitate two (2) or more simultaneous launches. Concrete must be scored for slip-resistance from the top of the bank to a water depth of 18". Concrete ramps must be cleaned regularly to prevent moss and algae growth, which can cause them to become slippery over time.

### **TERRACED STEPS**

Length: 10'-12' Width: 14'-20'

Stair: 3' Min. Width

Terraced steps may be used in areas where ramps aren't a viable option to provide access to the water. A series of wide steps can provide kayakers an easy way to get level with the kayak before entering. Step surface materials include marine-grade decking, which is designed and engineered to withstand the elements associated with aquatic environments. Common materials used in marine-grade decking include highdensity polyethylene plastics (HDPE). HDPE performs better than traditional materials, including wood, metal and concrete, as it never rots, splinters, corrodes or decays. It also repels moisture and moisture-related issues, including mold, fungi, rot, and pest infestations.

### ADAPTIVE FLOATING LAUNCH

Kayak Launch: 8' x 16' Floating Dock: 8' x 16' Gangway: 4' Wide Kayak Chute: 4' Wide

Adaptive floating launches should be used where possible to provide access to the water. Adaptive floating launches provide paddlers a safe and accessible way to get in the water. Adaptive floating launches mount to the adjacent pavement with a bulkhead mounting kit, provided standard with each launch. While they are available in a variety of configurations, based on the length of the Gangway/Chute, the preferred dimensions of the kayak launch and floating dock are 8' x 16.'















## **OVERLOOKS**

Overlooks and observation decks are smaller stops located along the route at key vistas and other significant sites. While they are intended to provide interpretive opportunities along the trail, they also serve as interim places to rest between Greenway-Blueway Trailheads and Blueway Access Points.

Amenities at overlooks and observation decks include 1-2 benches and interpretive signage.

The preferred material of overlooks is concrete. In areas where budget is a concern, stabilized crushed aggregate may be used to satisfy the needs of the overlook without compromising accessibility. In some conditions, such as wetlands and other ecologically sensitive areas, raised observation decks may be required to limit impacts to the surrounding environment. Observation decks should be constructed with resilient, durable materials that can withstand periodic flooding. Site specific structural recommendations based on soils and the presence of sensitive plants and animals will be required to minimize disturbance to the natural environment.

Observation deck surface materials include concrete planks and composite decking. Concrete planks are the preferred surface material as they are virtually maintenance free. However, implementation cost of concrete planks is higher compared to other surface materials.

Composite decking is a good alternative where concrete planks are cost prohibitive. Composite decking, such as Trex, is made from wood and non-organic material, including plastic. Because it is a combination of wood and plastic, it is less appealing to bugs, making it insect resistant. However, composite decking has a lifespan of 25-50 years and can become slippery over time.

# LANDING AREAS

Landing areas provide social gathering spaces for a moderate number of trail users away from trailheads and parking areas. They should be used at Greenway-Blueway trailheads and Blueway Access Points to provide educational, interpretive, and rest opportunities for trail users and to assure them they are traveling along the right path. The preferred material for landing areas is concrete. Pavers may be used in select circumstances to highlight areas of interest but may be cost prohibitive. In areas where budget is a concern, stabilized crushed aggregate may be used to satisfy the needs of the landing area without compromising accessibility. Where possible, amenities at landing areas shall include two (2) backed benches, one (1) litter receptacle, one (1) dog waste station, three (3) bike racks with (1) bike repair station, and interpretive signage.

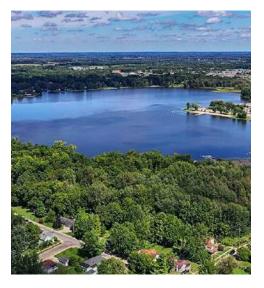
















## **USER AMENITIES**

User amenities will define and enhance the character of local communities and the Tippecanoe River corridor through a cohesive palette of materials that reflect the rich hydrology and agricultural heritage of the county.

**Hydrology** – Kosciusko County is well known for its various lakes and waterways which draw in thousands of residents and tourists each year. The natural form and flow of the Tippecanoe River will be celebrated through wood and stone components.

Agricultural Heritage – Agricultural land uses are the most prevalent land use type within th County. Crop production dominates the landscape, while livestock production (largely poultry) can be found within pockets of the county as well. Kosciusko County has a strong agricultural history, with poultry production being a major nationwide export at one time. The county's agricultural history will be celebrated through the selection of sustainable site furnishings with colors inspired by fields, crops, barns, and other agricultural elements.

A series of site furnishings, including benches, specialty benches, picnic tables, litter receptacles, bike racks, dog waste stations, bike repair stations, and habitats have been selected for their character and aesthetics to match the overall design concept.

### **Benches**

Backed and backless bench options shall be considered at trailheads, access points and nodes. Backed bench options include the following:

- **Vestre Inc.** BLOC Seat with backrest and armrests, primary material to be RAL 5021 Water Blue powder-coated steel, secondary material to be oiled oak, surface mounted.
- **Site Pieces, Inc.** Monoline 72" Bench, primary material to be midnight powder-coated steel, secondary material to be thermally modified ash, surface mounted.
- Landscape Forms, Inc. Glide 75" Bench, material to be LOLL navy blue, surface mounted.

Backless bench options include the following:

- Vestre Inc. BLOC Seat, primary material to be RAL 5021 Water Blue powder-coated steel, secondary material to be oiled oak, surface mounted.
- Anova Furnishings Canyon Recycled Plastic Gabion-Style 6' Bench, primary material to be textured teal powder-coated steel, secondary material to be Brazilian walnut-woodgrain plastic, surface mounted.
- **Site Pieces** Monoline 72" Flat Bench, primary material to be midnight powder-coated steel, secondary material to be thermally modified ash, surface mounted.
- Landscape Forms, Inc. Harvest 46" Dining Height Bench, primary material to be LOLL navy blue, surface mounted.





Product sheet

# **BLOC** seat

### 1517-940

Designed by Atle Tveit, Lars Tornøe

Bloc seat is available with or without a backrest and armrests, and can be used on its own or joined in rows and back to back.





213.8 fb / 97 kg

### **Anchoring/assembly**

Free-standing/mounted to the ground

### **Primary material**

Hot-dip galvanised and powder-coated steel

The powder coating process was developed to satisfy the tough requirements of the Norwegian offshore industry. Corrosion class



8 mm

### Color

RAL 5021 - Water blue

Powder coated with Jotun façade for standard colors. Vestre offers more than 200 standard RAL classic colors at no extra charge.



### **Secondary material**

Oiled oak (xxx-940/941)

Wood details in oiled oak from Scandinavia are recommended for indoor use. Hardness: 3.7 on the Brinell scale.



45 mm

### **Sustainability**

Indicators	Global warming	Total energy used	Recycled materials
Unit	kg CO2	MJ	%
Cradle to Gate A1-A3	220.6	3545.52	2.07

### **Certifications**





### Warranty

- · Lifetime warranty against rust
- 15 year warranty on powder coating
  15 year warranty on wood
- · Spare parts always available

Visit www.vestre.com for more information. Specifications are subject to change without notice. ©2020 Vestre Inc.

usa@vestre.com www.vestre.com

## MONOLINE BENCH

The Monoline Bench is simple, the way things should be. Its lightness, comfort, and restrained lines allow the materials to shine – a perfect match for any space.

- · thermally modified wood or aluminum slats
- all aluminum frame construction
- · powder coated finish
- · countersunk holes for surface mounting
- · available in custom sizes
- · ships fully assembled

product:	length:	width:	height:
ML-BENCH-48	48"	27"	38.5"
ML-BENCH-72	72"	27"	38.5"
ML-BENCH-96	96"	27"	38.5"





## **Glide**

#### **Product Data Sheet**

landscapeforms



The Glide bench embodies the perfect balance between restraint and innovation in design. The form of the bench—the way the seat and back seamlessly join the metal base with no visible screws—is simultaneously minimal and elegant yet unlike any other bench Landscape Forms has previously created. Glide's durable, post-consumer recycled plastic (HDPE) seat and back won't get too hot or cold and requires low-to-no maintenance. The four vibrant color options are blended into the plastic rather than surface applied, and a UV-resistant compound is added to the pigment. The metal base is finished in Pangard II® HAPS, VOC, and lead-free polyester powdercoat that resists fading and chipping. Glide is the result of a partnership between Loll Designs and Landscape Forms, two companies dedicated to enhancing outdoor experiences through design-led and sustainability-focused solutions.

#### **Bench**

- Glide is a bench constructed of extruded aluminum and high-density polyethylene (HDPE).
- Glide's support structure and legs are attached with hardware to the back and seat.
- The bench is available with or without arms.
- The bench leg glides are made of tough nylon to resist damage from dragging on rough surfaces.
- Glide is available freestanding or surface mount.
- Glide does not ship fully assembled.

### **Finishes**

- All metal components are finished with Landscape Forms' proprietary Pangard II polyester powdercoat, a hard yet flexible finish that resists rusting, chipping, peeling and fading.
- The benches seat and back material is made of Loll Designs' recycled high-density polyethylene (HDPE) sourced primarily from milk jugs. Please note that when the Glide product is placed in FULL direct sun, testing has demonstrated that the following Loll HDPE colors have exhibited NO significant change of color over time: Black, Charcoal Grey, and Navy Blue. Testing has also indicated that the following HDPE colors have shown INCREASED change of color over time: Apple Red, Sunset Orange, and Leaf Green. Please note that the changing of color of the HDPE can occur at a different rate than the changing of color of the powdercoated aluminum.
- Available in four standard colors: charcoal, apple red, leaf green, and sunset orange.
- Call for standard color chart.

### To Specify

 Specify Glide, with or without arms, freestanding or surface mount, and select powdercoat and HDPE colors. Bench does not ship fully assembled.

### Designed by Loll Designs

U.S. Patent No. Pending

Glide	Style	Depth	Width	Height	Weight
	Bench w/ out arms	27"	75"	31.25"	103 lbs
	Bench w/ arms	27"	75"	31.25"	111 lbs

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Revised May 15, 2024 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048

# **BLOC** seat

### 1506-940

Designed by Atle Tveit, Lars Tornøe

Bloc seat is available with or without a backrest and armrests, and can be used on its own or joined in rows and back to back.





### **Anchoring/assembly**

Free-standing/mounted to the ground



176.4 lb / 80 kg

### **Primary material**

Hot-dip galvanised and powder-coated steel

The powder coating process was developed to satisfy the tough requirements of the Norwegian offshore industry. Corrosion class



8 mm

### Color

RAL 5021 - Water blue

Powder coated with Jotun façade for standard colors. Vestre offers more than 200 standard RAL classic colors at no extra charge.



### **Secondary material**

Oiled oak (xxx-940/941)

Wood details in oiled oak from Scandinavia are recommended for indoor use. Hardness: 3.7 on the Brinell scale.



45 mm

### **Sustainability**

Indicators	Global warming	Total energy used	Recycled materials
Unit	kg CO2	MJ	%
Cradle to Gate A1-A3	145.27	2303.63	2.11

### **Certifications**





### Warranty

- · Lifetime warranty against rust
- 15 year warranty on powder coating
  15 year warranty on wood
- · Spare parts always available

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### CAN1872R - Canyon Recycled Plastic Gabion-Style 6' Bench

6' gabion-style bench with recycled plastic seat planks.

### Material

The 6' gabion-style bench is composed of 0.75" x 5.2" recycled plastic seat planks. The bench cage is constructed from a frame that is 14-gauge, alloy 5052 aluminum and type 304 stainless steel mesh panels with a .1250" wire diameter. The frame features 2" slots that accept 3/8" anchors for surface mounting to prevent movement. The bench is designed to support 200 lbs. per linear foot.

The planks are 95% recycled content by weight and are impervious to moisture and corrosion, do not require the application of sealants or preservatives, and will never need painting or staining throughout the product's life.

### Finish

Rust-proof aluminum and rust-resistant primed steel components feature a fade-resistant powder coating. Treated components exceed the industry standard by 34% in testing by independent sources.

#### Color

See website or sales representative for color choices.

### Assembly

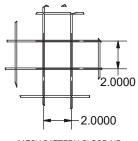
The bench requires some assembly; stainless steel assembly hardware is included. The seating surface ships pre-assembled.

#### Maintenance

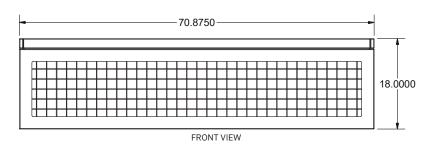
The product is virtually maintenance-free and requires periodic cleaning with a sponge and a solution of mild detergent and water to remove surface dirt. Do not clean with solvent or petroleum base products.

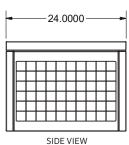
#### Warranty

20-year limited structural warranty with 7-year finish warranty against fading on cage frame and mesh panels from date of purchase. See full details on multi-year warranties for components at <a href="https://www.anovafurnishings.com/warranty.aspx">www.anovafurnishings.com/warranty.aspx</a>.



MESH PATTERN CLOSE-UP





7/30/2021

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 $\label{eq:manufactured} \mbox{Manufactured in the U.S.}$ 

### MONOLINE FLAT BENCH

The Monoline Flat Bench is a pared down version of our backed bench. With a generously dimensioned wood top and optional armrests it can certainly stand on its own but it also pairs perfectly with our Community Table and Backed Bench.

- · thermally modified wood or aluminum slats
- all aluminum frame construction
- · powder coated finish
- · countersunk holes for surface mounting
- · low friction glides for freestanding option
- available in custom sizes
- · armrests optional
- · ships fully assembled

product:	length:	width:	height:	
ML-FLAT-48	48"	24"	18"	
ML-FLAT-72	72"	24"	18"	
ML-FLAT-96	96"	24"	18"	





## **Harvest**

#### **Product Data Sheet**

landscapeforms



Including rectangular tables in standing and dining heights, round tables in standing and dining heights, a round casual height table, and a round side table, the Harvest line welcomes the full range of postures and use cases. For the rectangular tables, an optional LED light spanning the center sets the mood with warm, gentle illumination. For the round casual height table, an optional fire pit insert creates a signature outdoor experience. Benches and stools in standing and dining height round out the Harvest line. Harvest's durable, post-consumer recycled HDPE plastic surface requires low-to-no maintenance. The line's vibrant colors are blended into the plastic, not surface applied, and a UV-resistant compound is added to the pigment to ensure longevity. The metal structure and legs are finished in Pangard II® HAPS, VOC, and lead-free polyester powdercoat that resists fading and chipping.

### **Harvest Table**

- Harvest table options include a round side table, round casual height table, round casual height table with fire pit insert, round dining and standing height table, and rectangular dining and standing height table.
- Harvest rectangular tables are constructed of extruded aluminum legs bolted to steel table top supports, with a high-density polyethylene (HDPE) table top.
- Harvest round casual, round dining, and round standing height tables are constructed of extruded aluminum legs bolted to aluminum table top supports, with a high-density polyethylene (HDPE) table top.
- The rectangular dining height table is ADA compliant.
- Table leg glides are made of tough nylon to resist damage from dragging on rough surfaces.
- Harvest tables are available freestanding or surface mounted (must be surface mounted when used with an umbrella).
- Round dining height table will have six bag hangers, and the round standing height table will have three bag hangers for stowing bags and purses.
- Optional umbrella hole available on the rectangular dining height table, rectangular standing height table, round casual height table, round dining height table, and round standing height table.

### **Harvest Bench**

- Harvest benches are constructed of extruded aluminum legs bolted to steel bench top supports and high-density polyethylene (HDPE).
- Dining benches are available in 46" and 94" length.
- Benches are available in dining or standing height.
- Bag hangers for stowing bags and purses on the standing height bench.
- Bench leg glides are made of tough nylon to resist damage from dragging on rough surfaces.
- Harvest dining and standing height benches are available freestanding or surface mounted.

Rectangular Table	Style	Depth	Width	Height	Weight
	Dining Height	47.5"	94.75"	30.25"	260 lbs
A	Standing Height	36.75"	94.75"	40"	230 lbs

Round Table	Style	Diameter	Height	Weight
	Side Table	40"	15"	49 lbs
	Casual Height	62"	21.5"	147 lbs
	Dining Height	62"	30"	153 lbs
	Standing Height	47.25"	40"	104 lbs

Bench	Style	Depth	Width	Height	Weight
A	46" Dining Height	15.75"	46"	18.75"	52 lbs
A	94" Dining Height	15.75"	94"	18.75"	90 lbs
A	46" Standing Height	21"	45.5"	29"	60 lbs

Revised May 15, 2024 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048

## **Specialty Benches**

Specialty benches provide creative seating opportunities and shall be considered trailheads and access points. Specialty bench options include the following:

- **Vestre Inc.** BLOC Sun Bench, primary material to be RAL 6025 Fern Green powder-coated steel, secondary material to be oiled oak, surface mounted.
- Vestre Inc. YPSILON Seat, primary material to be RAL 6025 Fern Green powdercoated steel, secondary material to be oiled oak, surface mounted.
- Anova Furnishings Plank Adirondack Chair, primary material to be textured fern powder-coated steel, secondary material to be Brazilian walnut-woodgrain plastic, surface mounted.
- **Site Pieces** Monoline Link, primary material to be midnight powder-coated steel, secondary material to be thermally modified ash, surface mounted.
- **Site Pieces** Alpine 46er Chair, primary material to be midnight powder-coated steel, secondary material to be thermally modified ash, surface mounted.
- Landscape Forms Inc. Americana Single Lounge Chair, primary material to be LOLL Leaf Green, surface mounted.
- Landscape Forms Inc. Theory Bench, solid seats without skate stops, material to be LOLL Leaf Green, surface mounted.



Product sheet

# **BLOC** sun bench

### 1566-940

Designed by Atle Tveit, Lars Tornøe

Bloc sun bench can be used on its own or joined in rows and back to back. It is also available with a short seat.





295.4 lb / 134 kg

### **Anchoring/assembly**

Free-standing/mounted to the ground

### **Primary material**

Hot-dip galvanised and powder-coated

The powder coating process was developed to satisfy the tough requirements of the Norwegian offshore industry. Corrosion class



8 mm

### Color

RAL 6025 - Fern green

Powder coated with Jotun façade for standard colors. Vestre offers more than 200 standard RAL classic colors at no extra charge.



## **Secondary material**

Oiled oak (xxx-940/941)

Wood details in oiled oak from Scandinavia are recommended for indoor use. Hardness: 3.7 on the Brinell scale.



45 mm

### **Sustainability**

Indicators	Global warming	Total energy used	Recycled materials
Unit	kg CO2	MJ	%
Cradle to Gate A1-A3	303.01	4969.68	2

### **Certifications**





### Warranty

- · Lifetime warranty against rust
- 15 year warranty on powder coating
- 15 year warranty on woodSpare parts always available

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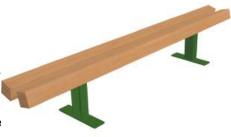


# **YPSILON Seat**

### 6206-940

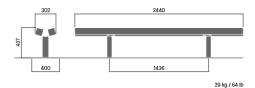
Designed by Daniel Rybakken

Ypsilon seat is easily recognizable thanks to its angled, solid glulam beams which rest on laser-cut and arched sheets of galvanized steel. The angled wooden beams offer a number of functional benefits: they provide a comfortable seating surface, while their sloping surfaces mean that water will quickly drain off the bench. They also open up the possibility of very long straight and circular models. The YPSILON is available either with or without a backrest and armrests, with a tabletop and in 200 RAL colors for the steel.



### Anchoring/assembly

Free-standing/mounted to the ground



### **Primary material**

Hot-dip galvanised and powder-coated steel

The powder coating process was developed to satisfy the tough requirements of the Norwegian offshore industry. Corrosion class C.5-M



### Color

RAL 6025 - Fern green

Powder coated with Jotun façade for standard colors. Vestre offers more than 200 standard RAL classic colors at no extra charge.



### **Secondary material**

Oiled oak (xxx-940/941)

Wood details in oiled oak from Scandinavia are recommended for indoor use. Hardness: 3.7 on the Brinell scale.



### **Sustainability**

	01-1-1	T I	D d. d
Indicators	Global warming	Total energy used	Recycled materials
Unit	kg CO2	MJ	%
Cradle to Gate A1-A3	52	990	n

### **Certifications**



### Warranty

- · Lifetime warranty against rust
- 15 year warranty on powder coating
- 15 year warranty on wood
- Spare parts always available

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### **MONOLINE LINK**

The Monoline Link is a flexible piece that can standalone, be linked together, and paired with the Monoline Flat Bench to create your own network or benches. It's as comfortable in small courtyards as it is in large-scale plazas.

- thermally modified wood or aluminum slats
- the Link has two mirrored forms that are allow the profile of the frames to match when pushed together
- all aluminum frame construction
- · powder coated finish
- · countersunk holes for surface mounting
- · low friction glides for freestanding option
- · ships fully assembled

product:	length:	width:	height:
ML-LINK	71.9"	63.3"	18"
ML-LINK-MI	71.9"	63.3"	18"

NOTE: "-MI" at the end of product number represents the mirrored option that is needed for the legs to match when pushed together





### **ALPINE 46er CHAIR**

The Alpine 46er Chair pays tribute to the forty six High Peaks that make up the Adirondacks. Inspired by the iconic chair that shares its name with the region, the 46er Chair sits low to the ground and boasts wide armrests that are paired with comfortable angles. This combination of design and style make the 46er look, and feel, just right.

- · thermally modified wood or aluminum slats
- · all aluminum frame construction
- powder coated finish
- · chairs can be surface mounted or freestanding
- · low friction glides raise chairs from surface
- · ships fully assembled

product:	length:	width:	height:
AC-46ER-CHR	31"	27.50"	33.75"







## **Americana**

#### **Product Data Sheet**





Americana is the reimagination of the classic Adirondack chair—a timeless icon of outdoor enjoyment. Offered in both single and double lounges, Americana modernizes the classic design language, and uses high-performance materials to make a bold visual statement while ensuring the chairs stand the test of time in public spaces. Americana utilizes UV-resistant post-consumer recycled plastic (HDPE) polymer for the seat and back, providing a long, vibrant and low-maintenance life. The rust-proof, commercial grade cast and extruded aluminum supports and understructure are finished with Landscape Forms' proprietary Pangard II® powdercoating to resist fading and chipping. Accessories for Americana include a hanger underneath the arm for secure bag or purse storage and an optional tablet arm, providing a wider surface for food and beverages or to serve as a functional work surface.

#### Lounge Chair

- Americana is available in both a single and double lounge chair option.
- Americana is an adirondack lounge chair constructed of cast and extruded aluminum and high density polyethylene (HDPE).
- Americana is available with accessories a tablet arm and bag hanger.
   The Single Lounge Chair has a single bag hanger, and the Double
   Lounge Chair will always have two bag hangers.
- The tablet arm (right or left) provides additional workspace or a wider surface to place food or beverages. For the Single Lounge Chair, the bag hanger is on the right side of the lounge, unless there is a tablet arm, in that case the bag hanger is attached underneath the non tablet arm. For the Double Lounge Chair, there is one bag hanger on each side regardless of tablet arm placement.
- The bag hangers are attached underneath the arm and available for stowing bags and purses.
- The chair glides are made of tough nylon to resist damage from dragging on rough surfaces.
- $\bullet$  Americana is available freestanding or surface mount.

Americana	Style	Depth	Width	Height	Weight
	Single Lounge Chair	37.5"	33.5"	39.25"	70 lbs
	Double Lounge Chair	37.5"	56"	39.25"	108 lbs

Accessories	Style	Depth	Width	Height	Weight
	Single Lounge Chair – tablet arm, right	37.5"	37"	39.25"	72 lbs
	Single Lounge Chair - tablet arm, left	37.5"	37"	39.25"	72 lbs
	Double Lounge Chair – tablet arm, right	37.5"	59.5"	39.25"	111 lbs
	Double Lounge Chair - tablet arm, left	37.5"	59.5"	39.25"	111 lbs
	Double Lounge Chair - both tablet arms	37.5"	63"	39.25"	114 lbs

# **Theory**

### **Product Data Sheet**



Designed in collaboration with Scott Klinker, Theory elevates the transit experience by combining traditional streetscape elements with an openended, abstract design to encourage personal interpretation, humanize the traveler's experience, and create inspired journeys.

Theory's elements are aesthetically compatible yet each uniquely expressive in functional and visual impact. The Theory shelter is refined, visually light and clear in its purpose. Working together with the shelter, the Theory thick beams and thin benches provide different places for people—a contrast of furnishings that express clearly-defined purpose with artful, abstract elements. The Theory cube accompanies stacked configurations to offer another surface or serve as a solo seat.

### **Overall Features**

### **Shelter**

- $\bullet$  Theory Shelter is available in one size, 103 % " (h) x 31 ½" (w), with the ability to connect up to four shelters together.
- Shelter is configured with glass roof and back walls.
- Glass roof and panels are always tempered safety glass.
- Tempered safety glass is heat treated so that it is four times stronger than regular glass and it does not leave sharp edges if broken.

#### Lighting Elements\*

- Lighting elements include:
- Rafter Lights: 3 (8-Foot) or 4 (12-Foot).
- Wayfinding foot lights.
- The lighting temperature of all lit elements is 3500k.
- The output power will be set to comply with RP8 guidelines for roadway lighting with heavy traffic.

### Glass Back Wall Panels

 Tempered safety glass is heat treated so that it is four times stronger than regular glass and it does not leave sharp edges if broken.

### Thick Bench

- Solid or perforated seats.
- With or without skate stops.
- Can be stacked in configurations up to two high.

### Thin Bench

- Solid or perforated seats.
- With or without skate stops.
- Narrow or wide armrests.
- Available with table options.

	Shelters -	Back Walls: Glass.	Roof: Glass or Meta	l.
Shelters				
	Shelter, one post	Shelter, two post	Shelter, three post	Shelter, four post
h x w x d (height x width x depth)	103 ¾" (h) x 31 ½" (w) x 64 ½" (d)	103 ¾" (h) x 63 ¾" (w) x 64 ½" (d)	103 ¾" (h) x 96 ¼" (w) x 64 ½" (d)	103 ¾" (h) x 128 ½" (w) x 64 ½" (d)
Weight	310 lbs.	644 lbs.	978 lbs.	1,310 lbs.
		Thick Bench with A	ccessories	
Thick Bench				
	Thick bench w/ perf seat	Thick bench w/ solid seat	Thick bench w/perf seat & 2 skate stops	Thick bench w/solid seat & 2 skate stops
h x w x d (height x width x depth)	17 ½" (h) x 96" (w) x 16" (d)	17 ½" (h) x 96" (w) x 16" (d)	17 ½" (h) x 96" (w) x 16 ½" (d)	17 ½" (h) x 96" (w) x 16 ½" (d)
Weight	129 lbs.	130 lbs.	143 lbs.	144 lbs.
		Thin Bench with Ac	cessories	
Thin Bench				
	Thin bench w/perf seat	Thin bench w/solid seat	Thin bench w/perf seat & 2 skate stops	Thin bench w/solid seat & 2 skate stops
h x w x d (height x width x depth)	17 ¼" (h) x 96" (w) x 16" (d)	17 ¼" (h) x 96" (w) x 16" (d)	17 ½" (h) x 96" (w) x 16" (d)	17 ½" (h) x 96" (w) x 16" (d)
Weight	146 lbs.	147 lbs.	156 lbs.	157 lbs.

Revised February 24, 2023 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048



### **Picnic Benches**

Picnic benches shall be considered at trailheads and access points. Picnic bench options include the following:

- **Vestre Inc.** BUZZ picnic table, primary material to be RAL 6021 Pale Green powder-coated steel, secondary material to be oiled oak, surface mounted.
- Anova Furnishings Beacon Hill recycled plastic ADA table, 3 flat seats, primary color to be textured fern powder-coated steel, secondary material to be Brazilian walnut-woodgrain plastic, surface mounted.
- **Site Pieces** Monoline Carousel Table (Round), primary material to be midnight powder-coated steel, secondary material to be thermally modified ash, surface mounted.
- Landscape Forms Inc. Harvest rectangular table, standing height, primary material to be LOLL Leaf Green, surface mounted.
- Landscape Forms Inc. Harvest 46" Dining Height Bench, primary material to be LOLL navy blue, surface mounted.



### PLK60R - Plank Adirondack Chair, Recycled Plastic

Adirondack chair with recycled plastic planks, polyethylene frame and armrests

#### Material

The Plank chair is composed of 4.81" x .75" recycled plastic planks and a .75" thick CNC-cut polyethylene frame, legs and armrests. Designed for relaxation, the chair features a 20" wide seat. Optional hold down kit is available.

The planks are made of 95% recycled content by weight and are impervious to moisture and corrosion.

#### Finish

Recycled Plastic planks do not require the application of sealants or preservatives, and will never need painting or staining throughout the product's life.

Polyethylene components feature a uniform color throughout and a scratch-resistant surface with UV

Polyethylene components reature a uniform color throughout and a scratch-resistant surface with UV inhibitors to protect against fading.

#### Color

See website or sales representative for color choices.

### Assembly

The chair requires some assembly. The backrest, seat and sides ship pre-assembled. Stainless steel assembly hardware is included.

#### Maintenance

The product is virtually maintenance-free and requires only periodic cleaning with a sponge and a solution of mild detergent and water to remove surface dirt. Do not clean with solvent or petroleum base products.

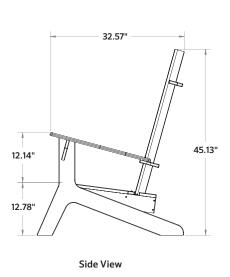
### Warranty

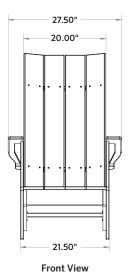
20-year limited structural warranty on recycled plastic and 5-year limited structural warranty on polyethylene from date of purchase. See full details on multi-year warranties for components at <a href="https://www.anovafurnishings.com/warranty.aspx">www.anovafurnishings.com/warranty.aspx</a>.



Accessories: Hold Down Kit

A1031







Rear View

7/26/2023

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Product sheet

# **BUZZ** picnic table

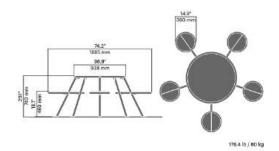
### 3317-940

Designed by

Tore Borgersen, Michael Olofsson, Espen Voll

Buzz picnic table is a versatile meeting place for up to five people. The high-pressure laminate used for the table top makes it possible to incorporate graphic designs, such as a chessboard, map or local information. The BUZZ picnic table is also available in a version that is suitable for wheelchair users.





### **Anchoring/assembly**

Free-standing/mounted to the ground

### **Primary material**

Hot-dip galvanised and powder-coated steel

The powder coating process was developed to satisfy the tough requirements of the Norwegian offshore industry. Corrosion class



5 mm

### Color

RAL 6021 - Pale green

Powder coated with Jotun façade for standard colors. Vestre offers more than 200 standard RAL classic colors at no extra charge.



### **Secondary material**

Oiled oak (xxx-940/941)

Wood details in oiled oak from Scandinavia are recommended for indoor use. Hardness: 3.7 on the Brinell scale.



28 mm

### **Sustainability**

Indicators	Global warming	Total energy used	Recycled materials
Unit	kg CO2	MJ	%
Cradle to Gate A1-A3	244.13	3489.04	2.55

### **Certifications**





### Warranty

- Lifetime warranty against rust
- 15 year warranty on powder coating
- 15 year warranty on wood
- Spare parts always available

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(800) 231-1327 specify@anovafurnishings.com anovafurnishings.com

### **BH1831T**

Beacon Hill Thermory® ADA Table with 3 Flat Seats



#### Accessories

9' Dia. Umbrella Standard Fabric Colors 9LPU-CSC Premium Fabric Colors 9LPU-CPC

Umbrella Brace UBRACE

#### Material

The 41.52" square table top is composed of a 10-gauge steel frame with Thermory hardwood planks. The flat seats are composed of Thermory planks along with aluminum accent planks and steel plates.

1"  $\times$  3.5" (1"  $\times$  4" nominal dimensions) and 1"  $\times$  2" Thermory planks are made from thermally-modified North American White Ash--a sustainably-harvested and renewable temperate hardwood.

The frame and legs are made of 2.38" O.D. steel tubing with built-in umbrella holder. Table top is designed to support 100 lbs. per square foot; the seats will support 200 lbs. per linear foot.

#### Features

Table meets federal ADA requirements. The table top features an optional 1.64" diameter umbrella hole in the center.

Thermory is a low-maintenance, environmentally-friendly hardwood and a great alternative to commonly used tropical rainforest hardwoods because of its dimensional stability and Class 1 durability (25+ years). Thermory has a lower carbon footprint than tropical hardwoods.

The table legs feature feet with pre-drilled .41" diameter holes for surface mounting to prevent movement. Table must be surface mounted for stability and to comply with warranty and federal regulations. Surface mounting is required; mounting hardware is not included.

#### Finisl

Thermory is a lustrous chocolate brown color when new and will naturally age to uniform silver/gray over time. The color-changing process begins immediately and varies with the amount of UV-exposure.

Rust-proof aluminum and rust-resistant primed steel components feature a fade-resistant powder coating. Treated components exceed the industry standard by 34% in testing by independent sources.

### Assembly

This product requires some assembly. The table top and seats ship pre-assembled. Stainless steel assembly hardware is included.

#### Colo

See website or sales representative for color choices.

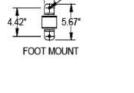
#### Maintenance

Clean with mild soap and water. Let dry thoroughly. To maintain original color, regularly apply standard deck oil, such as Cutek® Extreme Wood Protection Oil.

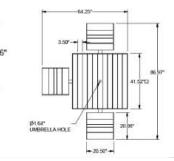
#### Warranty

20-year limited structural warranty, 10-year warranty on Thermory, and 3-year finish warranty on powder coated steel and aluminum components; 7-year warranty against fading from the date of purchase. See full details on multi-year warranties for components at <a href="mailto:anovafurnishings.com/warranty">anovafurnishings.com/warranty</a>.

Manufactured in the U.S.



2X Ø.41"



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17.92"



## MONOLINE CAROUSEL TABLE (SQUARE)

The Monoline Carousel table balances gentle curves with clean lines and subtle details to provide a fresh look.

- · thermally modified wood or aluminum slats
- · all aluminum frame construction
- · powder coated finish
- 42" square table top
- 3-seat ADA accessible table available
- · optional hole for use with an umbrella
- · pre-drilled holes for surface mounting
- · contact us with special requests
- · ships fully assembled

product:	length:	width:	height:
ML-CT-4SEAT-SQ	77"	77"	29.3"
ML-CT-3SEAT-SQ	77"	60"	29.3"



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## **Harvest**

#### **Product Data Sheet**



Including rectangular tables in standing and dining heights, round tables in standing and dining heights, a round casual height table, and a round side table, the Harvest line welcomes the full range of postures and use cases. For the rectangular tables, an optional LED light spanning the center sets the mood with warm, gentle illumination. For the round casual height table, an optional fire pit insert creates a signature outdoor experience. Benches and stools in standing and dining height round out the Harvest line. Harvest's durable, post-consumer recycled HDPE plastic surface requires low-to-no maintenance. The line's vibrant colors are blended into the plastic, not surface applied, and a UV-resistant compound is added to the pigment to ensure longevity. The metal structure and legs are finished in Pangard II® HAPS, VOC, and lead-free polyester powdercoat that resists fading and chipping.

### **Harvest Table**

- Harvest table options include a round side table, round casual height table, round casual height table with fire pit insert, round dining and standing height table, and rectangular dining and standing height table.
- Harvest rectangular tables are constructed of extruded aluminum legs bolted to steel table top supports, with a high-density polyethylene (HDPE) table top.
- Harvest round casual, round dining, and round standing height tables are constructed of extruded aluminum legs bolted to aluminum table top supports, with a high-density polyethylene (HDPE) table top.
- The rectangular dining height table is ADA compliant.
- Table leg glides are made of tough nylon to resist damage from dragging on rough surfaces.
- Harvest tables are available freestanding or surface mounted (must be surface mounted when used with an umbrella).
- Round dining height table will have six bag hangers, and the round standing height table will have three bag hangers for stowing bags and purses.
- Optional umbrella hole available on the rectangular dining height table, rectangular standing height table, round casual height table, round dining height table, and round standing height table.

#### Harvest Bench

- Harvest benches are constructed of extruded aluminum legs bolted to steel bench top supports and high-density polyethylene (HDPE).
- Dining benches are available in 46" and 94" length.
- Benches are available in dining or standing height.
- Bag hangers for stowing bags and purses on the standing height bench.
- Bench leg glides are made of tough nylon to resist damage from dragging on rough surfaces.
- Harvest dining and standing height benches are available freestanding or surface mounted.

Rectangular Table	Style	Depth	Width	Height	Weight
	Dining Height	47.5"	94.75"	30.25"	260 lbs
	Standing Height	36.75"	94.75"	40"	230 lbs

Round Table	Style	Diameter	Height	Weight
	Side Table	40"	15"	49 lbs
	Casual Height	62"	21.5"	147 lbs
	Dining Height	62"	30"	153 lbs
	Standing Height	47.25"	40"	104 lbs

Bench	Style	Depth	Width	Height	Weight
A	46" Dining Height	15.75"	46"	18.75"	52 lbs
A	94" Dining Height	15.75"	94"	18.75"	90 lbs
A	46" Standing Height	21"	45.5"	29"	60 lbs

Revised May 15, 2024 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048



## **Litter Receptacles**

Litter receptacles shall be considered at trailheads, access points, and nodes. Litter receptacle options include the following:

- Vestre Inc BLOC litter bin, material to be RAL 5024 Pastel Blue powder-coated steel, surface mounted.
- Anova Furnishings Beacon Hill 45 Gallon Recycled Plastic Receptacle with Bonnet Top, primary color to be textured teal powder-coated steel, secondary material to be Brazilian walnut-woodgrain plastic, surface mounted.
- **Site Pieces** Monoline Small Litter Bin, material to be midnight powder-coated steel, surface mounted. Small Litter Bin to be used at large trail nodes
- **Site Pieces** Monoline Large Litter Bin, material to be midnight powder-coated steel, surface mounted. Large Litter Bin to be used at trailheads.
- Landscape Forms, Inc. Sort Large Bin, material to be Sky polyethylene, surface mounted.

# **BLOC** litter bin

### 1542-900

Designed by Atle Tveit, Lars Tornøe

Bloc litter bin comes in two sizes (100 and 140 litres), with or without a built-in ashtray. The free-standing model has a steel base and is also available with integrated wheels. The BLOC litter bin is also available for wall mounting (100 litres). It is easy to empty by opening the door and removing the bin bag, with no heavy lifting required.





158.7 lb / 72 kg 26.4 gallons / 100L

### **Anchoring/assembly**

Free-standing/mounted to the ground

### **Primary material**

Hot-dip galvanised and powder-coated

The powder coating process was developed to satisfy the tough requirements of the Norwegian offshore industry. Corrosion class



3 mm

### Color

RAL 5024 - Pastel blue

Powder coated with Jotun façade for standard colors. Vestre offers more than 200 standard RAL classic colors at no extra charge.



### **Sustainability**

Indicators	Global warming	Total energy used	Recycled materials
Unit	kg CO2	MJ	%
Cradle to Gate A1-A3	229	3236	2.76

### **Certifications**





### Warranty

- · Lifetime warranty against rust
- 15 year warranty on powder coating15 year warranty on wood
- · Spare parts always available

Visit www.vestre.com for more information. Specifications are subject to change without notice. ©2020 Vestre Inc.

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### **BH1845RBT**

Beacon Hill 45 Gallon Recycled Plastic Receptacle with Bonnet Top

#### Materia

The receptacle is composed of 1" x 4" recycled plastic planks made of 95" recycled content by weight and an extruded aluminum frame.

The built-in, tapered bonnet top is made from 11-gauge steel and covers an 11.13" square waste opening. Top lifts off for easy waste disposal. The reusable plastic liner is made of high-density polyethylene.

#### Features

The receptacle is designed to be portable for flexibility in placement or surface mounted using .5" pre-drilled holes in the base to prevent movement. The rubber feet are adjustable to assist in leveling the receptacle. **Mounting hardware is not included.** 

Flexible modular design allows for customization; call for information.

#### Finish

The recycled plastic planks are impervious to moisture and corrosion, do not require the application of sealants or preservatives, and will never need painting or staining throughout the product's life.

Rust-proof aluminum and rust-resistant primed steel components feature a fade-resistant powder coating. Treated components exceed the industry standard by 34% in testing by independent sources.

#### Assembly

This product ships fully assembled and ready-to-use.

#### Color

See website or sales representative for color choices.

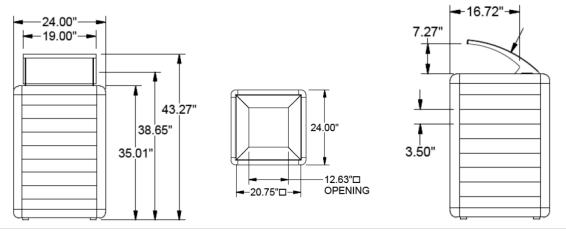
#### Maintenance

The product is virtually maintenance-free and requires only periodic cleaning with a sponge and a solution of mild detergent and water to remove surface dirt. Do not clean with solvent or petroleum base products.

#### Warranty

20-year limited structural warranty, 20-year warranty on recycled plastic, and 3-year finish warranty on powder coated steel and aluminum; 7-year warranty against fading from the date of purchase. See full details on multi-year warranties for components at <a href="mailto:anovafurnishings.com/warranty">anovafurnishings.com/warranty</a>.

Manufactured in the U.S.



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### MONOLINE LITTER BIN

Clean lines and clean streets is what the Monoline Litter Bin is here for. Available in multiple sizes to handle all your messy needs.

- all aluminum frame construction
- plastic liner(s) included
- · powder coated finish
- · surface mount or freestanding
- · pre-drilled holes for surface mounting
- single stream + dual stream options
- · aluminum or wood inserts for doors
- · custom laser-cut pattern for panels optional
- · heavy-duty hinge w/ optional door lock

product:	length:	width:	height:	capacity:
ML-SMLITTER	15"	14"	42"	18 gal.
ML-LGLITTER	27"	14"	42"	36 gal.
ML-LGLITTER-DL	27"	14"	42"	36 gal.
ML-LGLITTER-SQ	19"	19"	42"	36 gal.





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Sort is not just a litter receptacle by another name — it's a versatile recycling system with a sustainable point of view. This flexible system of collection bins for interior and exterior use was designed specifically for recycling. Created by designer John Rizzi, Sort offers a neat and attractive inducement to do the right thing. The distinctive top shape makes openings highly visible and easy to reach, sheds water, and protects contents. Bins, which can also accommodate litter if desired, are offered in a palette of colors, including fresh new blue and green hues. Bag hangers inside bins eliminate unsightly overhang, lids lift off for easy emptying, and this clever recycling solution is itself completely recyclable.

### **Recycling System**

- Large (50 gallon) and small (25 gallon) rotationally molded polyethylene bins.
- Bins may be positioned to face one direction or turned 90o or 180o within the basket to offer openings in multiple directions.
- Litter is emptied by removing lid and lifting trash bag from top.
- $\bullet$  Bag hanger is standard inside each bin; lids lift off for easy emptying.
- Bins are available in a selection of standard polyethylene colors with a choice of sign plates.
- Signage comes standard in pearl grey with black letters and are mechanically fastened to the bins, allowing plates to be updated as recycling programs evolve.
- Sign plates offered with selection of standard wording to support recycling program requirements.
- Bins are available with or without optional lock.
- Bins are completely recyclable.

STYLE	DEPTH	WIDTH	HEIGHT	PRODUCT WEIGHT
Small Bin	20"	10"	39"	18 lb
Large Bin	20"	20"	39"	25 lb

### **Bike Racks**

Bike racks shall be considered at trailheads, access points, and nodes. Bike rack options include the following:

- Vestre Inc. TOUR bicycle post, material to be RAL 5026 Pearl-Night Blue powdercoated steel, surface mounted.
- Anova Furnishings Circle Tandem Bike Rack, material to be textured teal powdercoated steel, surface mounted.
- **Site Pieces** Monoline Standard Bike Rack, material to be midnight powder-coated steel, surface mounted.
- Landscape Forms Inc. Ride Bike Rack, material to be LOLL navy blue, surface mounted.

## **Dog Waste Stations**

Dog waste stations shall be considered at trailheads and nodes. Dog waste station options include the following:

- Anova Grove 5 Gallon Pet Waste Station, material to be textured teal powdercoated steel, surface mounted.
- **Site Pieces** No. 2 Bag Holder + Waste Bin, material to be midnight powder-coated steel, surface mounted.

## **Bike Repair Stations**

Bike repair stations shall be considered trailheads and nodes.

 Dero – Fixit Plus with Air Kit 4, material to be black powder-coated steel, surface mounted.





Product sheet

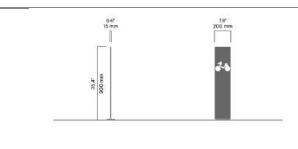
**TOUR** bicycle post

### 2886-900A

Designed by Hallvard Jakobsen

Tour bicycle post offers good support for two bicycles and can be supplied with a laser-cut design of your choice.

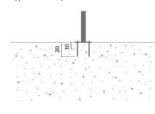




30 kg / 66 lb

### **Anchoring/assembly**

Type A - Base plate



### **Primary material**

Hot-dip galvanised and powder-coated

The powder coating process was developed to satisfy the tough requirements of the Norwegian offshore industry. Corrosion class



15 mm

### Color

RAL 5026 - Pearl night blue (+450,- Euro)

Powder coated with Jotun façade for standard colors. Vestre offers more than 200 standard RAL classic colors at no extra charge.



### **Sustainability**

Indicators	Global warming	Total energy used	Recycled materials
Unit	kg CO2	MJ	%
Cradle to Gate A1-A3	75	1046	2.69

### **Certifications**



### Warranty

- Lifetime warranty against rust15 year warranty on powder coating
- 15 year warranty on wood
- Spare parts always available

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### CIRBLEBR— Tandem Powder Coated Bike Rack, Surface Mount

Tandem powder coated steel bike rack, surface mount

The bike rack is 32.25" tall and made from 2.38" O.D. x 10-gauge wall steel tubing. Bike rack will accommodate up to two bikes, one on each side of the rack.

The bike rack is designed to be surface mounted. Each leg features a 7.75" x 5.5" plate with three .5" diameter predrilled holes for surface mounting to prevent movement.

 $\dot{\textbf{Surface mounting is required}}; \ \textbf{mounting hardware is not included}.$ 

Fade-resistant, powder coated steel features a state-of-the-art primer proven to prevent rusting. Treated components exceed the industry standard by 34% in testing by independent sources.

See website or sales representative for color choices.

### Assembly

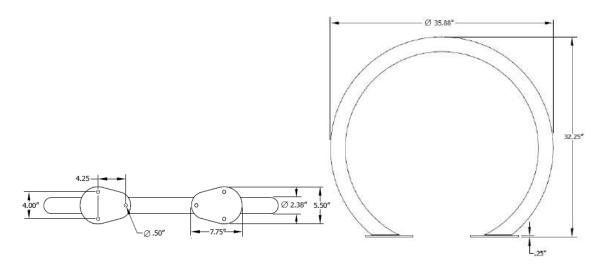
The bike rack ships fully assembled and ready for use. Surface mounting may require some assembly.

#### Maintenance

The product is virtually maintenance-free and requires only periodic cleaning with a sponge and a solution of mild detergent and water to remove surface dirt. Do not clean with petroleum base products.

Warranty 20-year limited structural warranty with 7-year finish warranty against fading; 3-year finish warranty on powder coated steel components against rusting, peeling, chipping, cracking, mold, mildew and defects in materials and/or workmanship. See full details on multi-year warranties for components at

https://www.anovafurnishings.com/warranty



### SHIPPING INFORMATION

Unit Weight	Unit Shipping Wt. UPS	Unit Shipping Wt. Truck	Unit Ship Size	Max Units	Pallet Size/Wt.	Total No.	Shipping
	(1-2 Units)	(3+ Units)	w/Pallet	Per Pallet	(48" X 32")	Pkgs.	Class
22 lbs.	25 lbs./unit	25 lbs./unit	10 cu. ft.	8	50 lbs.	1	70

9/30/2015

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Made in U.S.A





### MONOLINE STANDARD BIKE RACK

The Standard Bike Rack is a bigger version of the Core and the standard requirements of many municipalities for dimensions, two points of contact, and four anchoring points.

- all aluminum frame construction
- powder coated finish
- surface mount + in-ground mount options
- · countersunk holes for surface mounting
- · two-bike capacity

product:	length:	width:	height:
ML-STAND19	19"	3"	36"
ML-STAND19-IG	19"	3"	36"

NOTE: "-IG" at the end of the product number represents the in-ground mount option





## **Metro40 Collection**

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### **Product Data Sheet**



When Landscape Forms set out to develop the first comprehensive and integrated collection of site elements for the streetscape and transit core, it partnered with a world-leading expert. BMW Group Designworks brought to the challenge a deep understanding of the role of public transit in the life of the city, and unsurpassed mastery in form making and innovative use of materials. The Metro40 Collection, from benches and bollards to bus shelters and LED lighting, is a pioneering line of urban streetscape and transit elements with sophistication and global appeal for a world on the move. Used with Connect shelter or alone where space is at a premium, sitting and leaning rails provide a 'waiting room' amenity with minimal footprint.

### Rest™ Bench

- Rest length is 80", longer than typical three-person benches.
- Rest seat height is 18" and seat depth is 16".
- Optional arms (available only on backed version)
- End frames are joined using concealed mortise and tenon connections.
- Available with one or two optional intermediate cast aluminum seat dividers/skateboard deterrents.
- Equipped with "anti-glides:" cushioned plastic pads on the underside
  of the frame that keep the bench from moving under seated loads
  and protect the powdercoat finish from becoming scratched by
  concrete or floor.

#### **Materials**

- End frame is cast aluminum.
- Seat and back slats are aluminum extrusions or wood.
- $\bullet$  Cast aluminum frame and aluminum extrusion slats are powder-coated.
- Aluminum version can be two-toned: one color on the continuous ribbon end frame and another color on the slats.
- $\bullet$  The wood for exterior applications is jarrah.
- The wood option for interior application is jarrah with LF 80 finish.

### Installation

- Shipped fully assembled.
- Freestanding, surface mount or embedded.
- Surface mount and embedded versions are shipped with a mounting kit.

Style	Depth	Width	Height	Product Weight
backed w/ arm	26 ½"	80"	33 ¼"	Jarrah: 135 lb Alum: 167 lb
backed w/o arms	26 ½"	80"	33 ¼"	Jarrah: 125 lb Alum: 157 lb
backless	20 ¾"	80"	18"	Jarrah: 91 lb Alum: 106 lb

Note: The backless version is always armless. Seat dividers cannot be used at ends as a substitute for arms.



Revised June 21, 2022 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048





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### GRV05

Grove 5 Gallon Pet Waste Station



**Replacement Parts** 5 Gallon Liner

**Dog Waste Bag Refills** Case of 4,00 Bags Case of 6,00 Bags

DOM9055

efills 5 D001-20 5 D001-30

#### Material

The receptacle outer loop frame is made from 7-gauge steel with the inner waste receptacle and pet dispenser made from 10-gauge steel. The reusable, 5-gallon reusable plastic waste liner is made of high-density polyethylene.

### Features

ADA-compliant. The pet waste station has a built-in bonnet top and pet waste bag dispenser for ease-of-access of users. The upper pet waste bag dispenser features a magnetic door latch and includes two cases of pet waste bags (2,000 bags per case). Pet waste bags measure 8" x 13". The lower waste station body features a piano hinge and a tamper-resistant cam lock and key system.

Features adjustable, factory installed stainless steel glides for leveling and to avoid damages to the mounting surface or powder coat finish.

The outer loop features two .44" diameter pre-drilled holes in the base for surface mounting to prevent movement. **Must be surface mounted;** mounting hardware is included.

#### Finish

Fade-resistant, powder coated steel features a state-of-the-art primer provent to prevent rusting. Treated components exceed the industry standard by 34% in testing by independent sources.

#### Assembly

This product ships fully assembled and ready-to-use. Assembled using stainless steel hardware. Surface mounting will require some assembly.

#### Colo

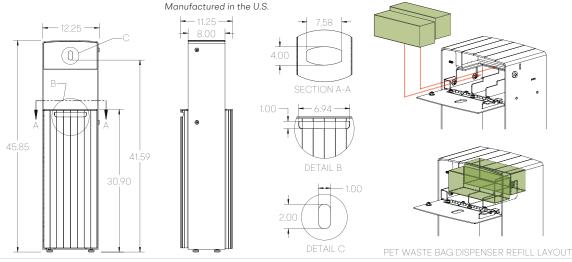
See website or sales representative for color choices.

#### Maintenance

The product is virtually maintenance-free and requires only periodic cleaning with a sponge and a solution of mild detergent and water to remove surface dirt. Do not clean with solvent or petroleum base products.

### Warranty

20-year limited structural warranty with 3-year finish warranty and 7-year warranty against fading from the date of purchase. See full details on multi-year warranties for components at <a href="mailto:anovafurnishings.com/warranty">anovafurnishings.com/warranty</a>.



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### NO. 2 BAG HOLDER + WASTE BIN

Because our best friends are animals and crap happens. The Monoline No. 2 Dog Bag Holder + Dog Waste Bin work perfectly together to help us keep things clean.

- all aluminum frame construction
- three roll capacity (600 bags)
- plastic liner included (for No. 2 Dog Waste Bin)
- · powder coated finish
- · surface mount or embedded
- · pre-drilled holes for surface mounting
- · heavy-duty hinge w/ door lock

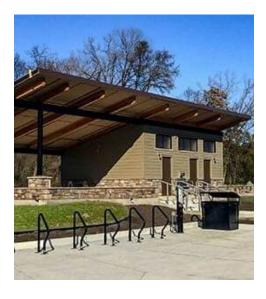
product:	length:	width:	height:	capacity:
ML-NO2BAG	9.5"	4.5"	42"	600 bags
ML-NO2WASTE	15"	14"	42"	18 gal.











## RESTROOM FACILITIES

Where possible at Greenway-Blueway Trailheads and Blueway Access Points, permanent restroom facilities should be provided for the convenience of trail users. The design of restroom structures should contribute to the overall character and experience of the trail though materials and branding. Two types of permanent restroom facilities will be considered at trailheads, including plumbed restrooms and waterless vault restrooms. Both versions are kits provided by prefabricated restroom companies and are easily installed and maintained.

### **Plumbed Restrooms**

Where water, sewer, and electricity are available on site, plumbed restrooms should be used. Plumbed restrooms should include two accessible, unisex stalls that are plumbed and connected to local utilities. ADA accessible drinking water fountains with bottle fillers and dog bowls should be attached to the outside of all plumbed restrooms.

### **Waterless Vault Restrooms**

In remote, rural sections of the trail where utilities are unavailable, waterless vault restrooms should be used. Waterless vault restrooms should include a single accessible, unisex stall with waterless vault technology. Waterless vaults shall be installed below ground level with dimensions matching the outside perimeter of the building to provide a stable structure that supports the full weight of the building.

## **OPEN SPACES**

Open spaces should be considered throughout the Kosciusko County greenways and blueways system to provide users with a space for recreation. Open spaces offer a variety of recreation, social, economic, environmental, and health benefits.

- Recreation Benefits Open spaces
   provide space for people to engage in
   recreation activities such as picnicking,
   lawn games, and bird watching.
- Social Benefits Open spaces encourage social interactions and create a strong sense of community by offering people a place to meet and experience togetherness.
- Economic Benefits Open spaces support economic development by attracting people who patronize local businesses. Proximity to open spaces can also increase property values and boost property tax revenues for local governments.
- Environmental Benefits Open spaces protect the natural landscape, improve air and water quality, and provide habitat for local wildlife.
- Health Benefits Open spaces improve community health by encouraging people to be physically active outdoors.

At a minimum, 500-600 square feet of open space should be set aside for active and passive recreational uses to achieve the greatest benefits to users and local communities.

















## **PUBLIC ART**

To expand the reach of public art in Kosciusko County, pieces should be incorporated as part of the greenways and blueways system that build upon the unique historic, cultural, and natural character of the surrounding communities. It should be in areas along trail corridors with high volumes of pedestrian and bicyclist traffic, including Greenway-Blueway Trailheads and Blueway Access Points. Art should be placed outside any walkways but should be in areas easily accessible by people of all ages and abilities. Art may incorporate a variety of media and materials in a way that demonstrates creative placemaking and an understanding of community context. Most importantly, the design of public art should encourage people to explore the Kosciusko County greenways and blueways system and should enrich the physical environment.

## **SHELTERS**

Overhead shelters should be considered at Greenway-Blueway trailheads and Blueway Access Points where the gathering of trail users is likely to occur to provide shade and limited shelter during inclement weather events. Two different sizes of overhead shelters may occur along the trail, including large overhead shelters and small overhead shelters. Both versions of overhead structures will be pre-manufactured using materials that evoke the character of trail branding and other design elements.

Large overhead shelters will be 24' x 34' and provide shelter for approximately 8 picnic tables and 32 people, while small overhead shelters will be 16' x 24' and provide shelter for approximately 4 picnic tables and 16 people. Minimal posts and electrical outlets will be incorporated to maintain flexibility of use. Security lighting should be provided at large shelters where possible to improve safety.

















## **BIKE SHARES**

Bike shares offer users the opportunity to explore the trails and greenways in Kosciusko County, benefit the environment, and promote public health. Bike shares are short-term rental systems that make bikes available for the public to rent. Bike sharing may be conducted from a single rental point, such as an outfitter, or through a network of stations that allow users to rent a bike via mobile application and return to any station in the network. A variety of bike rental opportunities are offered throughout Kosciusko County, including the Ride Warsaw + Winona Lake Bike Share Program, Trailhouse Village Bicycles, and Pedals and Paddles.

As the County continues to expand its bike sharing programs, it should consider adding e-bikes to its fleet. Electric bikes, otherwise known as e-bikes, are pedal-assisted bikes with an electric motor that allow users to travel further distances with less physical effort. Bikes travel speeds of up to 17 miles per hour and only provide assistance when you pedal. The battery life on e-bikes depends on a variety of factors including terrain, riding style, temperature, and the weight of the rider. Under ideal conditions, fully charged e-bikes can travel 30 miles on a single charge. With continued public interest, the future of shared electric bike programs plays a critical role in offering affordable and flexible transportation options for people living in and visiting Kosciusko County.

## PADDLE SHARES

Paddle shares are kayaking rental systems that offer users a way to experience Kosciusko County's lakes and rivers. While many kayaking participants own at least one or two kayaks, 27% of those who don't own kayaks rent them, with 65% renting from an onsite rental provider, such as a boathouse, livery, or marina (2018 Special Report on Paddlesports and Safety). Today, several opportunities exist for paddling the lakes and rivers in Kosciusko County, including Tippy River Adventures, Pedals and Paddles, and the Warsaw Parks and Recreation Department Kayak Rental.

Future outfitters should work with the Kosciusko County Parks Board and community organizations, such as Clearly Kosciusko, to form public-private partnerships. Outfitters will require access to restrooms and other amenities, as well as adequate storage space for boats, life jackets, and paddles. Staffing needs will be determined by the number of people needed to accomplish tasks such as reservations and trip planning, guest services and equipment rental, shuttle drivers, and equipment maintenance.











