Executive Summary





The Meridian Township Greenspace Plan grew out of Township residents' desire to protect the area's natural resources while accommodating new development. The plan outlines ways in which growth and development in the Township can continue to occur while simultaneously protecting the natural systems and community character of the Township.

The plan defines what should be protected based on public input and a detailed ecological assessment, and how it should be protected through a number of implementation tools that fit a variety of situations. It indicates important riparian corridors and upland areas that are critical for maintaining healthy wildlife populations. The plan also identifies scenic roadways with views of the Township's natural resources, and strategies for protecting those views.

In addition to identifying the Township's most important resources and scenic views, the plan outlines a non-motorized system of linked trails, pathways, sidewalks and bike lanes for recreation and transportation uses. These trails and pathways connect the parks, greenspaces, civic centers, schools and neighborhoods of the Township.

The improved quality of life that greenspaces and trails provide comes with economic benefits that include higher returns on property development, reduced community infrastructure costs, and enhanced personal property values. A plan that protects natural resources, encourages active lifestyles, and brings economic benefits will promote the health, safety and welfare of the citizens of Meridian Township.

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Prepared By:



Priority Conservation Corridors

The Priority Conservation Corridors (PCCs), shown in dark green, are an interconnected network of existing open space. These corridors, if kept intact and managed properly, will provide habitat that supports wildlife, protect the air and water quality of the township and contribute to the quality of life of township residents.

PCCs span across commercial developments, residential properties, and vacant land subject to new development. Land ownership of the corridor plays a large role in determining conservation methods used to preserve the corridor.

New development projects must be designed to preserve the integrity of the PCCs by clustering development and preserving the PCCs as community open space or deed-restricted private property.

The example below shows the different ways of protecting the corridors through ownership and management.



Implementation Guidelines

The central plan and surrounding callouts show how the components of the plan can be used to establish the greenspace network in a variety of places and conditions. The central graphic illustrates an area typical of Meridian Township, with a combination of new residential development, existing commerical development, and farmland. The Priority Conservation Corridors, Scenic Road Corridors, and Non-motorized Corridors are interconnected across these different land uses and ownership types. A variety of conservation tools and guidelines, illustrated in the various surrounding graphics, are used to protect and preserve these networks.

Existing hedgerow should be preserved between new development and farmland as a buffer. If no hedgerow exists, houses should be setback from edge of development to minimize conflicts between agricultural and residential uses.

2 Township should work with key property owners to secure trail easements through private property to complete the non-motorized system and acquire conservation easements from willing land owners in key locations.

3 In sensitive areas, the trail system should be located on the edge of the Priority Conservation Corridor. Neighborhoods should include a range of open spaces, from structured play areas to natural

> The non-motorized system should provide connections between neighborhoods.

places.

Non-Motorized System

Off-Road Corridors

An important part of the Greenspace Plan is the expansion of the independent pathway system separate from the road system. Off-road corridors include rail-to-trail corridors and paths through parks and new developments. If designed and maintained properly, these pathways can be the "jewels" of the Township's non-motorized transportation system.

Independent pathways should be designed to accommodate shared uses including bikers, walkers, strollers, in-line skaters, and people in wheelchairs. A 10' wide path is the minimum width for a shared-use path. A 12'-14' width is preferred in most cases in urban and suburban areas.

Whether the surface of the path is asphalt, crushed limestone fines or other material, it should have a solid base and positive drainage as the path may have maintenance vehicles on it at all times of the year. The vegetation along the trail should be regularly trimmed and mowed to maintain a clear zone around the trail.





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On-Road Corridors

A "non-motorized zone" comprised of a bike lane, a buffer zone with street trees, and a sidewalk should be established along both sides of collectors and arterials.

The combination of bike lanes and sidewalks is considered "best practice" and the safest way to accommodate bicycles and pedestrians along the road corridor in most situations. Bicycle use of sidewalks by adult cyclists should be discouraged except in parkway conditions where there are minimal intersecting driveways and roadways and where the sidewalk bikeway has been specfically designed to accomodate bicycle travel.



Supplemental plantings of native species can buffer the sidewalk from private residences and define transition between public and private space.

Sidewalk is set behind trees along canopied road to preserve vegetation.

Landmark trees are preserved

New residential development should be clustered to provide open space and protect the Priority Conservation Corridors.

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Conservation Corridors should be irregular to maximize edge

The non-motorized system provides connections between residential neighborhoods,

act as hubs for the Priority **Conservation Corridors and** destination points for the

1 Vehicular access control along a commercial strip improves non-motorized facilites along the main corridor by limiting number of driveway crossings.

Areas of Special Concern

Fragile Links and Restoration Opportunities

Areas of Special Concern include corridors within the greenspace network that are fragmented or narrow corridors surrounded by heavily developed areas. These provide restoration opportunities where weak linkages can be restored between two hubs to create a stronger ecological system. The following diagrams show an example of a stream corridor that runs through a heavily developed area along side the parking lot of a large store. The fragile nature of the corridor can be alleviated through redesign of the parking lot and restoration of the corridor.



Potential Solutions



Adjust parking lot standards to allow fewer parking spaces to reduce the amount of

A combination of bioretention ponds and detention basins treat stormwater and enhance the aesthetics of the property.

Require native plantings around detention basin to filter run-off and improve parking lot aesthetics.

Stream corridor is restored with a buffer of native vegetation and adjacent wetlands.

Wildlife Crossings Structures such as culverts and bridges designed for

roads can act as barriers to fish and other aquatic life. Road crossings can have a severe impact on wildlife populations. Mitigation of these impacts can be accomplished through design measures both along the road and below it.

Wildlife fences can effectively channel animal crossings to a narrow zone along heavily used road corridors. "Wildlife Crossing Zone" signs should be used to alert drivers approaching openings in the fences. Wildlife warning reflector systems that dissuade animals from crossing the road while a car is in the vicinity should be used at the crossing zones to reduce crashes with large mammals.

Existing roads should be retrofitted with culverts, fish ladders, or baffels that allow the proper water depth and velocity to accommodate aquatic life moving through the streams. Culverts should include ledges for terrestrial animals. Undercrossings should be oriented perpendicular to the road and should be large enough to have sufficient light shining through from the opposite end.



Road/Path Intersections

Intersections must be designed to provide clear information and guidance to both road and path users as they approach the crossing. This includes:

Clear signage that identifies user rights-of-way and notifies both the users of the pathway and the motorists that an intersection is approaching.

Pavement markings at the beginning of the trail intersection indicating direction of travel and rights-of-way.

The pathway should meet the roadway at a 90-degree angle for maximum visibility.

Refuge islands are necessary on high volume, high speed roadways where there are few gaps in traffic.

Asphalt or concrete should be used for the portion of the trail that intersects the road to cut down on debris from the road shoulder.

