Silvio O. Conte National Fish and Wildlife Refuge

Fort River Birding and Nature Trail Universally Accessible Outdoor Visitor and Learning Center

The Fort River Birding and Nature Trail is a universally accessible trail. It was
presented with the 2014 Paul Winske Access Award by the Stavros Center for
Independent Living. A trail of this type provides uniform equal access to outdoor
opportunities for all. This trails is able to occupy an "ADA niche" that elevates our
visibility and desirability as a "specialty trail" and a destination within a large network of
local nature trails that is capable of accommodating groups of visitors with a diversity
of access needs.



2. This trail is intended to function as an outdoor visitor center to "connect people with nature." Visitors will be immersed in a natural area to experience the sights, sounds, and smells on a trail that is easily accessible to visitors as well as educators.



3. We use these movable and weather tight cases to present storybooks and other interpretation. The trail provides quality access to all with mobility challenges; meeting the intent of the ADA. It is also very popular with young families, who often arrive with small caravans of strollers. We also have two large cases to present additional information on our kiosk located in the parking lot at the trailhead.



4. To demonstrate the steps of habitat succession; the trail is designed for "clockwise" travel. The uniform five (5) foot wide trail allows the public to travel side-by-side while providing enough room for others to easily pass. The 1.1 mile long trail is marked in tenth mile increments to give a point of reference for locations along the trail, allowing visitors to report bird sighting, or find other points of interest.



5. The trail was designed by Refuge staff and laid out in 2011 employing a combination of traditional and nontraditional trail structures, including our own design we refer to as "trail ties" pictured below. Our compliance process was completed in 2012; construction started in April 2013; and it was officially celebrated as "OPEN" about 18 months later on October 25, 2014.



6. The trail is designed to resemble a ribbon as it passes through various habitats to enhance the visitors' experience. Even if you keep your eyes straight ahead, you will still incidentally scan the area with your eyes as you meander along and view nature directly in front of you. The curves create a sense of curiosity about what's beyond the next bend. We accomplished the trail bends using a few inches of crushed stone, a couple inches of stone dust, and trail ties to retain the flexible 1" x 6" or 8" pressure treated wood at a constant 5 foot width. For the tougher bends, it was sometimes necessary to soak the wood overnight in a tarp with water to increase their flexibility.



7. Small wooden openings along the sides of the trail are called "critter crossings" (escape passages); allowing small toads, snakes, and turtles to escape the path before they become dinner. They are generally located on the outside of the bends in the trail. The height is designed to meet ADA standards for the visually impaired while allowing critters to pass through. These escape hatches also provided the added benefit of draining water from the trail during large rain event.



8. The 16' x 16' overlooks are supported by eight (8) 6" x 6" pressure treated posts that are centered on eight (8) 22 1/2" x 24" x 3" thick pressure treated wooden pads. The two layers of 2" x 12" stock are assembled so the grain on one layer is perpendicular to the other layer. Four (4) pads and posts are on opposites sides and are connected by 14 - 2" x 12" 15'-5" stringers that are attached with two 3 ½" LedgerLoks on ether end. The 2" x 12s" are doubled and attached to both sides of the 6" x 6" posts with LedgerLoks as well. Galvanized joist hangers can be added and attached with one inch ceramic deck screws. This design minimizes "waste" and allows the use of the entire 16' - 2" x 12" as decking; including a 2" overhang to avoid splitting when the ceramic deck screws are used. The entire structure rests on the ground with a thin layer of gravel directly under the pads to promote drainage and reduce deterioration due to moisture.



9. The entire trail is built on top of the ground. The wood structures use a combination of wooden pads rather than digging holes, to preserve the Native American artifacts that may be beneath the soil. Each elevated walkway is supported on 4" x 4" pressure treated posts that are resting on wooden pads. They were constructed in a series of 16' sections that include four (2"x8") pressure treated wood stringers supported every

eight feet on 11"x 16.5"x 2.5" pressure treated wooden pads; leaving only a seven foot (+/-) span. The decking is primarily 2" x 12" stock. Three 5' – 4" deck boards can be cut from each 16' board; leaving only sawdust as scrap. Tis design allows for a 2" overhang beyond the frame as well and a uniform five foot walkway for visitors.



10. The two bridges are constructed in a similar manner. However, five 2" x 12s" were used as the stringers and the cross supports (2" x 12") and pads (3" x 3' x 4') are much more substantial.



11. There are two covered overlooks or pavilions on the trail, can serve as a shelter for visitors during inclement weather. Having these two structures on the trail assures there is cover only several hundred yards away.



12. Several low level elevated walkways were specifically constructed to allow the underneath passage of a state listed species such as the wood turtle. Our goal is to have some form of passage approximately every 100-200 yards along the trail in areas where this species may be more likely to travel due to topography. The other elevated walkways and overlooks also serve these purposes for wildlife passage.



13. As you may have noticed, there are various types of seating available about every 100 yards along the trail and on overlooks. This allows visitors to linger and rest while they enjoy the sights, sounds, and smells of the outdoors. The armrests allow visitors to more easily transition from a walker or a wheelchair to rest or experience a different perspective. These armrests are installed in a way that allows the visitor to transition to the left or the right; depending on their individual preferences.



14. Each overlook is designed to focus your attention in a general direction, highlighting specific habitat types. They are also intended to accommodate outdoor presentations, meetings, and discussions. These vantage points afford the visitor a beautiful vista that could be utilized in many ways: create art, including photographs and paintings; watch wildlife; enjoy conversation with a friend; or rest in solitude to engage your senses.



15. There are opportunities to view a restored seasonal intermittent stream and a vernal pool. The water control structure plugs a ditch that drained the area over 25 years ago, allowing the intermittent stream to reoccupy some of its former course as it travels along a portion of the trail. Based on the response by wildlife and comments from visitors as well as the toads and frogs...This restoration as a demonstration is a perennial success!



16. Now that you have experienced most of this trail...it is a good time to mention how this project was accomplished. Youth Conservation Corp and Student Conservation Association interns, volunteers of all ages and abilities, Scouts, as well as Service staff made this opportunity possible. Incidental benefits gained by constructing the Fort River Birding and Nature Trail in this manner include forging relationships, creating a sense of ownership, and a stewardship network. However, it was our youth and young adults who invested a preponderance of the enthusiasm and sweat equity into this public asset, armed with rakes, shovels, and wheelbarrows. Strategically constructing the trail in segments and careful sequencing allowed the delivery of the material much closer to the intended destination.

