

Designing the Lake to Lake Trail

Providing a Trailhead



A small trailhead is established at the northern end of the Lake to Lake Trail. A small parking lot, informational kiosk and a covered picnic table were added at this location. The Owner also designed and added a themed play area.

Viewing Lake Abram



Lake Abram is surrounded by wetlands and not easily accessible. It was decided early on to try to obtain a glimpse of this natural water body from the trail. An overlook was carefully located and elevated to provide this view. The addition of telescopes makes the lake appear nearby.

Landscaping along Hepburn Road



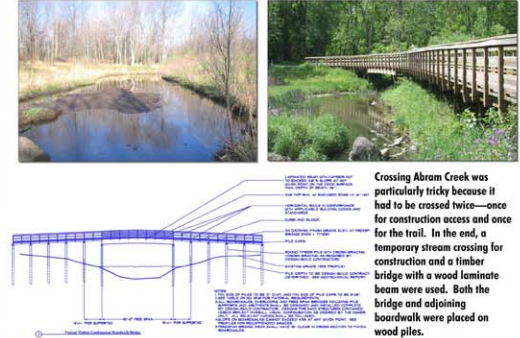
The trail suspends between Southwest General and Parkside Villas. However, users of the trail can still walk along the sidewalks in this stretch. Originally this stretch was fairly sterile with nothing but mowed grass. However, working with the adjacent landowners, we were able to introduce a great deal more of landscaping. Of course, species selected are native and greatly improve the appearance of the trail in this zone.

Crossing a Category 3 Wetland



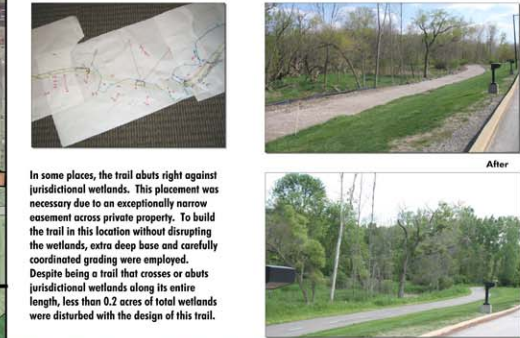
Deciding how to cross the Wetland surrounding Abram Lake was analyzed many times as part of this project. In the end it was decided that the least impact to the wetland could occur if an 800' long boardwalk could be built carefully across it. Wood piles, some up to 70' long were driven deep into the wetland. The boardwalk slowly crept across the marsh. In the end, this portion of the Lake to Lake Trail became its most dramatic feature. Efforts are currently under way to introduce more native vegetation into the wetland.

Crossing Abram Creek



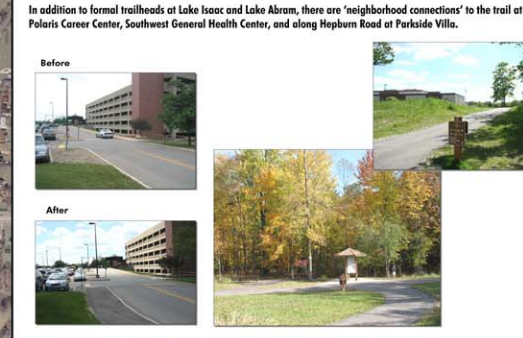
Crossing Abram Creek was particularly tricky because it had to be crossed twice—once for construction access and once for the trail. In the end, a temporary stream crossing for construction and a timber bridge with a wood laminate beam were used. Both the bridge and adjoining boardwalk were placed on wood piles.

Avoiding Wetlands



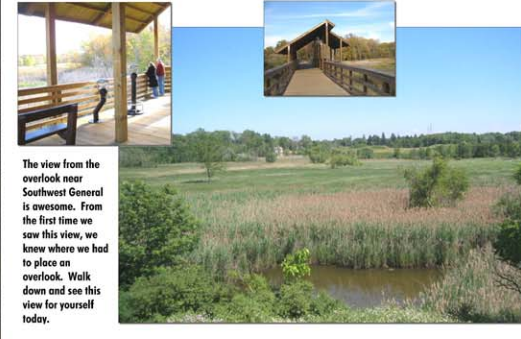
In some places, the trail abuts right against jurisdictional wetlands. This placement was necessary due to an exceptionally narrow easement across private property. To build the trail in this location without disrupting the wetlands, extra deep base and carefully coordinated grading were employed. Despite being a trail that crosses or abuts jurisdictional wetlands along its entire length, less than 0.2 acres of total wetlands were disturbed with the design of this trail.

Providing Public Access



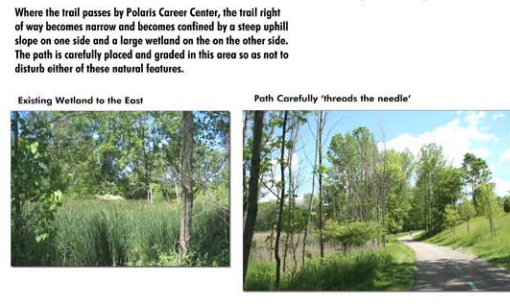
In addition to formal trailheads at Lake Isaac and Lake Abram, there are "neighborhood connections" to the trail at Polaris Career Center, Southwest General Health Center, and along Hepburn Road at Parkside Villa.

Capturing an Awesome View



The view from the overlook near Southwest General is awesome. From the first time we saw this view, we knew where we had to place an overlook. Walk down and see this view for yourself today.

Threading the Needle Between Wetlands & Private Property



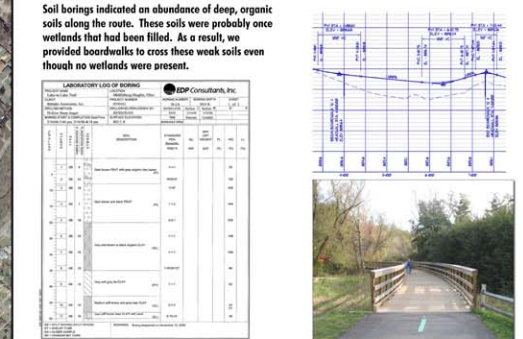
Where the trail passes by Polaris Career Center, the trail right of way becomes narrow and becomes confined by a steep uphill slope on one side and a large wetland on the other side. The path is carefully placed and graded in this area so as not to disturb either of these natural features.

Traveling Along Fowles Road



Along Fowles Road, the trail must be located within the existing public right of way. Cleveland Metroparks worked very closely with the owners adjacent to the right of way to insure that the trail would be acceptable to them. Behne Associates provided a number of site improvements including improved drainage, new landscaping, fencing, pavement, and grading to insure that these residents' concerns were addressed.

Crossing Weak Organic Soils



Soil borings indicated an abundance of deep, organic soils along the route. These soils were probably once wetlands that had been filled. As a result, we provided boardwalks to cross these weak soils even though no wetlands were present.

LABORATORY LIST OF BORINGS		BSP Consultants, Inc.	
Boring No.	Depth (ft)	Soil Description	Notes
1	0-1	Topsoil	
1	1-2	Organic silt	
1	2-3	Organic silt	
1	3-4	Organic silt	
1	4-5	Organic silt	
1	5-6	Organic silt	
1	6-7	Organic silt	
1	7-8	Organic silt	
1	8-9	Organic silt	
1	9-10	Organic silt	
1	10-11	Organic silt	
1	11-12	Organic silt	
1	12-13	Organic silt	
1	13-14	Organic silt	
1	14-15	Organic silt	
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1	98-99	Organic silt	
1	99-100	Organic silt	

Protecting Natural Features



A number of natural features were protected as part of the trail design. A small fen, or hillside seep was bridged with a boardwalk to not disturb its hydrology. Similarly, a giant White Oak tree was saved by routing the trail around it.

Crossing Under CSX Railroad



Behne Associates coordinated with Transystems to borrow a corrugated steel tunnel under an active CSX railroad line. While Transystems designed the tunnel, Behne coordinated line and grade of tunnel with the overall trail.

Improving ADA Accessibility



All trails were designed to accommodate ADA requirements. Where barriers such as stairs existed, they were removed. All new trails, bridges, and boardwalks were designed so that their slope would not exceed 5%. The result is that a variety of users can be accommodated on the All Purpose Trail.